A Hypnotic Protocol for Eliciting Physical Changes Through Suggestions of Biochemical Responses

Article i	tle in The American journal of clinical hypnosis · November 1991	
DOI: 10.1080	0.1080/00029157.1991.10402971 · Source: PubMed	
CITATIONS	IONS READS	
10	994	
2 author	thors, including:	
	Antonio Madrid	
	Russian River Counselors	
	9 PUBLICATIONS 66 CITATIONS	
	SEE PROFILE	

Hypnosis ——in—— Australia

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

ISBN: 0 9585434 0 2

First published 1998

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

Copyright © The Australian Society of Hypnosis 1998. Authors are at liberty to publish their own work in books of which they are author or editor, and may produce their papers for their own use.

CONTENTS

Contributors vi
FOREWORD
Graham D. Burrows AO, KSJ, Chairman, Board of Education, Australian Society of Hypnosisviii
INTRODUCTION
Barry J. Evans, Editor, Australian Journal of Clinical and Experimental Hypnosis xi
KEYNOTE PAPERS
Experiential approaches to clinician development
The treatment of pain in children and elders: Words are not enough 15 Samuel LeBaron
Combining music and words as a pathway through hypnosis: Practical guidelines
HYPNOSIS WITH THE ANXIETY DISORDERS AND POST-TRAUMATIC STRESS DISORDERS
Anxiety disorders, post-traumatic stress disorders, and hypnosis55 Barry J. Evans and Greg J. Coman
PSYCHONEUROIMMUNOLOGY, MIND-BODY HEALING, AND HYPNOSIS
Introduction
Psychoneuroimmunology and mind-body healing
A hypnotic protocol for eliciting physical changes through suggestions of biochemical responses
Effects of hypnosis on the immune response: B-cells,. T-cells, helper, and suppressor cells

HYPNOSIS AND HABIT DISORDERS

Introduction
Dissociation, dieting disorders, and hypnosis: A review
Hypnosis for anorexia nervosa and bulimia nervosa: An update
Hypnosis as an adjunct to the treatment of bulimia nervosa
Hypnosis for problem gambling182 Greg J. Coman and Graham D. Burrows
Hypnosis and smoking cessation
HYPNOSIS, SELF-ESTEEM AND PERFORMANCE ENHANCEMENT
Introduction215 Barry J. Evans
Self-esteem, hypnosis and ego-enhancement
Ego-enhancement for positive change
Gurdjieff and ego-enhancement: A powerful alliance
HYPNOSIS, MEMORY, AND RECOVERED MEMORIES
Recovered memory, hypnosis and professional issues
HYPNOSIS WITH CHILDREN AND ADOLESCENTS
Introduction283 Barry J. Evans
Hypnosis with children and adolescents: Some developmental considerations
Induction and deepening techniques with children305 William C. Wester II

Special considerations for using hypnosis with young children					
Leora Kattner					
The use of hypnosis with children and adolescents					
ERICKSONIAN AND INDIRECT APPROACHES TO HYPNOSIS					
Revisiting the question: What is Ericksonian hypnosis?					
Ericksonian Hypnosis: A perspective on direct and indirect methods 339 <i>Jeffrey K. Zeig</i>					
CLINICAL ISSUES IN ASSESSMENT OF HYPNOTISABILITY					
Clinical applications of hypnotic assessment					

MAJOR CONTRIBUTORS

- *Doris Brett*, BA(Hons), MA, DipClinHypn, MAPS, Member, Australian Society of Hypnosis, Private Practitioner, Caulfield, Victoria, Australia.
- Roger J. Booth, PhD, MSc, Department of Molecular Medicine, Faculty of Medicine and Health Sciences, University of Auckland, New Zealand.
- Graham D. Burrows, AO, KSJ, MD, ChB, DPM, FRANZCP, FRPsych, MRACMA, Chairman, Board of Education, Australian Society of Hypnosis, Austin and Repatriation Medical Centre/University of Melbourne, Heidelberg, Victoria, Australia.
- Greg J. Coman, MSc, BA, DipAppPsych, DipClinHypn, MAPS, Federal Treasurer, Australian Society of Hypnosis, Department of Psychiatry, University of Melbourne, Parkville, Victoria, Australia.
- Barry J. Evans, PhD, MA, DipFEd, DipEdAdmin, DipAppPsych, DipClinHypn, MAPS, Chairman of Publications, Australian Society of Hypnosis, Department of Psychiatry, University of Melbourne / Austin and Repatriation Medical Centre, Heidelberg, Victoria, Australia.
- Rosalyn A. Griffiths, PhD, BA(Hons), DipAppPsych(Clin), DipClinHypn, MAPS, Member, Australian Society of Hypnosis, Department of Psychology, University of Sydney, New South Wales, Australia.
- *Joseph J. Hinora*, BA, DipAppPsych, DipClinHypn, MAPS, AAMFC, CMAHRI, Member, Australian Society of Hypnosis, Private Practitioner, Adelaide, South Australia.
- Samuel LeBaron, MD, PhD, Division of Family and Community Medicine, Stanford University School of Medicine, Palo Alto, California, USA.
- *Lachlan J. Lipsett*, MBBS, FRACS, DipClinHypn, Member, Australian Society of Hypnosis, Private Practitioner, Lismore, New South Wales, Australia.
- Kevin M. McConkey, PhD, FAPS, Member, Australian Society of Hypnosis, School of Psychology, University of New South Wales, Sydney, Australia.
- *Kathleen A. Moore,* PhD, DipClinHypn, MAPS, Member, Australian Society of Hypnosis, Deakin University, Melbourne, Victoria, Australia.
- Barbara Newton, PhD, BA, MAPS, MACE, DipClinHypn, Member, Australian Society of Hypnosis, Private Practitioner, Vaucluse, New South Wales, Australia.
- Vicky Powlett, BA, DipCrim, TSTC, DipClinHypn, Member, Australian Society of Hypnosis, Department of Psychiatry, University of Melbourne and Private Practitioner, Rye, Victoria, Australia.

- Peter Sheehan, AO, PhD, Member, Australian Society of Hypnosis, Australian Catholic University, Sydney, Australia.
- Simon P. Stafrace, MBBS, FRANZCP, DipClinHypn, Member, Australian Society of Hypnosis, St George's Private Hospital, Kew, Victoria, Australia.
- Harry Stanton, PhD, MA, BEd, DipClinHypn, MAPS, Fellow of the American Society of Clinical Hypnosis, University of Tasmania, Australia.
- Wendy-Louise Walker, PhD, MAPS, DipClinHypn, Past-President of the Australian Society of Hypnosis, Private Practitioner, Croydon, New South Wales, Australia.
- Graham R. Wicks, MBBS, DObst, ROCG, FRACGP, DipClinHypn, Fellow of the Australian Society of Hypnosis, Women's and Children's Hospital, Adelaide, South Australia.
- Michael Yapko, PhD, The Milton H. Erickson Institute of San Diego, California, USA.
- Jeffrey K. Zeig, PhD, The Milton H. Erickson Foundation, Phoenix, Arizona, USA

FOREWORD

Graham D. Burrows AO, KSJ, MD

University of Melbourne/Austin & Repatriation Medical Centre Chairman, Board of Education, Australian Society of Hypnosis

It is with great pleasure that I recommend to you these background papers and selected proceedings from the 28th ASH Congress and Workshops, being held in Alice Springs and at Ayers Rock Resort in September 1998.

The idea behind the Federal Executive offering to organise our 28th Annual Congress was to bring the branches and members of the Society together in a place at the centre of Australian geography and history. I believe this will be achieved beyond their expectations and this Congress and Workshops have the potential to be the best ever run by our Society.

The success of the Congress will highlight the role of the Australian Society of Hypnosis as a foremost organisation of professionals who extend their medical, psychological, and dental expertise by utilising hypnotherapeutic techniques in patient and client care. The deregulation of hypnosis in many Australian states in recent times has brought with it the necessity for the Society to develop and expand its role as a provider of skilled, professional post-graduate programmes in hypnosis training, as an adjunct to university-based courses. The range and scope of workshops and symposia offered at the 28th Congress and Workshops by our international and national researchers and clinicians attest to the preeminence of the Society as an organisation which can proudly claim the best and most effective clinicians among its members. The extent to which members of the Society have taken up the invitation to attend and participate in the Congress attests to our members' ongoing commitment to maintain and expand their clinical knowledge and skills.

The range and quality of research and clinical experience contained in the papers in this book confirm our Society's role as the provider of the highest quality teaching and training programmes in hypnosis. The Congress and these proceedings also help in the development of our professional links with other medical and health professional organisations and having the Society seen by the general public as *the* professional organisation to contact when seeking referral to competent, safe practitioners who utilise hypnosis in therapy.

One outstanding feature of this book is the depth of review and analysis provided for each of the symposia of the Congress. This provides not only a thorough coverage of the field of hypnosis, but relevant and timely practical descriptions of hypnosis applications for practitioners who are already trained in the use of hypnosis or who are in the early stages of such clinical exploration and development. Each paper provides suggestions for actual clinical work in a way that encourages thoughtful and deliberate adaptation into each practitioner's own therapeutic style.

Hypnosis in Australia will provide a focus and impetus for the ongoing development of the Australian Society of Hypnosis as it meets the challenges of

professional and legal recognition from governments and professional associations; and provides high quality research and training of health professionals in hypnosis into the next century. I wish to congratulate Dr Barry Evans for the excellent organisation of the Congress, his work with the Society's Board of Education, and the publication of these proceedings.

INTRODUCTION

Barry J. Evans Editor, Australian Journal of Clinical and Experimental Hypnosis

The Australian Journal of Clinical and Experimental Hypnosis is proud to collaborate with the 28th ASH Congress and Workshops, in the publication of these background papers and selected proceedings of the Congress, under the title of Hypnosis in Australia.

It is often the case that congress proceedings are published well after the event and, with equal frequency, consist of edited or selected papers. The 28th ASH Congress and Workshops consists of three scientific and professional streams: (1) Keynote Addresses and Workshops presented by two internationally renowned researchers and clinicians — Jeffrey Zeig PhD and Samuel LeBaron MD, PhD; (2) special symposia/workshops chaired by eminent Australian researchers and clinicians; and (3) a scientific session for individual researchers and clinicians to present their own work. The papers in this book cover the range of material presented in the first two of these three streams, with the latter being published in subsequent editions of the *Australian Journal of Clinical and Experimental Hypnosis*.

For each keynote presentation and symposium held during the Congress, you will find, in this book, a comprehensive background paper, designed to complement each presentation. These research and clinical update papers have been written by the keynote speaker or symposium chairperson. With some symposia, the background paper has been written by an expert in the field, in collaboration with the symposium chairperson. In some cases, these papers have been supplemented by the inclusion of additional papers drawn from the hypnosis literature, or written specifically to provide a more comprehensive coverage of specific topic areas. Each paper has been written or reproduced to provide not only a review of the relevant literature, but to also provide detailed clinical applications in each area of clinical hypnosis addressed as part of the Congress. Thus, while readers may not attend individual workshops or symposia, or do not have the actual material presented on the day, they have access to research and clinical material for each topic area, written in such a way as to be immediately useful in therapy settings. These papers outline, illustrate, and expand on the current work of a range of researchers and clinicians skilled in hypnosis from across the country hence the proud use of Hypnosis in Australia.

The book commences with the keynote presentations made during the Congress.

Jeffrey Zeig PhD, from the Milton H. Erickson Foundation has contributed two papers. The first "Experiential approaches to clinician development" provides a background review and summary of his Keynote Address to the Congress. The second paper "Ericksonian hypnosis: a perspective on direct and indirect methods" complements the paper written by Michael Yapko PhD, as background material on Ericksonian and indirect approaches to hypnosis and therapy.

Samuel LeBaron MD, PhD, from Stanford University Medical School has contributed an extensive background review and summary of his workshop at the Congress on the treatment of pain in children and adults. This updates his chapters in Joseph Barber's 1996 book: *Hypnosis and suggestion in the treatment of pain*.

Wendy-Louise Walker PhD has contributed a revised version of her paper: "Combining music and words as a pathway through hypnosis: practical guidelines," published in the *Australian Journal of Clinical and Experimental Hypnosis*, as background material for her workshop with June Jackson MAppPsych. As with all papers in this book, this material provides a full description of clinical applications of music in hypnosis which is immediately useful to every practitioner.

Following the keynote presentations, the book continues with a range of papers covering the topic areas of the special symposia/workshops run during the Congress. Each section varies, with some containing papers written specially for the Congress by presenters, some written specifically for the Congress symposium by other researchers and/or clinicians, and others with additional background papers drawn from the hypnosis literature. In some cases, introductions have been added to sections, to summarise and synthesise the diversity of research and clinical material reported in the papers.

The section on anxiety disorders, post-traumatic stress disorders, and hypnosis consists of one paper written by Barry Evans PhD and Greg Coman MSc from the University of Melbourne. This provides an updated summary of much of the material published in the 1994 AJCEH anthology: *Hypnosis in the management of anxiety disorders*, which is now out of print.

Three papers are provided for the section on mind-body healing, with an introductory commentary written by Barry Evans PhD. What is most interesting about the emerging field of psychoneuroimmunology, mind-body healing, and hypnosis is the range of anecdotal and clinical reports which show that the focus is now not so much on reducing psychobiological responses to stress using "mind-over-matter," but, rather, enhancing immunocompetence and mental and physical well-being through psychological processes. The material reported in these papers represents a current review of the literature in this fascinating area and highlights the developing range of controlled clinical studies which are now being carried out.

Five papers are provided for the section on habit disorders and their treatment with hypnosis, together with an introductory commentary by Barry Evans PhD. Three were written by Rosalyn Griffiths PhD, Barbara Newton PhD, and Greg Coman MSc and Graham Burrows AO, KSJ, MD respectively. The remaining two papers are adapted and expanded versions of recent papers on hypnosis in the management of dieting disorders written by Rosalyn Griffiths PhD and Lorna Channon-Little. Each paper describes the relevant literature in the areas of dieting disorders, problem gambling, and smoking cessation and each author has provided a significant amount of clinical material, sufficient to allow immediate utility in the clinical setting.

The section on hypnosis and performance enhancement has three background papers, two written by Harry Stanton PhD from the University of Tasmania. The written material is designed to highlight the utility of hypnosis in enhancing performance across a wide range of clinical, educational, business, and sporting applications. The first paper, written by Simon Stafrace MBBS, FRANZCP, examines the concept and nature of self-concept and self-esteem, their role in psychological well being, and utilisation in therapy. The aim of the paper is to provide an understanding of how psychological therapies, and hypnosis, enhance well being and increase mastery and competence. The two remaining papers provide detailed clinical descriptions of how hypnosis may be used to enhance clients' self-esteem, ego, and performance.

Four papers comprise the section on hypnosis with children and adolescents, together with an introductory section by Barry Evans PhD. Lachlan Lipsett MBBS, FRACS is a practitioner with extensive experience in this area. His paper provides an extensive review of cognitive and psychosocial developmental processes across the child and adolescent lifespan, and integrates appropriate hypnosis induction and deepening techniques for each age range. In the first of two papers reproduced from the book Clinical hypnosis with children, William Wester II EdD describes processes to be used in preparing children for hypnosis. Leora Kuttner PhD discusses the nature of hypnosis experiences of children and how this information can be used to frame appropriate induction processes for children. In the final paper, reprinted from the Australian Journal of Clinical and Experimental Hypnosis, Chrissi Hart PhD and Barry Hart PhD describe the range of childhood and adolescent problems which may be successfully treated, using hypnosis an adjunct to a range of therapeutic modalities.

Two internationally known writers and clinicians have each contributed one paper on indirect and Ericksonian approaches to hypnosis. Michael Yapko PhD kindly agreed to rewrite and expand several chapters on Ericksonian and indirect hypnosis, published originally in the 1986 book: Hypnosis: questions and answers. He provides an overview of Erickson's approach to therapy as a background to the experiential work in the symposium. In his paper, Jeffrey Zeig PhD extends the indirect approach by discussing the essential nature and role of indirection in therapy.

For her review of clinical applications of hypnotic assessment, Vicky Powlett BA, DipCrim and her colleague Kathleen Moore PhD have provided a background paper which provides a clear analysis of the nature of statistical qualities required of any test. They then describe and evaluate available measures of hypnotisability and correlates of hypnotic responsivity. The paper concludes with a review of issues in clinical assessment, the starting point for the symposium. As is the case with all papers in this book, the paper by Moore and Powlett provides an excellent background review of relevant research and clinical issues which is immediately useful to practitioners in the clinical setting.

I recommend these papers to you, representing as they do the current corpus of knowledge and clinical skills of many Australian and international hypnosis

EXPERIENTIAL APPROACHES TO CLINICIAN DEVELOPMENT

Jeffrey K. Zeig Milton H. Erickson Foundation

Methods for training therapists customarily are directed to developing cognitive abilities. Using Milton Erickson as a model, an alternate, experiential approach is offered. The "evoking style" of the therapist determines the outcome of the treatment more than the theoretical and clinical methods to which the therapist ascribes.

In psychotherapy, we struggle endlessly with the fact that most people live fragmented lives. They are preoccupied with the horrors and the glories of the past or they are preoccupied with the horrors and the glories of the future. They don't live; they just use their left brain to endlessly think about living. This kind of meta-living is just like meta-communication — the disease that all psychotherapists are suffering from. We spend our lives talking about talking, and many times never say anything. What is the essential objective of psychotherapy? — maybe it's to get rid of the past (good and bad) and the future (good and bad) and just be. That is, develop your personhood or your capacity to be who you are, wherever you are. (Whitaker, 1982)

Broaching the distance from the head to the heart is a problem that concerns therapists of all persuasions. Clients commonly understand their difficulties but fail to take effective counter-measures. However, if clinicians can systematically distinguish between technical or theoretical *understanding* and experiential *postures* or *states*, they more easily can modify the distance between the head and the heart. Moreover, the same distinction can help clinicians develop their own personhood.

I have a number of goals for this paper, each of which concerns the distinction between technical understanding and experiential realisation:

- 1. I want to reflect on my own evolution as a clinician, with special emphasis on my evolution as a teacher.
- 2. I want to outline an experiential method of training that I am developing, which is still in its infancy.
- 3. I want to stimulate clinicians to apply the method both for their own growth and development and as a tool for clinical practice.

Before proceeding I will make three preliminary provisos: One, talking about experiential methods is difficult at best, and deadly at worst. There is too much of a tendency to metacomment, consequently squeezing the life out of vibrant experiences by talking about them. Therefore, I will intersperse some experiential methods into this paper, realising that this particular format, print, is more suited to didactic offerings than experiences. I hope to reach the experiential level during my discourses at the Congress proper!

Two, I am going to rely heavily on Milton Erickson as a model. This is not a case of transference; well, maybe there is a little transference. But I have been a

student of therapy approaches for quite a while, having closely examined the work of masters from many disciplines. However, in the final analysis, Erickson, unquestionably, has proven to be the most interesting, the most complex, the best clinician I have ever seen, bar none. He had the most extraordinary range in his ability to therapeutically reach diverse types of clients. I am not the only one who has come to this conclusion. Many notable therapists and practitioners have been profoundly influenced by Erickson and his work.

Three, my interest in hypnosis naturally leads me to view things in terms of states. A more recently acquired interest in drama leads me to a perspective on postures. There is overlap between hypnotic states and dramatic postures: they both are inherently experiential. The world of experience, as you will see, is of primary interest.

As an entrée to the world of experiences, let's consider a case:

A CASE EXAMPLE

A couple came to Erickson with the wife's alcoholism as the presenting problem. Her pattern of drinking was covert; for example, she would garden on the weekends and drink from a carefully hidden bottle. The husband counselled, confronted, criticised, and coerced his wife, all to no avail. The wife continued drinking to her own detriment and to the detriment of the relationship.

It seemed that the husband also had a "little hobby." All weekend long, he sat in the living room chair reading "dusty old books, dusty old newspapers and dusty old magazines." The wife counselled, confronted, criticised, and coerced her husband, all to no avail. The husband continued his hobby to his own detriment and to the detriment of the relationship.

In the interview, Erickson discovered two seemingly inconsequential details. The couple had a camping bus they had not used in years, and the couple passionately hated fishing.

Erickson's first intervention was to suggest to the wife that she buy a bottle of whiskey and bring it home. She was to hide it in the house. On returning home from work, the husband was to try to find the hidden bottle. If he didn't, she could drink with impunity in the home.

The wife found great delight in finding a place to hide the bottle that no man could find in one hour. But after a few days of this routine, she became disconcerted and her delight grew thin; the couple returned to Erickson.

To the couple's dismay, Erickson directed them to go fishing. When they declined, reminding him of their distaste, he insisted. Ignoring their mounting protests, he became adamant about his directive. Finally they asked why it was so important to go fishing. "Well," he said, "it's the only correct therapy for you. Wife, if you are in a boat in the middle of a lake, there is no place to hide whiskey. Husband, if you are in the boat in the middle of a lake, there is no place to bring books, magazines, and newspapers. Go fishing!"

The couple rebelled. Instead, they went camping. In doing so, they rediscovered a mutual hobby. They also rediscovered an interest in their relationship. He

voluntarily relinquished his isolation. She voluntarily gave up alcohol. They changed by their own initiative — Erickson merely established a climate for them to examine and alter their behaviour.

ERICKSONIAN POSTURES

To consider the therapist's posture, I will briefly describe four clinical postures of Erickson: creating experiences, utilisation, orienting toward, and communicating for effect.

One posture that is a hallmark of Erickson's work is the concept of *creating* experiences. Erickson engineered therapeutic encounters whereby a client would experientially realise previously unrecognised abilities to cope and change. The case of the couple is a good example. Erickson knew they had the inherent (but not fully recognised) power to live more effectively. He merely set up circumstances in which they could access that power, readily recognising that insight was not a precursor of change. Erickson's therapy (and teaching) eschewed insight in favour of experiential methods.

A second posture is utilisation, which dictates that whatever exists in the therapeutic situation can be harnessed to achieve therapeutic goals. Utilisation is a posture of readiness by the therapist to respond strategically to any and all aspects of the client or the client's environment. In the case of the fishing couple, Erickson used the wife's pattern of hiding, the couple's rebellious nature, and their dislike of fishing.

I have maintained that utilisation is to Ericksonian therapy as interpretation is to psychoanalysis, as desensitisation is to behaviour therapy. It is true that many great clinicians utilise what the client brings; however, the extent to which Erickson developed his utilisation orientation was unparalleled. (For further information on utilisation, see Zeig, 1992)

A third posture characteristic of Erickson's method is the emphasis on indirection, a philosophy of *orienting toward* goals. Orienting toward is similar to the manner in which a religious master uses parables rather than stating options directly.

Many texts provide elucidation of the techniques of indirection. For present purposes, let's presume that the technique of indirection and the posture of orienting toward can be remarkably effective on many therapeutic occasions.

A fourth posture intrinsically bound to Erickson's method is the idea of communicating for effect. Of course, all therapists communicate for directed effect, but Erickson, as a hypnotherapist, was keenly oriented to the intended outcome of his suggestions. In contradistinction, many models of therapy are predicated on uncovering the understructure of the pathology in the individual or family. Erickson, on the other hand, was more of a pilot than an archaeologist or oceanographer.

In his years of studying hypnosis, Erickson investigated how people responded to nuance in communication. He was an explorer of human social responsiveness. For example, he used words surgically to elicit responses; he used verbal implication, gesture, the implication of gestures, etc. Especially important to

4 Jeffrey Zeig

Erickson was the way in which people responded to innuendo without full realisation of the response or the stimulus that elicited it. A cousin of this important but insufficiently understood phenomenon is the way one person will cough in an auditorium and others will echo, the way strangers sitting side by side will unconsciously synchronise their breathing rate and/or posture. Again, communication for effect is an area to which I cannot give deserved attention in this paper; still, it is of essential importance in Ericksonian methods.

So many experts discuss their work vertically, describing the depth of dynamics in the presenting pathology, history, or family patter. Conversely, as an expert in hypnosis, Erickson set sights on the horizon; he demonstrated people's ability to respond specifically to nuance such as the locus of voice, intonation change, and alterations in tempo.

These four postures, creating experiences, utilisation, orienting toward, and communicating for effect are core concepts in my therapy. To understand why I refer to them as postures and even "states," let's examine their essential nature.

ON EXPERIENCE

Consider the four postures: they could be seen merely as techniques, and in some sense, they are. In fact, they, or related methods, are described as techniques in a number of effective approaches to therapy. Presently, however, I would like to think of them as experiential postures that a clinician can maintain. This is an important distinction that reflects on training: techniques can be taught didactically; experiential postures cannot. Therefore, a method is needed to train experiential postures; they are important for both clinicians and clients.

Experiential postures are essential for clients because some concepts can be mastered intellectually; others, such as being happy, cannot. Happiness is an experiential reality; one cannot <u>do</u> happiness intentionally. Happiness must be realised, not learned; there are few rational lessons that one can be taught overtly to promote happiness.

Some of the seeming obscurity of Erickson's clinical methods might arise from the distinction between lessons that can be learned didactically and those that must be realised experientially. More often than not, Erickson resided in the experiential latitudes. This was true both in his clinical work and his teaching.

ON TRAINING

I will diverge for a moment to describe Erickson as a mentor. My instruction under Erickson's tutelage was as uncommon as his therapy. He never saw me do hypnosis or therapy, although he sought out reports on some of the cases he referred to me. He rarely provided didactic input; rather he taught as he conducted therapy, by using experiential methods. He offered hypnosis, stories, tasks, allusions, etc. Not only did he eschew cognitive learning, he opined that it often was more of a hindrance than a benefit. Of course, one could and should read to learn content. For example, Erickson was well aware of the psychoanalytic

approaches of his day, having collaborated with Lawrence Kubie and having worked with analysts, including Spurgeon English and Ives Hendricks. However, in interpersonal situations, Erickson did not teach content; more commonly, he oriented to the development of the clinician's experiential posture and referred students to books for learning content.

There is an implication in Erickson's teaching method that has influenced my training of clinicians: training must develop the self of the clinician, not just technical ability. This does not mean personal therapy for the clinician. There are many aspects of self that can be evolved in the clinician in addition to those that can be developed through personal therapy. As I will demonstrate, systematic methods can be used for overall clinician development.

THE THERAPIST'S POSTURE

To consider the therapist's position one can ponder "What position does the clinician take?"

The position of the therapist can be divided into four subcategories: lenses, muscles, heart, and hats, each of which have a professional and personal aspect, modified by experience. First, lenses represent the ways of viewing. On a professional level, lenses learned when studying family therapy diverge from those learned in behaviour therapy. On a personal level, the lenses learned growing up in one's family of origin differ from those learned in the neighbour's family. Second, *muscles* are the way of doing. Psychoanalysts, for example, often hypertrophy their interpretation muscles while Ericksonians develop their orienting toward abilities. Third, compassion is manifested in the heart. And fourth, the *hats* symbolise the therapist's social roles.

ON THERAPIST EVOLUTION

Aspects of the therapist's posture continue to evolve through training and experience. Traditional professional sources of growth and development include graduate school, postgraduate training programmes, supervision, and experience with a variety of clients. Also contributing are lectures, modelling by experts, personal therapy, supervision, books, tapes, co-therapy, and supervision through a one-way mirror in which a teacher speaks through a trainee. Although these are effective methods in improving the therapist's abilities, they are not especially cohesive or experiential.

For instance, can one conceive of therapy training as sports training, which requires exercise, practice, and discipline? If so, therapists could regularly train (and crosstrain) to improve their development. Thereby, techniques would not predominate; rather emphasis would be placed on training therapeutic postures, on growth, and on development. In an attempt to advance the growth and development of the therapist, I have developed a systematic experiential training system which I will outline shortly. First I will describe how the model derived from Erickson's work.

ERICKSON'S SELF-TRAINING

A model of the self-training of postures is suggested in the work of Erickson. He reported a number of exercises he used to train himself. To compensate for omissions in his medical school education, internship, and residency, he said that in one of his early jobs, he would get a social history from the social work service, and then intuit and write a mental status examination based on the written history. Then, he would take a mental status examination, and compare the intuited with the actual mental status examination. Subsequently, he would reverse the process; he would get a mental status examination, write an intuited social history and compare it with the actual social history. He said he did that exercise with hundreds of patients. His attempt was not to learn content, but to master a posture, a style of understanding human circumstances.

Erickson was dedicated to his growth and development throughout his life. Just before his death, I asked him a simple administrative question. He responded, but answered by using an indirect technique; he told a story. I had to "unwrap" the answer. His failure to reply directly interested me: I had the sense he was playing — even more than that, he was exercising his orienting toward "muscles," wanting to maintain tonus.

Moreover, Erickson gave me personal development assignments, although not systematically. For example, he told me to go to a school yard and watch children. (If you do this, remember not to wear a trenchcoat). I should predict which child would go to which toy next. Which would leave the group first? The idea of extrapolating and projecting future patterns from small bits of behaviour was near and dear to Erickson, and he promoted his posture in his students.

To promote the philosophy of "self-training," I provide pragmatic guidelines for students to do the same. In workshops I give students problems for monthly therapist development. For example, here are twelve challenges from recent workshops:

- 1. For each client, consider the question: What does the person value? Be specific and write out two or three adjectives per client.
- 2. For each client, indicate a specific answer to the following question: How do you, the clinician, know the client can change or better cope?
- 3. In each session, use the method of utilisation once.
- 4. Smile when offering hypnotic inductions; gesture freely and congruently while the hypnotised subject's eyes are closed.
- 5. When you see a new client, after the first five minutes, predict which hypnotic phenomenon you believe he or she will best accomplish.
- 6. Collect separate stories about human rigidity and flexibility. When appropriate, tell them to clients.
- 7. For each client you see, write a sentence summarising the person's unique style of responding.
- 8. Take away your primary strength for a month. Don't use the method that you most overuse. For example, if you are Ericksonian, don't tell stories. If you are analytic, do not make interpretations. See what you develop in its place.

- 9. Make a prediction about how specifically the client will resist your assignment or therapeutic directives.
- 10. For two weeks, write out how clients confuse you. For the next two weeks, write out how you confuse them. Be specific.
- 11. Make a list of how you desire to evolve as a clinician. Say it silently to yourself before each session as an affirmation.
- 12. Think in terms of analogies. Take the client's problem and describe it as a colour, a tool, a plant, and a vessel to contain water. See how this influences vour treatment.

I have a reflection on such assignments, and it is a personal reflection. A Native American saying goes, "Tell me and I'll forget. Show me and I may not remember. Involve me and I'll understand."

HISTORICAL REFLECTIONS AND TRAINING

In psychotherapy's early days, there was not much to learn regarding technique. Inquiry in those days focused on theoretical and conceptual issues. Training emphasised the development of the therapist. Consequently, individuals who elected to become psychoanalysts spent years undergoing training analysis, thereby learning to rid themselves of their own distortions and transference. The purpose was to develop the analysand as a tool of therapy.

After World War II, however, with the proliferation of a burgeoning number of divergent schools of psychotherapy, attention focused on the methods of psychotherapy, and the development of the therapist receded into the background.

Yet, when one conceives of therapy as an art more than a science, it behooves us to train ourselves as artists. That requires an entirely different approach to learning therapy. If we want to learn how to do physics, we can learn the rules of physics by going to a classroom and listening to a scholarly lecture about physics. But if we want to learn how to do drama, theatre or art, then we are not going to be able to learn it in the lecture hall. Rather, we are going to learn it from the inside out, by discovering something inside ourselves rather than learning a specific set of rules.

PSYCHOAEROBICS SM

I am about to present my model of training which derived from improvisational training. First, let's take a moment to condense and review what has been covered so far: there is a basic subjectivity about offering psychotherapy that cannot be broached. For one thing the experiential posture of the clinician is too idiosyncratic. It is projected into the therapy situation and forms part of its core. Therapists whose postures are didactic expound teaching methods and use them effectively. Charismatic practitioners will have that attribute as a therapeutic core, and so on.

There can be alternatives to training by didactics, supervision, modelling, clinical experience, books, tapes, co-therapy, and the one-way mirror. Clinical training should develop the clinician's posture/style/selfhood/orientation/ways-of-being/states. Moreover, a systematic experiential programme is desirable. As I have evolved as a teacher, I have added a core component to my teaching. I developed a method to teach experiential postures. Yes, they are Ericksonian methods, but I hope the scope and implications are wider. All therapies should expand training to elicit and evolve core postures. Therefore, after the extended prologue, I will get to the point, I have developed an experiential training system that I call "Psychoaerobics"

Let's examine a few of the 70 existent PsychoaerobicSM exercises. There are two classes of exercises: one set of exercises "warms up" skills that will be later developed and accesses positions that are generic across therapies; the second set consists of more elaborate exercises that develop postures specific to Ericksonian practice.

Warm Up Exercise Three

I will begin by describing Warm Up Exercise Number Three, which can be conducted in a group. One member becomes *the Pitcher*. It is his job to tell an emotionally revealing personal secret to the group. However, rather than saying it verbally, *the Pitcher* communicates the emotional secret in one of three ways:

- 1. By mouthing the words but not allowing sounds to emerge;
- 2. By writing out the secret in the air in complete sentences while experiencing the emotion; or
- 3. By telling the secret verbally, using a single syllable to mimic words, such as "bah." The other members of the group become *Receivers*.

In one variation, the Receivers guess the underlying emotion, naming it in one word. (Isn't it convenient that all emotions can be named in one word?) In the variation I commonly use, I train what I call "experiential assessment." In response to the pitcher's communication, the receiver must move continuously allowing his/her body to *resonate* with the perceived emotion.

Consider two resonant tuning forks placed on a conductive surface. If one of them is struck, the other vibrates, albeit to a lesser degree. Similarly, the Receiver allows his/her body to mould itself into a posture that reflects the emotion/meaning underlying the Pitcher's secret. When the Pitcher is finished, the Receiver holds the posture so that the Pitcher can examine and discern whether or not the message sent is approximately the message received. Group discussion may or may not follow.

Therapists can experientially assess clients' emotional states by monitoring themselves during the session, including their own physical posture. If the clinician notices oneself slumping in the chair, perhaps one is responding to the client's underlying depression. Most therapists cognitively learn verbal empathy at an early stage of their career. Experiential assessment also can be valuable.

Warm Up Exercise Three is designed to stimulate openness, cooperation, and playfulness. Moreover, this warm up exercise accesses and primes a skill that, as we will see, is subsequently developed in the second set of exercises *Psychoaerobic SM Exercises One and Two.* Before presenting those exercises, I want

to reflect on the way in which this Warm Up Exercise can be generalised into the treatment session to add an experiential component to the therapy.

Options for Warm Up Three

Clinical options are only limited by the inventiveness of the user. For example, Warm Up Exercise Three could be used experientially in the therapy of a regressed client who lacks the ability to discern others' feelings. Practice could occur in individual, group, or family therapy. The client could access and verbally identify communicated feelings. The assignment could be homework: a rigid family, for example, could take turns playing the exercise at dinner.

Furthermore, the exercise could be used fruitfully with children, both in individual treatment or in a group. It could help them develop their skill at verbal empathy. It could be used similarly as a supervision task with novice therapists.

Please understand the underlying philosophy. Empathy cannot be learned didactically anymore than one can learn to swim on a piano stool, or learn to be a chef by being handed recipes. Empathy must be learned experientially, and only practice will lead to improvement.

PsychoaerobicSM Exercise One

Exercise One is designed to develop the Ericksonian skill of orienting toward. Orienting toward could be considered a "muscle," a way of doing. For present purposes, orienting toward is considered an experiential posture or "state" of the clinician, not merely the technique of using indirection.

The exercise is conducted in a dyad with a Pitcher and a Receiver. Prior to commencing the exercise, the Receiver studies the Pitcher for a minute or two and writes five "yes or no" questions, which are relevant and not obvious. For example, asking a meticulous person, "Do you like to play in the mud?" would not be productive because the answer would be obvious. Asking the same person, "Do you like to dress neatly?" would be relevant, but again too obvious. Perhaps a meticulous person could be asked, "Do you like classic movies?"

The five questions are asked and answered sequentially. The Pitcher is to truthfully reply to the questions, but is placed under severe restrictions which make treasured and effective methods unavailable. That is, the answer must be "gift wrapped" in a story which is to be told in a slow measured monotone.

Moreover, no obvious gestures can be made by the Pitcher. The story should be simple and of limited duration. For example, the Pitcher could talk for a few minutes about walking to school as a child. The content of the story does not have to be relevant, but the meaning of the story must be shaded to indicate "yes, no or sometimes." Nonverbal cues cannot be used.

The Receiver is to attend via experiential assessment (a posture primed in Warm Up Exercise Three), rather than conscious deliberation. One way to attend experientially is for the Receiver to monitor his/her own physical responses. If the Receiver's head nods (or shakes), that answer can be accepted. Similarly, a beginning smile or opening gesture on the part of the *Receiver* can be taken as a "yes," while a tilt of the head or a slight wavering of the hands could indicate "sometimes."

At the end of the exercise, answers are *not* compared. Being correct is *not* the goal of the exercise. Rather, at the conclusion, the participants strive to define their respective states when they were at their optimum. Here the talent of entering and exiting states is accessed and harnessed from Warm Up Exercise Nine. The Pitcher is to describe the accessed "state" of orienting toward, answering the question "When I was *best* at orienting toward what *specifically* was I like?" The Receiver is to describe the gift unwrapping "state." Each can provide feedback to assist the other in this difficult task.

Exercise Number One is a typical Psychoaerobic SM exercise, meant to develop core "postures" (in this case *orienting toward* and *gift unwrapping*), in a core manner; namely, experientially by relinquishing overused and well-developed skills. *Orienting toward* and *gift wrapping* are treated as talents that must be learned experientially in the way bicycle riding must be learned viscerally. *Indirection* may be a technique. *Orienting toward* is considered a "state," that the therapist can access similar to compassion or concern. It is postulated that through continued practice, the state can be more fully accessed and developed.

The PsychoaerobicSM process is somewhat like physical exercise through circuit training in which muscle groups are isolated and developed. Moreover, in Exercise Number One, a talent, communicating directly with words and gestures, is restricted so that latent abilities can emerge.

PsychoaerobicSM Exercise Two

Exercise Two immediately follows Exercise One, but in Exercise Two, the roles are reversed. This time there are two conditions, not five questions. In the first condition, the new Pitcher describes an object, such as a tennis racket. (Stories are <u>not</u> told.) The description must <u>mean</u> a negative emotion; for example, guilt or fear. The emotion is to be fixed prior to the description and cannot be changed during the description. It is technically best if the Pitcher eases into the emotion gradually and orients toward it progressively. Again, gestures and tone are restrained.

The Receiver accesses a state of experiential assessment and discerns the projected feeling through the self-monitoring of minimal cues: a beginning frown might indicate displeasure, a curl of the mouth, frustration; a welling in the eye, sadness. The Pitcher continues the description until he/she can discern an overt behaviour indicating an emotional response in the Receiver.

In the second condition, a new object is described; for example, a half-filled glass of water. A positive emotion is "pitched," for example, joy, excitement, confidence.

At the end of the exercise, participants are restrained from comparing answers. Again, the goal is to define the respective states, *orienting toward* and *gift unwrapping*. The exercise is not a competition to be correct. Describing a state

is hard but valuable. It is also highly individual.

To further elucidate the purpose of Exercises One and Two, let's consider a technical method which Erickson used, called the "interspersal technique."

Two outstanding examples come to mind. In working with a pain patient who was a florist, Erickson talked about the growth of tomato plants, interspersing suggestions of comfort into the description. In another case, he told stories to an anorexic client and interspersed suggestions of hunger while also stimulating a range of emotions. Although it is interesting to speculate about the techniques and theory of this approach, for present purposes, I will limit my discussion to training clinicians.

Consider Exercise One. The object of the exercise for the Pitcher is to orient toward a thought ("yes," "no," or "sometimes"). In Exercise Two, the Pitcher orients toward a feeling. Much of the interspersal technique is based on these processes: one orients toward a thought; one orients toward a feeling; one orients toward a behaviour. Eventually preconscious associations elicit constructive action by virtue of what is called the ideodynamic effect, which has to do with the ways in which ideas and associations stimulate action. Essentially, in the interspersal method, the patient is "induced" into a state of experiential assessment of the clinician's method.

Experiential assessment can be considered integral to hypnosis. Hypnosis does not have to be considered as "trances" — it could be defined as a state of "experiential assessment." Hypnotic suggestions could be conceived as ways of guiding associations. In Ericksonian therapy, associations are not analysed; they are elicited and utilised.

Realise that Exercise One and Two should be repeated regularly, similar to physical exercise. These techniques are best developed through regular practice.

Of course, in my training, I train both technical methods and experiential postures, but in recent years I have been more inclined to the latter. I even use group hypnosis before and after the exercises to further experientially consolidate learning.

Orienting toward is one of the essential postures in the PsychoaerobicSM system. It is a therapeutic "muscle." I arbitrarily chose it as the first to be developed. Other postures specific to Ericksonian practice include developing acuity, communicating for effect, and utilisation. I will discuss these briefly and provide examples of exercises to develop each of them. Again, keep in mind that I am describing them as postures, not techniques — which they also may be.

The point: after practising the exercises and accessing postures when the clinician gets onto his or her therapeutic "stage," the Psychoaerobic SM "states" will be available.

Acuity Exercises

The largest number of exercises in the Psychoaerobic SM system are those that elicit acuity and develop therapists' lenses. There are a number of subdivisions of acuity, each of which has specific exercises, including visual attention, auditory attention, concentration, detection of pattern, extrapolating from minimal cues, noticing conspicuous absences, and perceiving expectations (rather than realities). As a warm up for acuity exercises, I might offer students a group induction because hypnosis itself focuses perception.

Due to space limitations, I will only outline a few acuity exercises and present them as simply as possible: an exercise to access *visual perception for details* is as follows: two participants, one Pitcher and one Receiver, face each other. The Receiver "memorises" the Pitcher and then closes his/her eyes. The Pitcher then makes three physical changes; for example, removes a watch, changes the location of jewellery, unfastens a button. The Receiver then opens his/her eyes and discerns the changes.

In an exercise designed to enhance *perception of pattern*, one member of the group who is a native speaker of a foreign language, tells two brief stories, one of which is true, and the other of which contains an emotionally significant lie. The group works at discerning the speaker's pattern of lying.

In an exercise on *extrapolation*, in dyads, members make predictions about each other, based on minimal cues.

After each of the exercises, discussion centres on accessing and developing a robust acuity "state." Clinical extensions are offered: Similar exercises could be given to depressed clients to stimulate an external awareness that is antithetical to the inward pressures of depression, thereby disrupting the depressed state and eliciting a more helpful externally oriented state. For example, such clients could be given the task of noticing patterns in the clouds as they did as children. They could be given the assignment Erickson gave to me, namely, go to a school yard and examine specified patterns in children's behaviour, etc.

Communicating for Effect

There are a number of exercises to develop the posture of *communicating for effect*. In one exercise, I have participants conduct hypnosis using gibberish. In the next, I have them induce hypnosis by repetitiously using only one word. In a subsequent exercise, they can only repeat one sentence. Repetitions cannot be monotonous. Each must contain a novel variation in tone, tempo, gesture, voice locus, etc. Clinicians who have done this exercise often appreciate the experiential learning of how nonverbal methods can elicit targeted responses. Again, the focus is on developing posture, not competence in technique. Competence in methods should stem from posture, rather than vice versa. This is the reverse of customary training, in which one first learns the technique and posture follows.

PRELIMINARY CONCLUSIONS

At this stage of my evolution as a therapist and trainer. I distinguish between technical methods and clinician postures. In the forms of psychotherapy with which I am familiar, it is possible to teach theory and practice didactically, and that almost always is the starting point. In contradistinction, I maintain that providing therapy is more a matter of posture than technique. Therefore, in contemporary training, "state" can precede method.

Therapeutic practice is composed of techniques and postures. Consider the fact that light can be considered a wave and a particle. In studying light, sometimes it is best to think of it as a wave; at other times as a particle. Similarly, when considering the therapist, we can emphasise postures sometimes, and techniques at others.

There is a considerable corpus of knowledge of theory and practice in each school of therapy, and technical adequacy can be garnered through cognitive study. That is all well and good. However, the emphasis on training in didactics may inadvertently lead clinicians into counterproductive directions.

The primary goals of therapy are helping people cope, change, activate, realise self-esteem, assume responsibility, etc. These results are achieved through postures that must be learned experientially. If treatment is to be experiential, the training of therapists should stress systematic experiential methods.

Using Erickson as a model, I have tried to separate experiential postures from technique. I have attempted to develop a systematic programme for the experiential learning of experiential postures, although it is still in its preliminary stages.

I hope the model has greater applicability than just teaching Ericksonian concepts. I would hope that one could invent a Psychoaerobic SM programme to model any master clinician. If one were modelling Aaron Beck, one could ascertain the therapeutic postures of this master cognitive therapist and create experiential exercises for each. One could model Kernberg or Masterson for psychodynamic methods. One could model Minuchin for family therapy, etc. Moreover, the model could be extended to other fields such as teaching or parenting. What are the experiential postures of a great parent? What exercises could help teach these?

I suggest that we consider both the technical and the experiential, but let's start with the experiential.

One can consider that in lessening the distance from the head to the heart it is more important to first start from the heart.

Adapted from Zeig, J. K. (1997). Experiential approaches to clinician development. Hypnos: Swedish Journal of Hypnosis in Psychotherapy and Psychosomatic Medicine, XXIV(2), 60-69, edited and reprinted with permission. An expanded version of the paper appears in *The evolution of psychotherapy: The third conference*. (pp. 161-177). J. K. Zeig (Ed.). New York: Brunner/Mazel, 1997.

REFERENCES

- Erickson, M. H. (1948). Hypnotic psychotherapy. *The Medical Clinics of North America*, May. Also cited in E. L. Rossi (Ed.)(1980). *Collected papers of Milton H. Erickson, Vol. IV: Innovative hypnotherapy* (pp. 35–48). New York: Irvington.
- Whitaker, C. (1982). Keynote address: Hypnosis and family depth therapy. In J. K. Zeig (Ed.). *Ericksonian approaches to hypnosis and psychotherapy* (pp. 491–504). New York: Brunner/Mazel.
- Zeig, J. K. (1992). The virtues of our faults: A key concept of Ericksonian therapy. In J. K. Zeig (Ed.). *The evolution of psychotherapy: The second conference* (pp. 252–266). New York: Brunner/Mazel.

THE TREATMENT OF PAIN IN CHILDREN AND ELDERS: WORDS ARE NOT ENOUGH

Samuel LeBaron, MD, PhD Stanford University Medical School

This paper examines a range of issues relating to the management of pain in children and in elderly patients. In relation to children in pain, the paper discusses a developmental view of fantasy and play, which can be effectively used, in conjunction with hypnotic techniques, to moderate children's pain experiences. The review extends to an analysis of situational factors, such as the medical establishment, and parental / child variables which can be used in pain management. Several detailed case example illustrate the points being made.

When discussing pain management with elderly patients, the paper focuses on the meaning of pain in older age and illustrates the importance of meaningful activities and life goals in helping patients understand and deal with pain. Again, case examples illustrate theoretical points.

Overall, the paper highlights the critical role of the physician / patient relationship in pain management. What is so important in this relationship is not the medical expertise of the physician, but for practitioners of pain management to understand the scope and impact of their relationships with patients, in helping both individuals to deal with life experiences.

There is something that seems obvious, and yet mysterious, about how words appear to help our patients to suffer less. Perhaps one of the most simple and direct examples of this phenomenon occurs when you, in your role as a clinician, say to a person in pain, "I'm sorry you've been hurting. I hope you're feeling better soon." When you say words such as these, and you speak with sincerity, perhaps you notice in your patient just a little relaxation, a deep breath, a softening of the face and the eyes.

A smile may appear on your patient's face. Or tears. Or sometimes, both. "Thank you," patients often respond with a sigh. "I feel a little better just knowing that you care."

One simple explanation for our patient's sudden improvement is: "I said the right thing." Understandably this leads us, together with our motivation to be a good clinician, to try to "say the right thing" again and again, obsessively convincing ourselves that the words are the key. Our human tendency is to find simple, obvious explanations for everything that we experience. After all, explanations are part of our learning and survival.

Throughout all our life experiences we try to convince ourselves of this very attractive idea: "If only I can say the right words, everything will be better." Unfortunately, this well intentioned belief is simplistic, naive, and in some instances, dangerous. The danger as a clinician is that the obsession with clever word choices makes one deaf and blind to the most powerful variables: our relationship with the patient, our feelings and fantasies about each other, your

age, the patient's age, our cultural backgrounds, the medical diagnosis, the identified problem. . . These variables are more difficult to explore, more obscure, more complex, but they contain the greatest treasure.

The purpose of this paper is to review some basic guiding principles for treating pain in patients of varying backgrounds, with special emphasis on the therapeutic relationship. Human qualities such as developmental stage, gender, class, family relationships, language, and culture all serve to inform the alert clinician about the developing relationship. The therapist's own qualities (including both strengths and weaknesses) are equally important in determining therapeutic effectiveness. It is these qualities that make it more or less difficult to relate to the patient's problems. It is this human relationship, alive in the structure of a strong theoretical understanding, that is most efficacious.

1. CHILDREN WHO ARE IN PAIN

As we begin to think about how to help children who are in pain, one thought is immediately obvious: children love to play. Play of all kinds, whether mental or physical, provides fun, distraction, reassurance, solace, and an eloquent means of expression. In order to think about developmental differences among children, it is helpful to consider how children express themselves through play at different ages. These developmental differences provide us guidance in planning how to utilise a child's imaginative capacity in therapeutic ways.

A DEVELOPMENTAL VIEW OF FANTASY

Ages One to Three: Action Play with Objects

Between the ages of one and three years old, you can observe how children spend hours imitating parents, each other, and characters from stories and TV programmes. At times, the two-year-old may repeat the same scene over and over, in detail. This slavish insistence on repetition both amuses and frustrates the parent who reads the same bedtime story to his two-year-old for the hundredth time. Meanwhile, the child seems as entranced as if it were the first time. When the parent attempts an ad lib variation on the story, hoping to make it more interesting, the child insists indignantly, "But that's not the way the story goes!" Clearly, the child obtains satisfaction and pleasure from the faithful repetition of details, some of which may be replicated in play the next day. Children around this age typically have little interest in elaboration and embellishment of familiar story lines, since they do not yet have the ability to focus attention on internalised images or to develop these images into a story line or a fantasy.¹

 $^{^{1}}$ Obviously, it would be an oversimplification to suggest that this pleasure in the exact replication of stories is confined only to pre-school children. It is also commonly observed in older children — and in our own adult experience. Most of us have favourite stories, movies, or operas that we enjoy repeatedly throughout our lives.

Favourite and familiar objects become important props for this imitative play. Children want to imitate a parent sweeping a floor, hammering a nail, or washing dishes. So they seek a broom, a hammer, some dishes, or objects that are a close facsimile.

Psychological interventions designed to reduce pain or anxiety of a child this age make use of objects such as picture books, toys, stuffed animals, soap bubbles — all designed to involve the child in a more pleasant experience. A suggestion that the child imagine (rather than physically play with) an object or a scene is much more difficult and less engaging for children of this age.

Ages Four to Six: Sociodramatic Play

Gradually, pretend play becomes less dependent on objects and begins to include concepts and roles. This play is also characterised by its social qualities. Whereas the younger child is the producer, director, and star of her own show, the five-year-old wants to include playmates. There is discussion and negotiation about the roles and lines that each character will speak. These are often rehearsed and elaborated, and may evolve as the play continues. Props are still an important part of this play, but there is clearly an ability to include sustained imaginative sequences, with little or no external props. Sociodramatic play represents a transition from the earlier form of play, with its total dependence on external objects, to the complete representation of images and events in one's imagination. This signals the beginning development of a rich and varied fantasy life.

In contrast to younger children, who have much greater difficulty projecting their behaviour into the future, children four to five years old can benefit from play therapy to help rehearse new ways of coping with difficult situations. Unlike older children, the four-year-old child may be unable (or is only beginning) to describe conceptually the relation between rehearsing a behaviour and its application to a future situation, but the learning of new behaviour and development of enhanced confidence can occur nevertheless.

Ages Seven and Older: Internalised Imagination

In both early action play with objects and subsequent sociodramatic play, the imagined events are acted out overtly. As children pass through the early years of school, they learn to restrict and control their overt behaviour. Understandably, an adaptive way of coping with these physical restrictions is to imagine "What if ... ?" At the same time, there is a rapid growth in the ability to hold concepts and images in the child's mind. These abilities are readily observed in the child's capacity to consider past events, to develop hypotheses about future events, or even to consider events that are improbable — all on a cognitive level.

At this stage of maturity, children (as well as adolescents and adults) can benefit from physically rehearsing events, but they have the additional benefit of complex, imaginary rehearsal — fantasising — that may include imagined overt behaviour, imagined emotions, and alternate behaviours of both self and others. You will find a more complete discussion of developmental views of fantasy in Singer (1973) and Hilgard and LeBaron (1984).

Play, Imagination, and Hypnotic Ability

Traditionally, hypnotic phenomena have been thought to include relaxation, focused attention, suggestion, and responses that are subjectively perceived by the patient as some combination of somatic, cognitive, and emotional experience. These are characteristic of the immediate associations that most of us have to the idea of hypnosis, in the same way that many of us associate the idea of meditation with sitting motionless, breathing deeply, and remaining very quiet. However, just as there are active forms of meditation that teach the student to meditate while going on with activities of daily life, so, too, there are forms of hypnotic experience that involve either hetero- or self-suggestion, while remaining alert and active.

When working with children, it is particularly important to understand that, while the concept of giving suggestions and guiding the patient's attention appears to be useful regardless of age, the techniques for accomplishing that goal differ in important ways depending on age.

We adults are proud of our critical abilities. We value independent thinking. These are among the qualities that seem to help us achieve success in adult life. Thus, it is often difficult to suspend those treasured qualities and experience and to adopt what (initially at least) may feel like a passive, dependent mode of behaviour, with another person directing our attention and physical behaviour.

It is difficult, when in a critical frame of mind, to so intensely imagine having a bag of ice on a sore joint that both the idea and the image become real and compelling. But if we are first invited to sit quietly in a soft chair, to breathe deeply, to relax, to let go of our cares and concerns, to pay attention to the therapist's voice, etc., then we may be able — temporarily — to suspend our usual level of critical evaluation. Then, the ice bag has a chance to become more real to us.

It is clear to us, as we enter into this interaction with the clinician, that our suspension of critical evaluation is not only temporary but also conditional. The implication is "I will agree to not be critical of what you say as long as it doesn't violate our social contract." In other words, we understand that the interaction is intended to be safe, respectful, interesting, and helpful in some way. Paradoxically, then, we are not really agreeing to suspend our critical faculties entirely. Rather, we are agreeing that our critical faculties will be sent off to "patrol the perimeter" — to keep us safe — while letting us have a good (and/ or therapeutic) time.

In most instances, all of this appears to happen easily; yet, it's so complicated! It's no wonder that we adults have a more compelling and interesting reaction to suggestion when we undergo a "settling in" period of a few minutes, referred to in hypnosis jargon as an "induction." During this time, the instructions to relax, close our eyes, focus on the clinician's voice, and so on, provide just the transition many of us need. This process also provides a psychological transition for us as clinicians as we move from an everyday conversational tone of voice to one that is more dramatic, intense, or in various other ways more compelling to ourselves and to our patients.

What about children? Do they need an "induction" to make a transition from a critical mode of thinking to a more make-believe orientation? As any observer of children knows, they're usually already there, ready for play, either in the form of physical play or fantasy. As any parent and teacher knows, the more common challenge is how to get children from the land of make-believe back to our adult version of reality. With this in mind, the necessity of an adult-style "induction" as a prelude to using imagery and suggestion in children usually does not exist.

Observation of children at play and in conversation gives some clues about what's needed.

Four-year-old Kevin (sitting on his mother's lap): "I don't want a shot! It's going to hurt!"

Mother: "Would you like a story? Let's read a story."

Kevin (picks up a book): "I want this one. But I don't want a shot."

Mother: "Oh, look! This story is about a baby elephant 'What do you think he does when he bumps his nose on a tree?"

Kevin: "Did he cry?"

Mother: "He thought he was going to cry, but instead the mummy elephant gave the baby elephant a kiss on the nose, and he felt all better."

Kevin: "Are you going to give me a kiss?"

Mother: "I sure will, sweetie. And a big hug, too."

Kevin: "Then I'll feel better?"

Mother: "That's right. And then we'll go home and play."

In contrast to the need most adults have for an induction, children at play consciously establish necessary rules for their drama in somewhat the same way that some movies begin with a spoken or printed introduction, to "set the stage." Once the dramatic flow begins, however, the action can acquire a sense of reality, and the distinction between reality and make believe is often blurred. The following example illustrates this transition:

Allison (a six-year-old, says to her friends): "Let's play school. I'll be the teacher, and you be the students . . "

Later, Mom comes in the room and observes their play: "Are you pretending to be their teacher, dear?"

Allison: "I'm not pretending! I am the teacher."

Another example:

Mario (nine years old, walks slowly, with a limp): "Hey, wait for me, Steve! My ankle hurts."

Steve (also nine): "What's the matter with it?"

Mario: "My dad said I sprained it last week when we were up in the mountains."

Steve (after a few moments of silence): "Hey, I know! Let's say we're in the army. You got your foot shot!"

Mario: "OK. Quick! They're shooting at us! Run for cover!" (Both boys run at full speed to hide in some bushes.)

From observation of children, we can notice that the need for an induction (that is, for a process that assists the transition to an easy involvement in fantasy) develops as the child's critical reasoning abilities become stronger. This usually occurs somewhere between nine to twelve years of age. Prior to that time, children at play do not stop to "induce a trance." They just begin to play. To be more precise, they just begin to play after a brief explanation to themselves or others of what the premise of the drama will be: "Let's play house." "Let's play with our dolls." "Let's be cops and robbers. I'll shoot you and just before you die, you'll shoot me." And so on.

PROBLEMS IN THE ASSESSMENT OF PAIN IN CHILDREN

In addition to consideration of the child's developmental stage, it is crucial to assess their degree of suffering as one prepares to offer some therapeutic relief. This assessment helps us to determine a baseline of behaviour and experience, as well as to predict the eventual effectiveness of treatment.

It is often difficult to obtain a report of pain directly from children. For example, self-reports of pain are impossible for the infant and pre-verbal young child. For young children, therefore, assessment is based on observation of behaviour, such as whimpering and crying. Even for older children, the evaluation can be difficult, since the same word to describe pain may have a different meaning for the child than for the adult.

It is much easier to obtain a useful assessment of pain if the clinician practises careful observation. In situations where a child is unlikely to provide a rating or description of his or her own pain, we must rely entirely on observation. This presents some interesting challenges. For example, how can we differentiate between behaviours that represent anxiety and those signalling pain? During acute pain, the child's behaviour often represents a combination of anxiety and pain, commonly labelled as "distress."

Withdrawn behaviour in the child with long-standing pain may represent a combination of pain and depression, with either factor predominating.

Additionally, there are individual, developmental, familial, and cultural differences in pain expression. Some children tend to be very expressive when in pain, while others tend to suffer in silence. Older children and adolescents who have learned more cognitive coping strategies tend to be less vocally demonstrative when in pain. However, we still look for age-appropriate body language, such as muscle rigidity, sweating, or clenching of fist or jaw, which may represent attempts to cope with anxiety and/or pain.

Families tend to create implicit and explicit rules for their children of what constitutes appropriate behaviours to display in public, including pain relatedbehaviour. A common example is the father or mother who admonishes the 10-year-old boy: "Stop crying! You're not a girl!"

Some medical conditions present particular challenges for the assessment of associated pain. For example, with recurring or long-lasting pain related to illnesses such as arthritis or bone cancer, caregivers often require "proof" that a child's continued pain complaints are justified. Unfortunately, one still hears caregivers ask: "Is this child's pain real?" The ability of a child momentarily to divert attention to a game, movie, or television but then complain of pain as a caregiver enters the room is sometimes mistakenly interpreted as evidence that the pain is either bogus or exaggerated. This behaviour is typically labelled as "attention-getting" (for the younger child), "drug-seeking behaviour" (for the adolescent), or simply "manipulative." In any case, since this behaviour is seen as an unpleasant characteristic of the child, "limit-setting" is often the clinical response, rather than a thoughtful re-evaluation of the meaning behind the child's behaviour.

PSYCHOLOGICAL APPROACHES TO PAIN MANAGEMENT

Utilising the Power of the Medical Establishment

Pain specialists are often made to feel "ancillary" and therefore somewhat unimportant. This is unfortunate, because many pain problems are treated more effectively with a psychological intervention than with a medical one. It is essential for physicians, psychologists, social workers, nurses, psychiatrists all who treat the child — to communicate and collaborate as part of a team. It is equally important for the child to recognise that these caregivers function effectively as members of a team, all with equal status, but with different roles.

In the case of an acute pain situation, such as a medical procedure, the concept of a team is more difficult to achieve, because the physician is understandably perceived as having the greatest power, by virtue of the ability to inflict pain (e.g., by using a needle) or to relieve pain (e.g., by administering medication). Thus, in the acute pain situation, the patient will typically focus more attention on the physician.

Therefore, it is very helpful if the treating physician and the pain specialist, as well as the nurse and other providers, can discuss their preferred styles of handling various challenges that arise in the acute pain situation. While working with the child, each can give information and instructions to the child and refer to each other by name, as a way of demonstrating equal status and authority as they work in partnership to help the child. This will instill confidence in the child that it is okay to shift the focus of attention from the physician to the colleague who is interacting with the child.

Involving the Parents

Attitudes and practices in the medical environment often minimise the importance of parents. Often, they seem to be tolerated, as if they were present only because of their biological or legal status with the child. This is unfortunate, because parents are usually welcome and helpful allies in understanding and treating their children. Parents spontaneously treat their children's pain in ways that are well-known across most cultures: with a kiss and a hug, a distracting story, or with reassurance. Yet, in the presence of physicians, nurses, and other clinicians in the medical setting, they frequently stand back, both literally and figuratively, out of deference, to what they may perceive as a greater power. Through our words and our behaviour, we need to invite the parents to act as members of the team.

Discovering Children's Self-Directed Coping Skills

The primary goal of psychological interventions for pain control is to decrease suffering and enhance the child's feeling of security and comfort. In addition, clinicians and parents need to help the child develop successful coping strategies.²

Hilgard and LeBaron (1984) described a variety of self-directed coping techniques developed by children and adolescents who underwent repeated painful medical procedures. These techniques included physical as well as cognitive techniques.

Case Example: Martin (6), Who Found a Religious Solution

Martin was a sociable, bright boy who initially experienced a great deal of pain during bone marrow aspirations. Like many children, he soon developed a great anticipatory anxiety to these repeated traumas.

Martin complained to his father about the anxiety and pain. His was a family with a strong Christian tradition, so the father suggested that Martin try to relax by reciting Psalm 23 to himself. In fact, his father told him that, if he would do this, the bone marrow aspiration would not hurt. Fortunately, this suggestion was very effective.

Following his father's suggestion, Martin was able to remain relaxed and calm throughout subsequent procedures. His description of the pain suggested it was now greatly diminished. He was quite enthusiastic about the improvement. He said that, as long as he kept his mind on Psalm 23, there was no pain. When asked to describe his experience, he said: "It's like going to sleep, but you don't close your eyes."

SPECIFIC THERAPEUTIC TECHNIQUES

The treatment of pain with techniques such as cognitive preparation, distraction, relaxation, and hypnosis have been described elsewhere (Hilgard & LeBaron,

² Coping is a self-regulatory process serving the basic motive of control over oneself and one's world. "Successful coping" occurs when children's appraisal in anticipation of an event and during the event results in an experience of mastery or accomplishment. Obviously, children facing the same pain event will differ in their coping abilities, as well as in their perception of the situation, for a number of reasons, including past experiences, age, and temperament.

1982, 1984; Katz, Kellerman & Ellenberg, 1987; Kuttner, Bowman, & Teasdale, 1988; Olness, 1981; Siegel & Peterson, 1981; Zeltzer & LeBaron, 1982).

Psychological intervention "packages," which include a combination of breathing, imagery, rehearsal, and modelling have demonstrated efficacy (Jay, Elliott, Ozolins, et al., 1985). Distraction may be sufficient for some children to help them to cope with medical procedures. However, if a child is extremely anxious, or the procedure is very painful or invasive, then the child may require intensive pharmacological intervention. Of course, psychological and pharmacological interventions are not mutually exclusive, and are often complementary.

There are a number of common psychological interventions for pain control, which are outlined here. The reader interested in more detail may refer to Hilgard and LeBaron (1984); Olness and Gardner (1988); Kuttner et al. (1988); Zeltzer, Jay, and Fisher (1989); and Zeltzer and LeBaron (1986).

Desensitisation is particularly helpful for children experiencing anticipatory distress. The child may be gradually exposed to the impending stimulus with imagery and / or doll play and may practise with a mock procedure. Modelling and rehearsal through use of videos, dolls, or other techniques can help children visualise the procedure they will undergo. Videotapes for parents can teach them coping skills they can demonstrate to their children or use themselves. Positive self-statements (e.g., "I know what to do," "I've done this before") can be combined with thought-stopping and positive reinforcement to encourage feelings of self-efficacy.

Distraction techniques, such as counting or blowing bubbles, are particularly helpful for children who have difficulty focusing on imagery. Imaginative involvement in pleasant activity — whether physical or mental — encourages dissociation from an unpleasant experience, while maintaining continued attention on a pleasant one. Suggestion is also often used to help "re-frame" or re-define the sensory experience, to render it more tolerable.

The following examples demonstrate the use of various psychological interventions, including imaginative suggestion. I emphasise that the use of suggestion is not merely a technique to be applied to all children in pain; nor is a child who has received one type of intervention destined to continue to receive that same intervention indefinitely. Children's individual needs and the particular type of pain situation guide both initial interventions and later shifts in approach.

Case Example: Kerrie (8), Who had a Facial Laceration

While she was playing soccer, Kerrie's chin collided with another player's head. She was brought to my office for sutures of her split chin.

When I entered the room, Kerrie was holding a piece of bloody gauze to her chin. As her mother described how the accident had happened, Kerrie's eyes filled with tears. "Do I have to get stitches?" she asked in a trembling voice.

"I hope you can get some of my special magic stitches," I answered with a cheerful voice. "Let me take a look, and I can tell you how much fun we'll have. Oh, that's a beauty! This is your lucky day! You can get some of my special stitches. They're blue! When your friends see your chin, they're going to want stitches too."

Kerrie seemed quite thoughtful, and she looked a little less afraid. "Will it hurt?" she asked in a fearful whisper.

I continued re-framing her experience by gently whispering in Kerrie's ear: "Ever felt what fairies' feet are like? Sometimes they tingle, sometimes prickle, sometimes tickle. That's what it will be like. Hurt? Naw . . . I don't think so — but if it does, you let me know, and I'll stop."

OK," she said, smiling a little now.

Kerrie had a deep, jagged laceration on her chin, which would require three small sutures. I signalled to the nurse to bring in a tray with the lidocaine syringe and suturing equipment, all covered with a towel, of course, to avoid frightening Kerrie.

"First, I'll wash your chin with some magic soap — it feels so good, so cool, that maybe you'll feel some tingling. Let me know if you do."

Kerrie laid back on the treatment table with her mother at her side. I washed her chin with enthusiasm and a flourish, as if creating a work of art.

"Aha! Look, Mom, what a beautiful chin!" At the same time, I asked Kerrie if she believed in fairies. Of course she did, although she had never seen any.

"I'm going to put this magic tent over your face so you can feel fairies dance on your chin," I said, while opening a paper sheet with a hole in the middle to create a sterile field for the suturing. "By the way, you and your Mom can peek at each other under the edge of the tent."

This way of communicating with Kerrie allowed me to continue the technical medical procedure while simultaneously attending to Kerrie's (and her mother's) needs for comfort and security.

With one hand, I lightly pinched the chin. "Now you can feel the fairy toes dancing across your chin." At the same time a small amount of lidocaine was dribbled from a syringe and infused into the surrounding tissue (thus, I was not depending solely on psychological pain management, since medical management was so readily available).

All the while, Kerrie, her mother, and I chatted cheerfully about fairies, tiny giraffes, and a pet kitten, all of whom were having a picnic on Kerrie's chin. Three sutures were then easily placed, with no discomfort to Kerrie. As she sat up afterward, Kerrie grinned. She blinked her eyes the way people do when they come out of a darkened movie theatre into the sunlight. "Are we done? Do I have stitches?"

Kerrie had no previous horrible experiences to convince her this one would also be horrible. But she had enough information to suspect that needles (and, therefore, pain) would inevitably be part of her experience. Yet, she was willing to trust I could help her without causing pain. She was receptive to my suggestion of "special" "magic" stitches. Further, a tone of voice that conveyed

excitement and pleasure, rather than regret, helped support the expectation of magic and wonder, rather than pain and fear.

The involvement of the child's interest in fantasy and in comforting attention to her chin served two purposes: it provided a more pleasant focus than worrying about pain (which already existed because of the injury); and it offered a way for the child to re-interpret the sensations she did feel. For example, if the momentary stinging that occurs as the anaesthetic is injected is interpreted as "fairies' feet dancing" or a "kitten licking my chin," the child can perceive it as tolerable, sometimes even pleasurable. Without this reinterpretation, children are very likely to worry that the stinging is a harbinger of great pain yet to come, and their fear and vigilance escalate quickly.

It is important to note that, although Kerrie's case demonstrates a physician providing psychological intervention while suturing her chin, the intervention could have also been provided by a psychologist, social worker, nurse, or other professional. In that case, it is helpful for the physician and pain specialist to work together, communicating shared expectations and intentions, so that the child knows they are working in collaboration.

CHILDREN WHO APPEAR TO HAVE LITTLE INTEREST IN IMAGERY

An appreciation of the variation in children's needs and preferences is essential to effective treatment. Some children appear to be inherently very interested and responsive to the use of suggestion, imagery, and fantasy to help relieve their pain. Others, although seemingly very motivated to feel comfort, simply do not respond well to these approaches.

A significant amount of this variability seems to be related to early childhood involvement in make-believe fantasies and experiences of story-telling with their parents (LeBaron, Zeltzer, & Fanurik, 1989). However, other situational variables also play a very significant role in determining the child's receptiveness. These include the child's level of anxiety, alertness, and general feeling of wellbeing. Let us also recall again how important our own characteristics are in a child's response. Some children will look at your face and see a kindly, loving character. Another child may immediately react to you as if you were the wicked witch of the west.

Some children present a very interesting challenge to the clinician who invites their involvement in imagery and fantasy:

Clinician: "Would you like to feel some little fairies dancing across your chin?"

Child: "I don't believe in fairies."

Clinician: "How would you like to have Fluffy, that little kitten you were telling me about, curled up right here on your lap while we do this? Child (incredulous): "We can't have Fluffy here in the office!"

Such interactions are not infrequent, even with children who are at an age and of a predisposition to enjoy stories and fantasies about fairies, kittens, and other sympathetic creatures. Whatever the reason — because of underlying predisposition or temporary anxiety — these children simply do not find the images and make-believe offered by the kindly clinician to be at all helpful.

Here is one of many ways that you might respond to such a child (the physician is preparing to suture a laceration over the eyebrow):

Pain therapist: (e.g., psychologist or nurse): "You're right, we can have a great time without any fairies or kittens. While Dr Jones is fixing your eyebrow, would you prefer to know everything she's doing, or do you want to tell me about the camping trip you just finished?"

Child: "I don't want her to stick me with a needle! That's going to hurt!" Therapist: "OK, then. So let's let Dr Jones cover both of our faces with this sheet. I'll put my face down here too, so we can see each other. Like a tent. Like camping."

Physician: "Oh, you two are so lucky to go camping! Have fun! I'll give you a phone call if there's anything I need to tell you."

Therapist: "Thanks, Dr Jones! Now, Dr Jones is just washing your eyebrow with soap. That will help it. So you went camping up in the mountains?"

Child: "Uh-huh."

Therapist: "Under a tent?"

Child: "Uh-huh."

Therapist: "Like this one. Like this tent that you and I are under except bigger?" (The therapist notices that Dr Jones is about to infuse a local anaesthetic into the eyebrow.) "When you were camping, you could have woke up in the morning . . . and there's the sun coming up, shining right in your face! Kind of warm. Not hot, really . . . more warm, warm sun, so that you think of wearing a hat to keep it out of your eyes, then you begin to wonder if somebody's going to do some pancakes over the campfire . . . Did you have any?"

Child: "No."

Therapist: "Would you like some pancakes for breakfast while you're camping?

Child: "Oh, yes! Of course! I love pancakes! But we didn't bring any pancake mix. What are you doing? Are you going to stick me with a needle?"

Therapist: "Dr Jones put the special medicine in your eyebrow so it would feel good while we're camping. Right now, she's just pressing on it with her finger. Just like when you put your hat on to keep the sun out of your eyes while you're camping. So what would you like for breakfast?"

Child: "I would love pancakes!"

Therapist: "What if I had a bag of magic pancake mix right here in my pocket? Mmmmm . . . tastes great. With maple syrup. Let's stir it up and put some in a pan. If you have a glove to protect your hand, you could hold the frying pan. Be careful when you bend close to the fire. The heat can feel good and warm on your face in the early morning."

Child: "I tasted one of the pancakes! It's sweet!"

But what if, in spite of our most compassionate and creative intervention possible, the child still seems uninterested or does not benefit from our efforts? Understandably, we are often more personally invested in our behavioural interventions than we are in the pills or ointments we recommend. This great personal investment springs the compassion and commitment we feel toward the patient.

Yet we will inevitably have the experience, repeated again and again, of children who do not benefit from our intervention as much as we hope. We may feel inadequate, and even angry at these children for frustrating our good intentions. Or, rather than blaming the children, we might blame the parents, the physician, or ourselves. But what we imagine to be a "failure" may be, in a larger context, more successfully comforting to the patient than we realise. Whatever else is the case, our calm and compassionate presence is a value to our patients. The challenge is to temper our enthusiastic need to help by maintaining a calm and intelligent detachment, so that even in the greatest physical and emotional turmoil, the patient and parents know they have not been abandoned: we are there, doing our best. Even as the patient tries to reject adult help, there is also a lonely hope that the adult will never leave.

There is much to learn when we help children and adolescents with pain. Sometimes we are most helpful when we make little use of standard techniques. Specific techniques may be either quite powerful or quite inadequate, depending on our skill and sense of timing, as well as the child's acceptance of those skills. When we feel the most uncertain regarding what specific techniques to use, it is often helpful to become less active, less clever, and to become quieter, calmer, and more observant. This often inspires children to bring their own clever creativity to life, knowing that we are still there, ready to receive and value them.

2. ELDERS WHO ARE IN PAIN

The management of pain in elders is neglected in the training of physicians, psychologists, and providers of social services (Ferrell, 1991). Yet, the prevalence of pain has been estimated to be 100 percent greater in those over the age of 60 compared to those under 60 years of age (Crook, Rideout, & Browne, 1984).

The emphasis in this section is on the fact that our relationship and responses to an elderly man or woman create a context within which suffering is understood. The experience of pain and suffering is powerfully altered by the meaning of the pain to the patient and by the influences of culture, family, and past experience. The patient's needs for empathy, dependence, or autonomy affect how and when the individual experiences pain and suffering. Expressions of pain ("I feel so much pain!" or "I don't get around much any more") may elicit either support or avoidance by caregivers at home, as well as from professional caregivers such as ourselves. As therapists or physicians we are susceptible to the same discouragement and pessimism as the patient, if we feel frustrated in our attempts to be helpful.

THE MEANING OF PAIN

To understand the experience of pain in elders more clearly, let us consider the various meanings that pain may have for those in the later years of life. Some elders fear and resent pain because it heralds a decline toward increasing loss of function and, ultimately, death. Such an elder may respond to pain with denial or with more complaining and anger, sometimes turned toward a physician or family members. Elders who deny pain because of fear may try to push themselves toward greater activity, or they may retreat physically and emotionally into a dark hut of depression.

Case Example: Mr Willis (82), with Prostate Cancer

Mr Willis stopped taking his medication. This occurred after one of his cancer specialists complained that another specialist had been wrong to change one of the medications. This was extremely upsetting to Mr Willis. He felt that somehow it was his fault that there was a disagreement between his physicians.

Many clinicians are so awkward around pain and death that they retreat from human contact with the patient to technology or "facts" to try to maintain a sense of control. Often, patients such as Mr Willis with a terminal or chronic illness feel guilty or angry when problems arise in their treatment. Understandably, due to the physicians' retreat, the patient is likely to feel abandoned.

Mr Willis returned to see his family physician, because he didn't know what to do. He appeared sad and reported he often felt like crying, he was fatigued, his sleep was disturbed, and his appetite gone. He also said he and his wife, to whom he had been devoted for 48 years, had never had marital problems until recently. As he became more depressed, Mr Willis ruminated more and more about his illness and pain.

Mr Willis' family doctor offered to resolve the dispute between the other physicians about his medication. Then he concluded, "There is nothing in your history or exam that would suggest that you're at death's door. On the contrary, there's every indication that you could feel a lot better if your depression were treated."

Mr Willis seemed interested and pleased. He was given a prescription for antidepressants and was encouraged to return for more discussion of his fears and needs. As the weeks passed, he changed from a sad, morose person to somebody who was hopeful and could smile readily. As this change occurred, his complaints of pain decreased significantly.

For Mr Willis, pain was a recurring reminder of loss that seemed to drive him deeper into depression. Other elders appear to experience pain not so much as a threat but as a nuisance — and perhaps a severe one. They do not seem, however, to suffer fear or anguish in relation to the pain. Instead, some elders laugh at their pains or remark that the pain is a valuable part of their present existence. Some have been heard to make comments such as: "When I wake up in the morning and feel my joints ache, I know I'm still alive." Why do some elders feel this way about pain while others experience pain as a severe threat?

Part of the answer lies in the meaning of the pain. Like everyone else, an

elder's interpretation of a pain sensation is affected by the location, severity, frequency, and duration of the pain, all of which are clues to both the patient and the clinician about the possible morbidity of the condition represented by the pain. In addition, factors such as environmental contingencies, a desire to be stoic, and the elder's degree of equanimity versus anxiety in everyday life will all affect the experience and the expression of pain.

Understanding the role of pain in the human condition is a lifelong challenge. Symptoms are often attributed to life events that may or may not truly be causal factors. Such explanations are useful for both the patient and the physician to understand and discuss, particularly with regard to self-limited types of pain problems. Although the practical value of such explanatory models decreases when more serious, aggressive biological disease is present, even then an appreciation of the patient's understanding of his or her pain may provide an opportunity to relieve anxiety and suffering to some degree.

Elderly patients, in particular, often present unusual combinations of symptoms. Sometimes they have pain for reasons that are unclear; other times they may have no discomfort associated with an illness or trauma that would ordinarily cause pain. For example, an elder with pneumonia may have no cough or fever; the only symptom may be falling down.

Although some tend to embellish their symptoms, clinical experience suggests that most elderly people more frequently downplay the severity of their symptoms. Perhaps they simply do not experience their symptoms as dramatically as a younger person. This blunting may reflect actual age-related changes in the nervous system that result in slowing and reduction of afferent stimulation, thereby assisting in the process of coping with pain. Or perhaps blunting of symptoms occurs because elders develop another psychological way of coping with discomfort. They may notice aching joints but, having become accustomed to many aches and pains, think them unworthy of mention. In summary, we see that reporting of symptoms is affected by (1) sensory-perceptual changes, and (2) coping strategies that may include denial, self-distraction, or reinterpretation of the symptoms as a natural part of growing older.

INVOLVEMENT IN MEANINGFUL ACTIVITIES AND GOALS: **EFFECTS ON FUNCTION**

One of the most salient themes of old age is the tension between dependency, on the one hand, and separation and isolation, on the other. Interwoven with those prominent themes is the tension between continued involvement in meaningful activity versus the loss and resignation that often occurs when elders retire from an active career.

Case Example: Raul and Julia Salcido, in their Early Eighties, Making New Lives

Raul and Julia had lived in a quiet suburban neighbourhood for 30 years. For many years, they had no reason to move. However, with advancing years, they began to feel isolated from their children. Though they had several children, they all lived some distance away. The Salcidos didn't belong to any church or social group. They had a large number of close friends, but those friends had their own families and activities, and there was nobody whom they felt they could call on for an extended period of assistance if one of them became critically ill.

They were increasingly aware of the possibility that one of them could have a stroke or fall and break a hip or have some other major problem. They had both already experienced a taste of disability: Julia had moderately severe arthritic degeneration in her hips and spine. Sometimes she had difficulty getting out of bed for days at a time. Raul had chronic muscle pain from fibromyalgia, and he also suffered from moderate emphysema and recurrent bronchitis. They both agreed that they would rather die than become so debilitated that they would have to be cared for by strangers.

Raul and Julia discussed their concerns with their children, whose response was unanimous: "We would like to be involved in your care if you have any problems. Is there any way that you would consider moving closer to where we live? If you wouldn't mind moving to our rural area and buying some property right next door, we would love nothing better than to be involved in your care for whatever time it takes. It would be an honour, a pleasure."

Some of the other Salcido children also considered moving to the same small town because they had visited there and loved it. So it happened that, over the following couple of years, some of the other siblings did move to that town. The Salcidos now felt that a change was feasible. They bought an old house on a lot next to one of their son's homes. It required extensive renovation to make it habitable; in fact, when they moved in late in the fall, there was no running water or electricity installed yet. They spent the entire winter in that house without electricity or running water while they worked on the renovation.

Mrs. Salcido, who was fairly frail and continued to have daily back pain, did much of the interior repainting in the huge house. The following summer a friend asked her where she found the strength to do this. She said, "It was strange. Every night as I went to bed on the floor I felt so tired I wondered if I would die during the night. But as I fell asleep I thought of how much fun it would be to get up the following morning and finish painting the next wall. It was such a joy to see each ugly, dirty wall covered over with beautiful, fresh paint. I haven't felt that much energy for years. I haven't seen my husband have such energy for years. I don't know where it comes from. He works 15-hour days and he's 80 years old! He groans with fatigue and he can hardly walk at the end of the day, and yet he's up at five or six the next morning already working!"

The Salcidos' story illustrates the potential advantages of living with

challenges that the elder finds manageable and familiar. These challenges may include cleaning the house or yard or walking a mile each day to pick up mail or groceries. People do not have to live like pioneers to experience these physical challenges. There are everyday physical challenges such as gardening, cleaning, and volunteer work that are healthful, both physically and spiritually. The purpose of these familiar challenges is to add meaning, purpose, and value to life. When life has lost its meaning and purpose, symptoms are often experienced with overwhelming severity.

The Salcidos have lived in their beautiful, comfortable house for about six years now. The raw forest and rocky fields around it have been transformed into beautiful gardens. Each year they set a new goal: for example, an extension of the garden or a new fence.

This illustrates the importance of having family support that encourages autonomy rather than dependency and helplessness, and support that encourages independence while acknowledging increasing limitations in strength, memory, and physical stamina as the years pass.

PAIN AS A MESSENGER

The clinician needs to be ready to hear a variety of messages that are communicated by pain complaints. These messages may speak of loss, conflict, difficult changes in life circumstances, stress, isolation, failure, or of lifelong personality problems. These messages may also speak of the patient's determination and perseverance. Acknowledgment of these messages is essential to appropriate treatment, of course. But more, this acknowledgment can be profoundly nourishing to the patient because it expresses deep understanding and honours a life and a soul.

However, such communication is not easy. The patient, preferring to focus merely on the pain, may resist the clinician's attempt to attend to other issues. However, it is essential that the clinician be clear about his or her judgment of the problem, while listening patiently and observing, gradually helping the patient de-focus on non-medical issues. Doing so may not only reveal unresolved life problems but may also facilitate the patient's awareness of his or her strengths. This awareness, in turn, helps remind the elder of the importance of his or her place in the scheme of things, which may be important in keeping a person alive.

There are two important types of nutrition: one is the food we eat, and the other is the knowledge of our meaning, life purpose, and value. When the awareness of meaning and purpose is lost, we tend to feel that there is no longer a place in the world for us. In this condition, people sometimes lose the will to live — but they may only be aware of the pain for which they seek treatment.

RECONNECTING TO THE MEANING OF LIFE

In some cases, the clinician's primary task is to help re-connect the person to his or her place in the scheme of things. That may happen partly through just valuing a patient so clearly that he or she is reminded: "You have value. You're still important."

Honouring a patient's values often requires flexibility and patience on the clinician's part. We need to know and honour the person's way of dealing with the world. Is this an individual who really wants to control her destiny in terms of large and small decisions? Or does she prefer a much more passive response to her own care? It will not help to say to the latter person over and over again, "Well, what do you think you need?" She will answer, "What do you think I should do, doctor?"

Elders may exercise control by asking questions, expressing wishes, or insisting on the continuation of a long tradition of doing things in a certain way, whether the pain is major or minor. If they have many other disabilities or if their voice and power are taken away in a number of ways, then to insist on a particular medication or on a certain method of treatment is not a helpful strategy. Having a firm opinion may enable the person to maintain a sense of self; it is a way of controlling his or her destiny. If the treatment threatens or removes that sense of self, then elders feel that they have no rudder, no sense of direction, energy, or autonomy. Paradoxically, we sometimes try to remove pain in people who feel they have nothing left to hold onto but the pain. Flexibility is the first step in treatment.

Case Example: Mrs Yee (60), with Knee Pain

As a part of her active life, Mrs Yee loved to go dancing with her husband, and she loved to travel. She developed pain in her knee while she was dancing. It had started to improve a little until a few days later when she went dancing again. Then it hurt even more. The knee was swollen and she could hardly walk. After the pain continued unabated for a week, she became very worried about it, so she came to see me.

On examination of her knee, I found no indication of any severe ligament damage or other serious injury. It appeared to be a combination of mild "wear and tear" in her joint and mild muscle strain. She was reassured that if she would abstain from dancing for a while, do some exercises, put ice on it, and just take care of it, it would get better in six to eight weeks. She indicated that she was satisfied with this recommendation.

Returning to my office about a month later, she said she was feeling much, much better. After examining her knee, I agreed she was doing much better. Mrs. Yee said apologetically, "I guess I should tell you I went to see a Chinese doctor." She studied my face very closely as she said that, waiting for my reaction. I replied, "Oh, that's fine."

Mrs Yee seemed relieved. "You're not angry with me?"

I replied, "No. I'm happy for you to get any kind of help that seems useful to you. Did you feel it was helpful?"

She said, "Yes, I think it was helpful. They wrapped some medicine, some kind of herbs, around my knee and put an ice bandage around that and made it feel better. Every day I would put that on and they told me to continue to do the things that you told me to do, like the exercises. But the herbs would help also, so I felt both together were really helpful. But I was afraid that you would be angry with me for going to somebody else."

I remarked that I thought she was very fortunate to be able to draw expertise from more than one world, and to bring both of those worlds together to work on her problem. She said, "I'm so relieved that you're not angry. Do you think I should continue to see that Chinese doctor?" I replied, "As long as it seems helpful to you, then that's fine."

About two weeks later, she came back for another visit. She had started very carefully dancing again, and reported that she had very few problems with her knee. She said, "You know, I've been thinking a lot about going to see the Chinese doctor. I don't think there was anything in that medicine that helped me, but I think it was really important for me to go see him because when I was a little girl that was the kind of doctor we saw in China."

Mrs Yee had considerable insight into her own needs. She recognised that she could obtain needed extra reassurance from her own culture and background. She found reassurance in the familiar.

THE ROLE OF IMAGINATION AND SUGGESTION

Elders are as able as younger patients to benefit from therapeutic interventions based on imagination and suggestion, although the themes that occupy the imagination vary with the patient's age. The imagination of youth is often filled with the same images that are found in popular books and films: cute animals, action and adventure, or romance. Elders, on the other hand, often use imagination as a tool to help put events of the past and the future into a perspective, in order to find, or deepen, the meaning of their present circumstances. When one simplifies these two extremes as a search for physical experience and mastery among the young versus a search for meaning among the elderly, this contrast brings to mind Erik Erikson's (1968) views on human development and reminds us of the importance of a developmental perspective. (For a description of Erikson's views, see the paper by Lachlan Lipsett.)

Case Example: Mr Kay (67), Suffering from Trigeminal Neuralgia

Mr Kay had suffered from trigeminal neuralgia for nearly four years. The sideeffects of the several medications he had tried were worse than the pain itself. He had also tried acupuncture, herbal medicine, biofeedback, and meditation without any resolution of his symptoms. He experienced a severe attack about every two weeks, with frequent, aching pain in between. In fact, at our first meeting, he rated the present intensity of the aching pain as four out of 10.

Mr Kay had restricted his activities severely in the past six months. An accomplished amateur violinist, he participated in local concerts and sat on the board of directors of a large metropolitan opera company. Aside from his family, including his eight grandchildren, music was the passion of his life. He also enjoyed cooking gourmet meals for friends and family. As his pain increased in intensity and frequency, he had become more withdrawn, and he felt his usual rich and varied life slipping away.

Born in Poland, Mr Kay was sent, at age 14, together with his mother and sister, to the concentration camp at Auschwitz. His father was taken prisoner by the Nazis and was never seen or heard from again. Miraculously, Mr Kay, his mother and sister all survived Auschwitz. After liberation and several months of rehabilitation, they recovered their physical health, and subsequently emigrated to the United States. Mr Kay met his wife in America, where they raised a family and developed very successful professional careers.

When I first met Mr Kay, I was struck by his warmth and good humour. He expressed great hope that hypnotic treatment would be helpful in relieving his dreadful pain. After we had talked for a while, I asked him if he would like to have an experience that he might find both pleasant and interesting. He eagerly agreed and asked what he should do. I invited him to sit back in his chair and to close his eyes in order to more easily notice some pleasant scenes. He smiled and commented he often did this on his own, when listening to music. I suggested he allow his mind to float freely until he noticed some pictures, images, or thoughts that seemed particularly pleasant to him. At the same time, I also suggested slow, deep breathing, and I made comments about the deep relaxation that he could experience from his face and head all the way down to his toes.

After three or four minutes of relaxation, Mr. Kay mentioned that he had a picture of the San Francisco Symphony Orchestra in his mind. He could see it clearly and described it in detail. With some encouragement he began to hear the music more clearly. It was one of his favourite pieces: the "Moonlight Music" from the opera Capriccio by Richard Strauss. With deep feeling, he described the music as sensual, sweet, and slightly melancholy. After several minutes, he sighed, and said with a little smile, "The music has finished." I invited him to gradually return to my office and open his eyes. When his eyes opened, he blinked, then slowly smiled.

"What a pleasant experience," he said. I asked him whether the aching pain he had been experiencing had changed "in any way." He stopped for a moment to think, and then said, with some surprise, "Yes, actually it's completely gone. Now that I think of it, I don't notice any pain."

We had several subsequent treatments, each one lasting at least 45 minutes. He particularly enjoyed spending time listening to music during these sessions, and he reported the music felt like a deep, healing fluid that washed away his pain and suffering.

What was additionally meaningful to him about these experiences was that they were an affirmation of the decision he had made when he came to the United States to devote himself to living life to its fullest. Enjoyment of the arts, including poetry, literature, and music was a fulfilling way of enjoying life with friends and loved ones. All of these experiences seemed to act as an antidote to the horrors he had experienced in the concentration camp. He also commented that whenever he recalled a memory of the years he spent in the Nazi camp, the

intensity of his pain would suddenly increase. Therefore, he felt very cautious about recalling any memories at all from his childhood for fear that unwanted memories would return, causing him great pain. Rather, he preferred to devote himself entirely to his family, music, and all the beauty in life that he could capture and experience.

It was very tempting for me to assume that somehow his pain was connected to a denial of feelings or recollections that needed to be expressed or re-experienced. On various occasions when the topic arose, I wondered out loud whether it would be helpful for him to go deeper into some of those feelings and experiences. Each time he listened thoughtfully and agreed to consider that question. He never seemed irritated or impatient that I had posed the question. Finally, he said that, although he had understood the logic of what I had wondered, he trusted his judgment in leaving all of those bad memories behind.

A new question arose in my mind: were there any pleasant memories and experiences from the past that might have been discarded along with the horrible ones? I asked him if he would like to journey back to times in his childhood that were pleasant. He seemed surprised and at first a little wary, but then agreed that he would be willing to find out.

I asked him then, as I had each time before, to allow his mind to clear, to close his eyes, to take several deep breaths, then to experience himself travelling to whatever place and time he would like. For a few minutes he appeared as deeply relaxed as usual during our sessions. Then the expression on his face seemed somehow more intense than usual. He began to speak slowly, softly, as if recounting a dream while in the midst of it. He saw his old family home back in Poland. He described in detail the fresh green grass and the trees that grew around the house. He saw the front door, the deeply textured wood and the polished brass handle. He opened the door and went inside. He found himself in the bedroom where he slept as a child.

After some long moments of silence, he smiled and spoke of the wallpaper and the texture of the paint on the ceiling. Then there followed a long silence as he appeared deeply involved in some scene. After about 20 minutes I invited him to gradually return to the present whenever he was ready. After three or four minutes, his breathing seemed to indicate a gradual arousal from a deep concentration and a shift in his consciousness back to this room.

Finally, he opened his eyes and smiled. His eyes filled with tears as he described the texture and colour of the wallpaper in his bedroom. He had even noticed a spot on the wall where he had once scratched away the wallpaper down to the paint as he lay in bed and listened to the birds in the trees outside. Nobody but him knew about this spot because it was right next to the mattress. Now when he saw that familiar, long-forgotten wallpaper, a series of pleasant memories began to return.

Next, he had felt himself outside in winter. He was walking through the snow with his sister. They were holding hands with their mittens, coats, and scarves wrapped around themselves. He felt warm and secure. The sharp freshness of the cold winter air brought back the exhilaration of being outside playing. He felt again how the two of them gradually became tired and hungry and went back inside for a warm dinner around the family table. He remembered all this with tears in his eyes, which I imagined was going to lead to an expression of grief, perhaps over the loss of this golden period of his life.

To the contrary, Mr Kay was glad to discover that he still had such strong memories and images. He said, "I haven't had those vivid memories for years and years, and I'm so grateful to have them back. I feel like they'll never leave me now."

Since he had fewer and fewer pain attacks and was less bothered by the aching in his face, we agreed that we could postpone any further meetings. We did not meet for several months, at which time he came back saying that he had a series of pain attacks in his face during the past three weeks. He attributed these to an increase in fatigue and stress related to an illness his wife had recently experienced.

We had one session during which he spent about 20 minutes deeply relaxed, listening again to the "Moonlight Music" from Capriccio in his mind. As he opened his eyes after listening to this music, he sighed and said with a smile, "This is just like taking medicine, except better. I feel so lucky to be able to have the pain stop so easily and pleasantly."

He called me about a week later to say that every time he felt he was going to have some pain, he would sit quietly for a while with eyes closed. Sometimes he played one of his favourite musical recordings; at other times he would listen to the music in his head, accompanied by an image of the orchestra. He was happy to report that in every case it helped him to feel relief from the pain. His pain continued to diminish, and follow-up after one year revealed that he had only a few pain attacks since that time.

Mr Kay's case illustrates ways in which this kind of imaginal approach can, with very few explicit suggestions, help patients to discover a path that proves to be helpful. Although I was tempted to explore what must have been a deep well of emotional pain, I was, fortunately, able to resist. Instead, I respected Mr Kay's wishes to leave those memories buried. Doing so freed me to then think of the potential value of re-experiencing pleasant memories, which Mr Kay was able to do with evident benefit. This case helps me to remember the importance of not being too closely wedded to my psychological hypotheses and personal wishes for a patient, but to hold them in my mind while I explore other, perhaps less obvious, avenues.

Although Mr Kay improved substantially, other patients with quite similar symptoms have not. We need to be ready to consider, with the patient, a variety of treatment options, ranging from psychological to medical and surgical.

SOME GENERAL PRINCIPLES REGARDING ELDERS IN PAIN

Here are some specific strategies that are often helpful in caring for elders suffering from pain:

- 1. Develop a trusting relationship over time. This means continuity and regular scheduled visits. Make it clear that you will be the caregiver who will work with the patient on the pain problem.
- 2. Establish ground rules. This is especially important when potentially addicting drugs are needed to control the pain. In addition to coordination of care by the primary physician, there should be agreement that the emergency room is not to be used for obtaining drugs and that any change in the established dose will be made as a joint decision between you and the patient.
- 3. Utilise appropriate community resources. If the elder is isolated, effectiveness of care will be enhanced by addition to the team of a visiting or community nurse. Local organisations, such as a church, may have a visitor programme that can be involved. If the elder is disabled, volunteers can provide nutritional support and a daily visit.
- 4. Pain is a family affair. "Significant others," family, or friends should be involved with the patient's care. Encouraging a spouse or involved family member to accompany the patient to the office is important. Understanding the involved caregiver's perspective may be extremely valuable in approaching the pain problem.
- 5. Utilise physical activities. Since function is so important, we urge regular physical activities with specific instructions, such as, "I want you to walk around your block twice daily." Use available physical therapy, which will likely involve stretching exercises, to improve strength and range of motion, as well as a specific programme for rehabilitation. This may be an indispensable support in enabling the patient to feel better and become more active.
- 6. Use relaxation techniques and imaginal or hypnotic techniques. Help the patient practise deep breathing and relaxation while visualising serene scenes. Tape record this process so that the patient can practise these techniques at home, using the tape recording as both a motivational tool and a memory aid.
- 7. When there is emptiness and a dearth of meaning in the patient's life, help the elder "get a life." Refer the patient to a social worker, who can, for example, suggest specific volunteer activities.

There is something profoundly sad and unfair about pain in old age — insult really is added to injury. Whether the voice of a wounded heart, opportunities lost, the complaint of tired, crumbling bones, or a merciless cancer, pain is a cruel intruder in what could have been a time of accomplishment, satisfaction, reflection, and peace.

Caring for elders and their pain is often discouraging and difficult; at the same time it is work that heals our future self. The process of integrating the emotion of the pain with the medical facts helps us to find a healing path that is at once practical and heart-felt. Youth and renewal in old age are often abandoned beneath a blanket of hopeless gloom or futility sought through medication or empty distraction. Elders in pain deserve our acknowledgment of the sadness that coexists with the dissatisfaction of our best, most optimistic efforts. This sadness is neither depression nor self-pity; rather it emerges from an honest recognition of the loss brought on by the pain of age. It may be that only through expression of this sadness will we find our way to the compassion and energy necessary to experience renewal and healing.

CONCLUSION

How did we arrive at this place? Coming to the end of a chapter can be like realising that we are closer to the end of a life — our own and our patient's. How did we start? It was with the belief that the words we had learned during our professional infancy were powerful — if only we knew how to speak better. But in our adolescence, we realised how, although words alone were sometimes powerful, they were too often so inadequate and foolish! We began to sense that there were other ways — complex subtleties of behaviour and situations that could help us to communicate and understand one another in a deeper and more satisfying way. Finally as adults, we recognise that for all the power words may carry, there is still a more powerful connection that we always struggle to name. Perhaps rather than specific words, its a combination of qualities in our relationship with patients: "being," "caring," "seeing" — qualities which, combined together, represent a particular vision of therapy. This vision, like life, is always changing just a little, to maintain a balance between our words and the delicate wings of an understanding heart.

What is the vision of therapy that is so much more than the "right words?" It becomes clearer when we see ourselves, with each patient, exploring the contexts and relationships that comprise this patient's individual life. Our own personal foibles and struggles suddenly become essential to recognise and to see as clearly as possible, because we have now become a real person in our patient's life. To the extent that the expression of love, anger, or humour is a problem for us, this same difficulty will somehow be reflected in difficulties for the therapeutic relationship. So it is partly our presence and actions with the patient - including not merely words, but our diligence, honesty, patience, and sweetness, as we sit quiet and attentive, that will all promote healing.

And yet, even more is needed: this potentially helpful — in fact, essential human relationship is always searching for a framework in which to live, like a family searching for a house. The structure of that house is our theoretical understanding of why and how patients suffer. And why we, ourselves, suffer. The need for that theoretical structure reminds us why clinicians need to be not only good, loving people, but also more — we need to have some clear, organised understanding of what we're doing. But that's another chapter or two.

ACKNOWLEDGMENT

Some of the ideas presented here are based on collaborative work published in a variety of articles and chapters with colleagues Josephine Hilgard and Lonnie Zeltzer. Much of this chapter is derived from a chapter on pain in children by LeBaron and Zeltzer (pp. 305-340) and a chapter on pain in elders by LeBaron and Fowkes (pp. 341–360), both from "Hypnosis and suggestion in the treatment of pain: A clinical guide" edited by Joseph Barber, New York, Norton, 1996, with consent of the publisher.

REFERENCES

- Crook, J., Rideout, E., & Browne, G. (1984). The prevalence of pain complaints in a general population. Pain, 18, 299-314.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: Norton.
- Ferrell, B. A. (1991). Pain management in elderly people. Journal of the American Geriatric Society, 39, 64-73.
- Hilgard, J. R., & LeBaron, S. W. (1982). Relief of anxiety and pain in children and adolescents with cancer: Quantitative measures and clinical observations. International Journal of Clinical and Experimental Hypnosis, 30, 417-442.
- Hilgard, J. R., & LeBaron, S. W. (1984). Hypnotherapy of pain in children with cancer. Los Altos, CA: William Kaufman.
- Jay, S. W., Elliott, C. H., Ozolins, M., et al. (1985). Behavioral management of children's distress during painful medical procedures. Behavior Research and Therapy, 23, 513–520.
- Katz, E. R., Kellerman, J., & Ellenberg, L. (1987). Hypnosis in the reduction of acute pain in children with cancer. Journal of Pediatric Psychology, 12, 379-394.
- Kuttner, L., Bowman, M., & Teasdale, M. (1988). Psychological treatment of distress, pain, and anxiety in young children with cancer. Journal of Developmental and Behavioral Pediatrics, 9, 374-381.
- LeBaron, S. W., & Zeltzer, L. K. (1996). Children in pain. In J. Barber (Ed.). Hypnosis and suggestion in the treatment of pain (pp. 305–340). New York: W.W. Norton.
- LeBaron, S. W., Zeltzer, L. K., & Fanurik, D. (1989). Imaginative involvement and hypnotizability in childhood. International Journal of Clinical and Experimental Hypnosis, 36, 284-295.
- LeBaron, S. W., & Fowkes, W. C. (1996). Elders in pain. In J. Barber (Ed.). Hypnosis and suggestion in the treatment of pain (pp. 341-365). New York: W.W. Norton..
- Olness, K. (1981). Imagery (self-hypnosis) as an adjunct therapy in childhood cancer: Clinical experiences with 25 patients. *Journal of Pediatric Hematology/Oncology*, 3, 313–321.
- Olness, K., & Gardner, G. G. (1988). Hypnosis and hypnotherapy with children (2nd ed.). Philadelphia, PA: Grune and Stratton.
- Siegel, L. J., & Peterson, L. (1981). Maintenance effects of coping skills in sensory information on young children's response to repeated procedures. Behavioral Therapy, 12, 530-535.
- Singer, J. L. (1973). The child's world of make-believe: Experimental studies of imaginative play. New York: Academic Press.
- Zeltzer, L. (1984). Pain and symptom management. In D. Bearison, & R. Mulhern (Eds.). Pediatric psychooncology: Psychological research in children with cancer (pp. 61–83). New York: Oxford University Press.
- Zeltzer, L., Jay, S. W., & Fisher, D. M. (1989). The management of pain associated with pediatric procedures. Pediatrics Clinics of North America, 35, 1-24.
- Zeltzer, L., & LeBaron, S. W. (1982). Hypnotic and non-hypnotic techniques for reduction of pain and anxiety during painful procedures in children and adolescents with cancer. Journal of Pediatrics, 101, 1032–1035.
- Zeltzer, L., & LeBaron, S. W. (1986). The hypnotic treatment of children in pain. In D. Routh, & M. Wolraich (Eds.). Advances in developmental and behavioral pediatrics Vol VII (pp. 190-234). Greenwich, CT: JAI Press.

COMBINING MUSIC AND WORDS AS A PATHWAY THROUGH HYPNOSIS: PRACTICAL GUIDELINES

Wendy-Louise Walker Psychologist in Private Practice

Music in itself has powerful effects on consciousness and, combined with appropriate hypnotic words to guide attention and experience, makes a congenial and delightful pathway into hypnosis. This paper provides practical guidelines rather than a theoretical analysis. In its simplest use in the hypnotic situation, music makes an effective and widely acceptable deepening technique and clinicians are advised to begin with this use of music to acquire their own communication skills in the area. However, music can also be used as the primary focus of attention for induction as well as deepening and, when hypnosis is achieved, it can be a very effective vehicle for carrying verbal suggestions, a primary stimulus for production of emotional experiences, or a background for therapeutic fantasy, guided imagery or imaginal rehearsal. Music makes a gentle and positive pathway out of trance and it can provide a safe and appropriate vehicle for self-hypnosis in stress management.

It has long been known that music has impact on consciousness, and to remind ourselves of this we have only to think of the kinds of music available in a well-stocked music shop: loud pop music with a powerful and accentuated rhythm, jazz ("classical" and modern), Gregorian chants, folk songs, meditational music, an extravaganza of classical music, Renaissance songs and dances, religious music (old and new), music of non-European cultures, war music, dance music — the list goes on and on. When not using music as the central focus of attention, we are used to it in the background of experience. Music is used to create emotional background or to augment emotional response in movies and in television productions; we tend to have music playing when we are driving cars, doing the ironing, even weeding the garden. Radio and television programmes have their own signature music, and advertisers use music (often well-known and well-loved) to manipulate emotion and attitude in relation to their product.

Music has a long history of use for manipulating mood and motivation, in religious traditions for producing alterations in consciousness and also in healing traditions. Clynes (1987) defined music as an organisation created to dictate feelings to the listener. He separates the response to patterns of pulse or rhythm, automatic and inbuilt in our central nervous systems and receiving both the regularity and variation of rhythm (as do the central nervous systems of other living creatures; c.f., the mating songs of insects and birds) and melody, which he considers to communicate essentic form, emotional meaning, which, when pure, is recognised and responded to automatically, though the individual needs some familiarity with the language of the music of his/her culture for this automatic response to take place. Clynes also discussed tone, colour, and timbre. He distinguishes two modes of emotional experience, Dionysian and Apollonian.

Dionysian, which we share with animals, involves the whole body and self. The Apollonian mode involves a complex of intellectual evaluation and emotional response, is more muted, involves awareness of separateness from the stimulus input, and is central to aesthetic experience.

Brown (1991) noted how the neurobiology of hypnosis overlaps with the neurobiology of music and cites Rouget's work from an anthropological perspective suggesting that trance state is linked with dance and music throughout the world:

Throughout the world, the trance state is associated with dance and music, but the relationship is not a simple one. The types of dance and music vary markedly from culture to culture, as does their role. Music is used variously to induce, deepen, or end trance. As Rouget has shown convincingly, it is not simply a question of some music being "hypnotic;" rather, variations in rhythm and sound have been assigned a particular meaning by the people who use them. (pp. 59–60)

The question of whether certain pieces of music are universally "hypnotic" or not remains unanswered; though it would seem likely that there are some inbuilt, non-learned components, along with learned ones. For example, being familiar with the style of music trains one to focus attention on it and shift to "passive/receptive" mode of consciousness, and there is likely to be a component of the experience from the learned connotations of melodic and rhythmic patterns in a particular culture. In any case, it is not outrageous to propose that some music of our cultural tradition is useful in facilitating hypnosis for those who are receptive to the hypnotic ritual. And further, that the right kinds of words would be useful to focus attention and partly define the experience by suggestion.

Hilgard (1979) noted that her highly hypnotisable subjects were more likely than less hypnotisable ones to become absorbed in classical music rather than pop or jazz, like their absorption in pleasant natural phenomena such as landscapes; this suggests that music would be a congenial pathway to hypnosis for responsive subjects. Snodgrass and Lynn (1989) reported differences in selfreported absorption and imagery elaboration in response to music rated high and low for "imaginativeness" by high, medium, and low hypnotisable subjects. High hypnotisable subjects reported higher levels of absorption, regardless of the "imaginativeness" of the music, and higher levels of imagery elaboration when the music was "imaginative." Hypnosis was not used, except to classify hypnotic responsiveness on an earlier occasion.

Thus it would seem that hypnotic responsiveness is related to reports of absorption in some kinds of music. This suggests that the music itself may be a pleasant and natural pathway into hypnosis. Based on my own research and that I have supervised (Reeve, 1973; Rottenstein, 1985; Walker & Diment, 1972), it would seem that, in hypnosis, the response to music is different from that in the waking state. Affective response, the emotion experienced, is amplified and tends to be similar for different subjects for the same piece of music. Sensory imagery elicited by "imaginative" music is more vivid and subjectively real in hypnosis than in the waking state and sensory imagery tends to be highly individual across different subjects. (I do, however, have reports of a small number of highly hypnotisable subjects who regularly experienced synaesthesia in response to music and, in hypnosis, they tended to experience the same colours in response to certain "visual" pieces of music, e.g., some pieces by Vivaldi.) There is more loss of self in the experience of listening to music in hypnosis than in the waking state.

On the other side of the coin, there is a loss of awareness of change over time, and a lack of appreciation of development and repetition of themes; response to music in hypnosis is very much in the here and now, to runs and sequences of notes, unless the subject spontaneously or by instruction builds the ongoing music into a sequence of imagined experience. There is also a lack of the critical aesthetic judgment; interpretation and the excellence of performance of the musician is not appreciated or compared with other performances. Part of the essence of being in hypnosis, of course, is the here-and-now, lost-in-experience quality. This calls to mind the Dionysian/Apollonian categories of Clynes (1987).

A COMBINATION OF MUSIC AND WORDS AS THE PATHWAY INTO AND OUT OF HYPNOSIS

Over some 20 years, since my first dabblings in music and hypnosis with Chris Rippingale and Tony Diment, I have used music a great deal, not as a background "mood setter" as in the movies, but as a primary focus of attention in at least part of the hypnotic session. It is my contention that, if one combines hypnotic instructions with the right sort of consciousness-altering music, the two inputs augment each other. Music as a focus of attention is more pleasant, more familiar, and more attention-holding than watching a spot on the wall; with words as well to keep focusing attention and to provide instruction about how to listen, the experience of moving into hypnosis seems less awkward or strange and is less plagued by intrusive thoughts. As Tony Diment and I pointed out some time ago (Walker & Diment, 1979), music is particularly useful with highly hypnotisable subjects who have conflicts about loss of autonomy, with gifted subjects who have less than optimal imagery, with subjects whose movement into hypnosis is disrupted by intrusive doubts and thoughts, and with medium to high hypnotisable subjects who want to enjoy a delightful pathway to optimal working depth, for clinical work or research.

There has been very little research, in the domain of hypnosis on the effects of the induction and deepening, or pathway into trance, on what is experienced in hypnosis. The major techniques we still most often use to take our clients or research subjects into hypnosis are, to my mind, a bit boring, stilted, powerridden and outdated, and probably not even the most effective. We do not know if hand levitation has the same implications for a subject as eye-fixation, or as a "confusional" technique in the Ericksonian tradition. However, even if these different pathways do take our hypnotic subjects to one and the same domain of experience, they will have implications for the interpersonal relationship between hypnotist and subject, which is very important in the clinical situation. Also, the different pathways would surely set different expectancies and demand characteristics. In clinical uses of hypnosis, I dislike techniques that set up the hypnotist as all-knowing, clever, and dominating. The hypnotic ritual itself, involving that unique trust of handing over to another person the role of directing the stream of consciousness, involves enough trust on the part of the subject and influence on the part of the hypnotist without using communication techniques which further convey dominance and power. Consumer responses to my inquiries over a couple of decades have revealed that over 75% of my client and research subjects have evaluated music for induction and/or deepening as their preferred method of entering hypnosis, and that those who preferred another method did not find music noxious. Being given time to enter hypnosis pleasantly was frequently given as a virtue of the method and some subjects said that their appreciation of music was spontaneously enhanced in everyday life.

Many years ago, as well as using music as a pathway into hypnosis, I also began using music to produce special results in hypnosis, or to augment suggested fantasy experience, guided imagery, or imaginative rehearsal activities. Over the last 10 years or so I have been using music as a pathway out of trance as well. Central to the effective use of music with hypnosis is the proper planning of the session, which I like to do in collaboration with each client.

In conceptualising the different uses of music, I like to keep the structure in my head (no matter how the parts merge into each other, are abbreviated or extended) that the hypnotic session falls into six parts: (a) pre-hypnosis discussion including informed consent, (b) induction, (c) deepening, (d) content, (e) de-hypnotising and (f) debriefing. The use of music gives the hypnotic session an easy flow, an apparent lack of rigid structure, but I keep the structure in mind so that none of my important tasks is left undone. Beginners are advised to make themselves worksheets with headings for the six parts of the session and to plan beforehand what will go in each section. In that way, if the hypnotist becomes a little absorbed in the music him/herself, things will not be omitted.

THE SIMPLEST USE OF MUSIC: DEEPENING

The simplest use of music, which still has quite potent clinical uses, is for the deepening stage of the hypnotic session to involve listening to music. While excellent subjects can "jump" straight into hypnosis at a signal, all of my best subjects tell me that they prefer an induction ritual, however brief, and also that they need a time of deepening to get a comfortable working depth, either for research or therapy. Music makes a very pleasant and effective deepening stage for the therapy session. Further, for the hypnotist, learning to use music for deepening with some personal style and flair is the ideal way to learn how to combine hypnotic words with music.

Using music for deepening is simple and very pleasant, for both client and therapist (for what therapist would be foolish enough to use music that is noxious to him/her?) I have already noted (Walker, 1984) that music for deepening can be quite varied but generally should be music that runs and ripples, with predictable rhythm, no great changes in tempo or volume and no sudden changes in pattern to cause arousal. As I define the music as "a moving pathway of sound to carry you further and further into hypnosis," this definition partly defines the kind of music I use. It includes flute, guitar, and lute music of Bach, Boccherini, Vivaldi, Handel and others, and Celtic harp music, where the notes dance like sunlight on running water.

Music used for deepening hypnosis need not be your typical soporific music introduced with a sleepy voice. Hypnosis is not sleep. Remember this is the imaginative involvement part of the domain of hypnosis and a quietly involved, story-telling voice may be the appropriate one for the verbal component.

When music is to be introduced as a deepening technique after a standard induction, I discuss this in the waking state, get permission and explain the use of the music. Remember that many powerful expectancy factors are set by suggestions before hypnosis. I explain how the music will become a moving pathway of sound that will carry the subject further into hypnosis. I explain that tastes differ in relation to how much I talk with the music and ask my subject/ client to have a guess how much I should talk with the music, in rough categories of very little, a moderate amount, a fair bit. If the proportion of talking is not optimal, then at least the client has been a participant in the decision-making and will have no qualms about giving me the feedback to fine-tune my performance.

After induction, say by modified eye-fixation, and after counting from 1 to 20 with the usual suggestions of going further with each count, I would introduce the music, played at normal listening volume, along the lines:

In a little while I will start the CD player and you will listen to the music in a special way. You will let the music pick your mind up and carry it further and further into hypnosis . . . The music will be a moving pathway of sound to take you further into hypnosis . . . (Music starts and you weave your words through the music.) Listen to the music, let the music take over your mind and carry it on and on into hypnosis. Let your body relax and relax, quite automatically, as your mind becomes more and more absorbed in the music, carried along by the music while tension dissolves from your body. (You can introduce an imagery component if you wish, kinaesthetic for dancing music, or visual.) As you move further into hypnosis with the music, delightful images will form in your mind, but most of all you will focus on the music . . . Let the music become your moving pathway of sound to carry you further and further into hypnosis, and as you move, you will become more and more absorbed by the experience of listening . . . the further you go, the more absorbed you will become in the music and the more responsive you will become to it . . . The music itself is delightful, so the pathway will be a beautiful and a happy one as you move further and further into hypnosis. (To manage distraction with less than optimally hypnotisable clients/subjects.) If your mind should wander from the music, don't worry, simply re-focus on the music and let it carry you further.

These suggestions are repeated as often as seems to be necessary or desirable for that particular subject. At the extremes of the continuum of taste or personal need, some people like me to introduce the music, to give the suggestions, and then to say nothing until the end of the deepening, which may be some 10 minutes; at the other end, some find it both enjoyable and comforting to hear my voice almost constantly weaving in and out of the music. If your client has no idea how much you should talk, you will have to make a guess and use a moderate amount of talking woven into the music.

Begin your own learning as a musical hypnotist by using a piece you know well yourself. Baroque chamber music can make excellent deepening music, and one can suggest that the subject feel the rhythm of the slow drone, resonating peace and relaxation through the body, while focusing attention on the melody (often of the violins), which delight and enchant the mind further and further into hypnosis. Pachelbel's "Canon," especially a slow rendition (not a pretty, fussy one), can be powerful as a deepening pathway. Renaissance dance music can also be very effective, and then the suggestion would be that the mind dance into hypnosis with the music.

The essential ingredients of the suggestions with the music are set out below and you repeat them in different orders as the music goes on, as often as is appropriate:

- 1. In a little while I will start the CD player and play some music, and you will listen to it in a special way.
- 2. You will let the music pick your mind up and carry it further and further into hypnosis.
- 3. The music will be a moving pathway of sound to take you further into hypnosis.
- 4. If your mind wanders, simply lock it into the music again and keep moving further and further into hypnosis.
- 5. The more you become absorbed in the music the more responsive you will become to it.
- 6. It is likely you will experience delightful imagery in response to the music, but most of all it will be a moving pathway of sound to take you further and further into hypnosis.
- 7. The music is itself intrinsically delightful, so your pathway will be an elegant and happy one as you move further and further into the meditational state of hypnosis.

One does find differences among subjects in what kind of music works best for them and some like quieter, less involving music than Baroque chamber music or the music for the Irish harp by O'Carolan. One thought I have had and want to investigate is that high hypnotisable subjects probably prefer music that captures consciousness (e.g., Baroque), while less hypnotisable subjects probably respond more to a less powerful stimulus and one wonders about Satie and even some of the modern meditational music by, for example, Stephen Halpern. Research by Dragutonovich and Sheehan (1986) on evoked potential among subjects of varying hypnotic responsiveness is relevant here, with its suggestion that the highly hypnotisable may be "stimulus hungry."

You are able to select among the hypnotic modalities better if you know about the hypnotic gifts and deficits of your clients and the possible differences between the moderately hypnotisable and the hypnotic virtuosi are important in the use of music. Of course it is silly to use hypnosis if the client is not at all responsive, though combinations of music, guided imagery, and relaxation can be devised. For the low hypnotisables there are plenty of therapeutic magics other than hypnosis and I like people to have a success experience.

As you develop your own confidence and skill in weaving in words with music for deepening, build up your own set of tapes or CDs that delight not just your clients while taking them further into hypnosis, but also you the therapist. To test them, try them out on yourself or, if you are not very hypnotisable, get a highly hypnotisable spouse or friend to "test" your pieces as pathways further into hypnosis without the use of words.

To end the deepening phase, fade the volume of the music and give some kind of input to end that sequence:

Now the music is fading . . . listen carefully now to what I say . . . let your mind go calmly, peacefully blank. Let yourself float calmly and peacefully and listen while I map out the next part of the session . . .

With highly hypnotisable subjects, it is quite illuminating to ask them to tell you what they experienced as they moved with the music along their pathway into hypnosis. Although they can be told to remember everything that happened, gifted subjects often remember only a faded shadow of their hypnotic experiences and the content may be therapeutically relevant or may be useful to you, the hypnotist, in refining your suggestions for this client. In any case, it is quite sure to be interesting.

MUSIC AS PART OF THE CONTENT OF THERAPY

Music has many uses as part of the content of therapy and can provide a great range of input, depending on your own creativity and your particular goals. These goals might include producing particular ranges of emotions. It can be illuminating and very therapeutic for a client, caught in grim conflict or overstressed by the external demands of life, to spend 15 or 20 minutes exploring the many faces of active joy (why not Handel's "Royal Fireworks"?), or the many faces of gentle serenity and peace (what about Gluck's "Dance of the Blessed Spirits"?), or (if it be to the taste of client and therapist) explore a more spiritual dimension with the religious music of J. S. Bach and experience being part of the overall glory of the universe and the proximity to God. With AIDS sufferers, and with the terminally ill, I use music as a powerful way of producing joy, wonder, the feeling of being loved, the feeling of being powerful, enthusiastic, valuable.

Introduce the music by telling the client the range of feelings to be experienced, and you have the option of building in a suggested fantasy activity along with listening to the music, with the feelings developing and being savoured as the music continues (Walker, 1991a). You might simply suggest that each movement of the music (such as Handel's "Royal Fireworks" or "Water Music") would produce a different scene, each beautiful. You would know the music yourself and would introduce each by saying something to the effect:

The next movement is quietly (boisterously, gracefully, etc.) joyous and as you listen, a scene will build itself vividly in your mind as you experience the quiet (boisterous, graceful, etc.) joy of the music . . .

You can keep the CD player on "pause" while you make your suggestions. A little practice makes one quite skilful at the staging of such experiences. Another alternative is to suggest what the scene will be for each movement and let the client elaborate on it as the music continues, perhaps with the occasional suggestion woven in.

Of course, after this section of experience, you would have options. You could ask the client to describe his/her experiences and discuss them. You would certainly bridge the experience across to waking experience by appropriate suggestion, put in with and over the music for maximum effect, and these suggestions would involve such notions as:

- 1. Experiencing these feelings reminds you of other aspects of living you had almost forgotten; you will find that the very experience feeds a quiet but persistent faith and optimism back in the real world of everyday life.
- 2. You had almost thought you were incapable of experiencing such feelings and to do so in hypnosis today will increase your self-esteem, make you feel a more interesting, complex, and positive person.
- 3. You will automatically seek out stimuli to such feelings in everyday life. You will pause to notice the colours of the sunset, sunlight shining on leaves, birdsongs, sparrows bathing, and all the things that are absorbing and delightful to children but that we so often close out of our adult consciousness. Such experiences will feed your optimism, your self-esteem. Joy is the great anti-stress feeling.
- 4. Each time you experience positive feelings in response to music in hypnosis with me, the experience will be more powerful, more positive, more growthprovoking and you will be increasingly aware, in your own time in between, of the sheer miracle of the gift of life.

Clearly, a great range of music can be used in this phase of the hypnotic session, not limited by the needs of the deepening situation for predictability and a sense of moving on and on without rapid change.

For AIDS patients, the suggestions about response to the music would include a sense of wellness, which would be bridged by suggestion over to the waking state. Suggestions could include boosting immune functioning, which could be encapsulated in an image to take away and repeat. (Why not a fountain of coloured light?)

Although imagery in response to music is individual, the range of feelings produced by music is much more predictable. You can, therefore, select music that generally produces strong, joyous or gentle, peaceful feelings and augment that by suggesting the kinds of feelings that will accompany listening to the music, leaving the client to create the accompanying imagery or fantasy experience him/herself. You will always remember to inquire about the experience, but, of course, how could you resist?

Before leaving the production of emotions as a specific goal, I would suggest that two combinations of feelings are likely to prove of enormous therapeutic value when we learn more about the body chemistry of primitive, pure emotions. One is the combination of wonder and joy, encapsulated for me in the image of a small child holding a tiny, new kitten or a fluffy chicken; the other is that profoundly elevating combination of peace and joy, which to Christians is typified by the image of the new-born Christ; it is elicited by quite a lot of the music of J. S. Bach (for example, the chorale "Kommst du nun, Jesu, vom Himmel," BWV 650).

We are quite accustomed from the movie and video screen to associate visual imagery with music, and music can be a delightful way to augment suggested imagery in therapy. In this case the imagery will be suggested and the music will help with increasing involvement and in the creation of the required mood and feelings.

As an example, I might have a recording of Irish harp music by the blind harpist O'Carolan, which sounds like Irish folk music written by J. S. Bach, O'Carolan having been much influenced by Baroque music. I might start the CD player softly and suggest that the client is sitting in a lovely green forest (the music is not that of the Australian bush). I might describe the light speckling down from the green canopy of leaves, little wild roses blooming, a soft, gold haze of light . . . then slowly turn up the volume and suggest that the person's attention is caught by a harpist playing a small folk harp, a blind harpist, with a boy behind him holding his horse, his long fingers rippling over the steel strings of the harp and producing the beautiful, haunting, dancing little melodies . . . I would then suggest further things, absorption, getting lost in music, the feelings appropriate to the piece . . . I may then construct a story that has a metaphorical significance for that client, or I may let the story take over and let the client go on constructing it, with me silent.

Another powerful use of music during the therapeutic work stage of the hypnotherapy session is the use of music, with or without suggested imagery, to carry the hypnotist's suggestions so that the words, the music and the imagined imagery will all be woven into a very involving and powerful experience. I believe that the music in this use is particularly good for those who are only moderately hypnotisable and helps prevent self-watching and self-criticising about the production of imagery, helps the whole experience become more involving and complete. For the highly hypnotisable, however, the experience is a very powerful and quite absorbing one and the actual suggestions are often not available to recall after the session.

Clients, even in depth psychotherapy, love a few sessions from time to time given over to music with the general suggestion of promoting the experiencing of positive feelings and self-growth. Remember that many of our most potent suggestions are often those given before hypnosis begins, setting very powerful expectancies. This helps bridge the hypnotic experience across to the waking state, which is separated by a qualitative gap in recall for very gifted subjects; not usually total amnesia, but a gap such as we have when recalling a dream. I believe that the act of putting the experience into words in hypnosis facilitates more detailed recall back in the waking state.

In simple stress management and anxiety control, use of music as deepening and/or content (and the two can merge), with use of music as the content of self-hypnosis (lazy man's meditation) to be done each day, comprise the core of a very effective and non-meddlesome package. The suggestions incorporated with the music are, of course, selected with care, sensitivity, and, one would hope, some imagination and flair. Always remember that these little sessions should be suggested as sensitising the client to other sources of peace, joy, wonder, etc. and, of course, adding to the general feeling of being centred and in control of one's own life.

When anger, guilt, and bitterness are an ongoing problem (for example, with AIDS patients), the going-into-hypnosis music can be used to dissolve these corrosive feelings away. Thus Bach's flute and harpsichord music might be a clear, rippling stream of sound that carries him/her on and on into hypnosis and at the same time lightly washes away anger, bitterness, sadness, and the feeling of being trapped . . . The music will ripple and dissolve these away like clear water running through the soul (or whatever). Remember, the words must suit the values and tastes of the individual client.

There is a great range of music, Renaissance dance music, harp music, lute music, religious music, etc. that my clients/subjects and I find magical with hypnosis and as long as the music is appropriate to the therapeutic purpose we have in mind, people do not mind using the music I have available. Some people love modern meditational music and environmental sounds and it is useful to have some of these, especially for young clients, who can then be lured to Baroque music if you wish. A very nice thing is to make your clients individual audiotapes: induction and deepening (over music or just voice), content, music with suggested feelings and therapeutic suggestions over the music, de-hypnotising (over music if you want to be polished, but it is a good idea to count backwards over the music as well).

For those who like environmental sounds as well as music, I have found that the sound of a tap running onto my dog's drinking bowl can well mimic a waterfall and that, combined with music from my CD player and the trailing ferns and patterns of light and shade from the words, create an effective and absorbing audiotape for use at home; the sparrows I feed in the backyard have contributed some lovely bird twitterings over music for my hypnotic audiotapes.

THE WHOLE HYPNOTIC SESSION TO MUSIC

My latest style, well received by clients, is to do the whole session with and over music. It goes like this:

Induction

After a brief statement of how it will work, the client is asked to close their eyes, told to listen to the music which is in itself trance-inducing (Pachelbel's "Canon," Bach's "Arioso") and I weave in the going-into-hypnosis suggestions:

- 1. Focus on the music, let it carry you into hypnosis.
- 2. Let the body relax and relax as the mind becomes absorbed in the music.
- 3. I will talk a little about breathing as you listen to music, to relax as you quietly breathe in, relax as you pause, relax as you breathe out as if through your skull, but always listen to the music which carries you into a quiet meditational state.
- 4. I draw attention to components. For example, the lower bass drone, its slow beat, and the deep notes will resonate peace and relaxation through your body; the higher melody, for example, defined by the violins, will enchant and delight your mind, carry you further and further into hypnosis.
- 5. I generally repeat themes of relaxation and peace resonating through the body, the mind becoming absorbed in the music and increasingly responsive to the music.
- 6. I continue interweaving these suggestions to comprise an induction and deepening of at least 10 to 15 minutes, not feeling I have to talk all the time.

Content

Content would vary according to the taste of therapist and client and the therapeutic goals. As the induction music ends, the person is told that another piece will be played that will, for example, lead him/her on a tour of all the faces of joy. The therapist will talk with and over music, defining the general parameters of the experience and, towards the end of the content music, will make the therapeutic suggestions, including the bridging over to the waking life of what has been experienced and learned in hypnosis.

Alternatively, the therapist will use that music to merge with and augment suggested therapeutic imagery, walking along a beach, through a forest, watching a waterfall, sitting by a still pool.

There is, remember, a very real place for suggestion; the fact that we are working in the imaginative involvement dimension does not mean we cannot use the increased responsiveness to suggestion in hypnosis, both in the sense of compliance and (more subtly) of incorporating suggested input into the selfconcept. Music can be a powerful vehicle of suggestion (just try Albinoni's "Adagio" after an effective musical induction), so powerful that the words might not be remembered. In this case be very careful that the suggestions are entirely acceptable to the client; I always work this out with the client before the hypnosis session and this does not in any way interfere with effectiveness. I would hate to think someone was changing my psyche without my fully informed consent and active collaboration! Further, remembering that the induction with music very likely takes people further into an altered state of consciousness than the traditional inductions, and remembering that subjects in deep hypnosis take our words very literally, do not set up conflict and unhappiness by careless or insensitive wording of suggestions. If your choice of music is inappropriate, then your client will not feel comfortable with it and will not go far into hypnosis; if you have proper communication and a good, collaborative relationship, the client will tell you and you will use another piece of music or another induction technique. However, this is not the case with the right music, augmenting the hypnotic depth and then the wrong words in suggestions.

De-Hypnotising

Remembering that pauses do not matter to the subject in hypnosis and that spaces that would be unbearable in conversations feel really pleasant in hypnosis, change to your coming-back-with-good-feelings music, your pathway back out of hypnosis. All kinds of music can be effective, depending on how you wish to define the waking world. I have suggested that, for those women who are born dominant but feel guilty about it, Handel's "Arrival of the Queen of Sheba" makes a dramatic and positive way to return to the waking state (Walker, 1991b). Much of the music of Vivaldi is appropriate and delightful as a pathway back to a world that will look brighter after the session. Instructions go along these lines (with and over the coming-back music):

- 1. This delightful music will be your pathway back to the real world and the waking state.
- 2. There will be no hurry, time to enjoy the feeling.
- 3. The music will start leading you back but, after a while, I will count also from 20 to 1, your eyes will open at 5 and you will be wide awake and most pleasantly alert at 1.
- 4. Coming back with this lovely music will leave you aware of the many sources of peace, joy, and delight in the real world as well as in hypnosis.
- 5. If the music is being used for some special effect, this effect will be suggested.
- 6. I always weave in with the music counting backwards from 20 back to 1 as a more insistent signal of return to the alert waking state.

Leave the music playing for just a little while and turn the volume down gently.

Debriefing

Do not forget your debriefing stage of the hypnotic session. Asking about the experience and memory of the music and hypnosis will give very useful guides for the refinement of your technique. Also, discussing the session in the waking state helps to bridge the magical hypnotic experience across to the waking state and everyday experience.

MUSIC AS A PATHWAY FOR SELF-HYPNOSIS

While self-hypnosis is harmless enough for the moderately hypnotisable, for the hypnotic virtuosi who are psychologically damaged, hypnosis without the safety and guidance of the hypnotist/therapist may permit the reactivation of old traumas, when what was aimed for was peace and relaxation.

If instructed to use self-hypnosis at home, the gifted subject can go into trance very readily, giving him/herself the hypnotic instructions. However, like the sorcerer's apprentice, such a patient does not always maintain a positive directing of experience and imagery. In my experience, the hypnotic virtuoso patient needs careful instruction in exactly how to carry out selfhypnosis and in exactly what is to be done in that altered state of consciousness. (Walker, 1990, p. 57)

Music makes a safe pathway for hypnotic virtuosi and an elegant pathway for self-hypnosis for less hypnotisable subjects. With my own clients, who are used to music as deepening and even as the major pathway into hypnosis in the clinical sessions, it is a comfortable and congenial extension of the familiar to use music for self-hypnosis. It is very effective for stress management and I train clients how to use it in clinical sessions. These days, becoming increasingly aware of the straight teaching/learning component of therapy, I tend to give clients printed instructions for self-hypnosis, written for them individually, with their active collaboration, their own self-hypnosis workbook. Instructions vary for the individual, but, for example, for stress management self-hypnosis with a client who was reasonably well adjusted but in the midst of a chaotic life situation, I would give the instructions first during an hypnosis session and would then have the client return to the waking state and have a short practice run, with me there to prompt the self-suggestions. We would then go to my computer and type and print these instructions. The general line of suggestions would be:

- You can use the experience of hypnosis at home to break the spiral of mounting tension and anxiety in everyday life.
- Each day, when you come home from work, you will take 20 or 30 minutes just for yourself. You will select an audiotape or CD of the right sort of music, warn the family to leave you alone for the time, start the music playing, and lie down quietly.
- You will close your eyes and say to yourself "Now I am going into hypnosis," and focus your attention on the music, just as you do with me when you are using music as your pathway into hypnosis.
- You will quietly, almost automatically, let your body relax each time you breathe out, as you focus your attention on the music, as you let the music take over your mind and become a moving pathway of sound that carries you peacefully and happily into hypnosis.
- The further the music takes you, the more involved you will become in listening to it and the further things around you will fade away beyond the peripheries of awareness.

- 6. As you go on listening to the music, losing yourself in the experience of moving further with it, your body will become profoundly relaxed, while you experience whatever delightful fantasies or images the music makes in your mind.
- 7. Whatever you experience will be pleasant, since the music will structure your experience and rule out the possibility of your thinking or feeling anything negative.
- 8. As the music goes on, you will go further and further into hypnosis.
- 9. When the music ends, no matter how far you have gone into hypnosis, you will register that the music has ended and you will calmly, peacefully, and very deliberately bring yourself back to the waking state.
- 10. You will feel very refreshed after the session.
- 11. Each time you practise self-hypnosis in this simple and delightful way, it will become easier and more effective. It will break the build-up of tension from the working day before you join the family circle.
- 12. Should someone barge into the room or the phone ring, there will be no problem. You will simply let your mind slip back to the waking state with no more disruption than waking from a light sleep.
- 13. This is a special way of listening to music and you will only do it on purpose to get into hypnosis, only when you say to yourself. "Now I am going into hypnosis." You will never do this accidentally when you are listening to music in the ordinary way. It will never happen when you are driving a car. It is a special experience that you will only produce on purpose.
- 14. Now we will return to the waking state and afterwards I will play a piece of music and you can practise putting yourself into hypnosis here with me, then you will be confident by yourself.

If a moderately hypnotisable client has difficulty maintaining concentration on music at home during times of particular stress, a powerful method is to combine active self-talk related to breathing while concentrating all possible effort on the music. This involves responding as fully as possible to the music as the primary focus of attention, while saying (in time with breathing), "Breathe in peace and joy . . . breathe out fear and pain." This is easier said than done and the effort tends to drive out intrusive thoughts and images, while the words have their own effect. The pain can, of course, be mental or physical and the fear can be of failure in the current situation of self-hypnosis or fears from life in general.

CONCLUDING COMMENTS

For those clinicians who are comfortable with music and enjoy it, music and words make an effective and very pleasant therapeutic modality. It is advisable to begin with use of music as a focus of attention for the deepening phase of the hypnotic session, and to begin with familiar pieces of music, so that one's own style of verbal communication with the music can develop without too much performance anxiety. Once the clinician is comfortable in talking before, during, and after the music, the uses of music to elicit emotions and to accompany fantasy and imagery in hypnosis are limited only by the joint creative imaginations of therapist and client.

Updated paper from that published in the Australian Journal of Clinical and Experimental Hypnosis, 1992, 20, 117-132.

REFERENCES

- Brown, P. (1991). The hypnotic brain. New Haven and London: Yale University Press.
- Clynes, M. (1987). On music and healing. In R. Sprintge & R. Droh (Eds.). Music in medicine. Berlin/Heidelberg: Springer-Verlag.
- Dragutonovich, S., & Sheehan, P. W. (1986). Hypnotic susceptibility and cortical modulation of stimulus intensity. Australian Journal of Clinical and Experimental Hypnosis, 14, 1-14.
- Hilgard, J. R. (1979). Personality and hypnosis. A study of imaginative involvement. (2nd ed). Chicago: University of Chicago Press.
- Reeve, W. (1973). Vividness of imagery in response to music: A comparison between hypnotic and waking states. Unpublished honours research dissertation, Department of Psychology, University of New South Wales.
- Rottenstein, M. (1985). A study of imagery in response to music in hypnosis and the waking state. Unpublished research dissertation, Department of Behavioural Sciences in Medicine, University of Sydney.
- Snodgrass, M., & Lynn, S. J. (1989). Music absorption and hypnotisability. *International Journal* of Clinical and Experimental Hypnosis, 37, 41-54.
- Walker, W.-L., & Diment, A. D. (1972). Pilot study investigating vividness of imagery in response to music in hypnosis and the waking state. Unpublished study.
- Walker, W.-L., & Diment, A. D. (1979). Music as a deepening technique. Australian Journal of Clinical and Experimental Hypnosis, 7, 35–36.
- Walker, W.-L. (1984). Some uses of imaginative involvement in therapy. Australian Journal of Clinical and Experimental Hypnosis, 12, 37–53.
- Walker, W.-L. (1990). Music as a pathway for self-hypnosis. Australian Journal of Clinical and Experimental Hypnosis, 18, 57-59.
- Walker, W.-L. (1991a). Hypnosis with Mesmer's glass harmonica music. Australian Journal of Clinical and Experimental Hypnosis, 19, 134–136.
- Walker, W.-L. (1991b). Experiencing dominance as positive. A musical fantasy with Handel. Australian Journal of Clinical and Experimental Hypnosis, 19, 137.

ANXIETY DISORDERS, POST-TRAUMATIC STRESS DISORDERS, AND HYPNOSIS

Barry J. Evans Department of Psychiatry, University of Melbourne/Austin & Repatriation Medical Centre

Greg J. Coman
Department of Psychiatry, University of Melbourne

This paper describes the research and clinical literature relating to the anxiety disorders. The chapter begins with a review of the general nature, classification, and aetiology of anxiety disorders, using DSM-IV criteria. Approaches to the treatment of each anxiety disorder are then discussed, including information-giving, cognitive-behavioural techniques, and pharmacological interventions. The broad range of suggestions for effective management highlight the need for an eclectic approach to client management. The particular relevance of hypnosis as an adjunct to the range of therapeutic approaches suitable for these disorders is then discussed, focusing on the evidence for the higher hypnotisability of at least some types of anxiety disorder sufferers. The clinical material suggests that hypnosis has a range of applications in anxiety disorder management. The paper concludes with detailed suggestions for the use of hypnosis as an adjunct in the treatment of post-traumatic stress reactions, suggestions which may have relevance in the management of the full range of anxiety disorders.

In lay terminology, people are said to "feel anxious" in situations which represent demands on their coping ability. These might include situations of danger or when faced with important events. We prefer not to use the word "anxiety" to describe what is essentially a state of arousal which, while it may be unpleasant and increase discomfort, is not debilitating in the sense conveyed by the use of the term: "to feel anxious." Some level of arousal or what others term "normal anxiety" is part of a natural reaction to stressful demands which can be helpful in assisting the individual marshal the energy and activity required to cope with daily life (Bootzin, Bower, Crocker, & Hall, 1991). However, as arousal increases, and anxiety is felt, they can begin to interfere with the individual's concentration, attention, and performance, limiting overall ability to cope (Bootzin et al., 1991). At very high levels of arousal, people may feel so anxious they cannot perform to a usual or required standard.

Such feelings of arousal, through to mild and elevated anxiety should be distinguished from the term "anxiety state," which is a continual and, often, irrational feeling of discomfort and tension, in the absence of any justifiable cause (Bootzin et al., 1991; Dally & Watkins, 1986). Such an anxiety state characterises those who suffer from the anxiety disorders.

Our aim in this research and clinical update for the symposium on anxiety disorders, post-traumatic stress disorder, and hypnosis is to describe the range

of anxiety disorders, to review treatment approaches and focus specifically on the use of hypnosis as an adjunct to therapy.

The anxiety disorders are the most frequent psychiatric diagnoses (Rickels, Case, & Schweizer, 1988), with an estimated incidence of around 9.0% of the adult population (Goldberg & Huxley, 1980; Schapiro, Skinner, Kessler, Von Korff, German, et al., 1984). In certain populations, such as medical patients and those suffering from specific medical conditions, the incidence can rise as high as 25–28% of patients (Dally & Watkins, 1986).

Jackson (1995) commented that therapists often experience great difficulty addressing the issue of anxiety with clients. Clients may fail to understand their feelings of generalised anxiety, which, from their point of view, are not related to what is happening in their lives. They find it difficult to accept that their problems, whether physically or psychologically oriented, are occurring as the result of anxiety. It is interesting that although most clients are aware of the terms "anxious" and "anxiety," few understand clearly what the terms mean. Part of the therapist's task is an educational role: to view anxiety from the standpoint of a generic term for a variety of conditions, which vary markedly in their classification, aetiology, presenting symptomatology, and treatment approaches. Viewing the anxieties from this standpoint, as Jackson argued, has a significant impact on the range of therapeutic approaches one can consider and make it far easier for the therapist to offer the client a satisfactory treatment rationale.

With this view of the anxieties in mind, the therapist can then help the client distinguish between what we termed above as arousal or "normal" anxiety and abnormal or pathological anxiety. As we commented above, clients can identify with the idea that mild to moderate levels of arousal help them cope more effectively with the stresses and demands of life. When aroused, their reactions become faster, their concentration improves, there is greater stimulation to get things done, and, overall, an increased sense of mastery. On the other hand, when the person experiences heightened anxiety or feels constantly anxious, there is a reduced capacity to plan, make accurate or logical decisions, carry out skilled tasks, or cope in general with everyday life events. Helping the client understand the relationship between their feelings of anxiety and subsequent effects of this on their coping and self-esteem may be an important first step in helping them learn control over their anxiety.

THE CLASSIFICATION OF ANXIETY DISORDERS

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, American Psychiatric Association [APA], 1994), provides a suitable classification system for the anxiety disorders. It divides the anxieties into the following clinically recognisable groups:

- 1. Panic Disorder (with and without agoraphobia).
- Specific Phobia (replacing Simple Phobia).
- 3. Social Phobia.

- 4. Obsessive-Compulsive Disorder.
- 5. Post-Traumatic Stress Disorder.
- Acute Stress Disorder.
- 7. Generalised Anxiety Disorder.
- 8. Substance-induced Anxiety Disorder or that resulting from a medical condition.
- 9. Anxiety Disorder not otherwise specified.

The essential characteristic of most anxiety disorders is the occurrence of panic attacks, the sudden onset of a discrete period of intense fear or discomfort accompanied by a range of somatic or cognitive symptoms, and the fear that such attacks may re-occur. Agoraphobia is characterised by anxiety about being in places or situations from which escape might be difficult or embarrassing, or in which help may not be available should the person suffer a panic attack. Those who suffer from Panic Disorder without Agoraphobia are, in most respects, similar to those with a diagnosis of Panic Disorder with Agoraphobia, except that, for the former, the focus of their fear is on the occurrence of incapacitating or extremely embarrassing panic-like symptoms or limited symptom attacks, rather than on the fear of full panic attacks, a characteristic of sufferers of Panic Disorder with Agoraphobia.

A person suffering from a Specific Phobia is characterised by a marked and persistent fear of specific objects or situations. Social phobics feel anxious when they have to confront situations where they may be under scrutiny of others.

Obsessive-Compulsive Disorder is characterised by recurrent obsessions or compulsions on the part of the sufferer. Anxiety occurs if the person tries to resist the obsessions or compulsions and, sometimes, avoidance behaviour may intensify this anxiety. The predominant symptom of Post-Traumatic Stress Disorder is the development of characteristic anxiety symptoms following exposure to an extreme stressor, together with recurrent re-experiencing of the trauma. DSM-IV introduced for the first time a category of Acute Stress Disorder, the essential feature of which is the development of anxiety reactions, dissociation, and other symptoms within one month of exposure to an extremely stressful trauma.

Generalised Anxiety Disorder is characterised by excessive anxiety and apprehensive expectation about possible forthcoming events or situations. Finally, DSM-IV includes a classification of Anxiety Disorder resulting from a general medical condition and/or substance use, both characterised again by high levels of anxiety.

DSM-IV provides information on the specific diagnostic features of each of these disorders and the frequency, severity, and associated requirements for a formal diagnosis. Our approach here is to discuss the general features of the disorders, at both a clinical and sub-clinical level, for which the treatment approaches and hypnosis techniques described in this paper are equally applicable.

THE NATURE OF THE ANXIETIES

Panic Disorder and Agoraphobia

Those suffering from panic disorder and agoraphobia experience a constant sense of apprehension, which they often describe as a "fear of fear." Their initial panic attack can "come out of the blue" and can encompass a terrifying fear they are about to die, lose control, have a stroke, or "go crazy." The accompanying heightened response of the sympathetic nervous system in turn produces an increased release of adrenalin into the circulatory system, causing systemic over-arousal (Murphy, Siever, & Insel, 1985). Many of the distressing symptoms of panic disorder, including chest pains, shortness of breath, dizziness, faintness, sweating, nausea, paraesthesia, and flushes or chills are the result of this sympathetic nervous system over-arousal. Panic attacks can last from minutes to hours and can vary significantly in their frequency and severity.

Sufferers often report depersonalisation and describe feeling as "As though I'm looking at things through a frosted glass window" or "As if I'm on another planet." Once a person has experienced that first attack, there is a likelihood of further attacks recurring in that situation. This fear of panic attacks can become so intense that, in many people, it leads to avoidance behaviour. Sufferers are disinclined to move away from places they perceive to be safe unless accompanied by a trusted, supportive figure. "It's like living on the edge of a precipice" is the way that many clients describe their feelings at this stage of the disorder.

Despite the relatively common incidence of both agoraphobia and panic disorder in the general community, there is little firm research and clinical evidence to suggest an invariable relationship between the two disorders. Clinically, it is known that a small group of sufferers develop panic disorder without progressing to full-blown agoraphobia. Similarly, agoraphobia can occur in the absence of panic attacks. DSM-IV classifies agoraphobia as a more severe form of panic disorder, and avoidance arises from a reluctance on the part of sufferers to put themselves in the position where they might panic.

The incidence of Panic Disorder is between 1.5% and 3.5%. Both disorders (with and without Agoraphobia) tend to first become apparent between adolescence and the mid-30s, with a peak in late adolescence. Women have a higher incidence for both disorders than males. As Jackson pointed out in his review (1995), while there may be a genetic basis to panic disorder, stressful life events and cognitive-demand factors are likely catalysts for sufferers' initial panic attacks (De Loof, Zandbergan, Lonsbergen, Pols, & Grieze, 1989; Torgersen, 1983). A significant loss in a person's life (e.g., loss of a loved one through death, serious financial loss, loss of a business, or breakdown in an interpersonal relationship) is often the trigger for onset.

It is not at all clear why some people who suffer from panic disorder go on to become agoraphobic, while others do not. Jackson (1995) argued that clients most likely to develop panic disorder and agoraphobia were those who were expert at what he termed cognitive distortions and who "catastrophise" situations and events, especially where they face the likelihood of having to leave their perceived place of safety. The role of such cognitive distortions and irrational thought processes have an important bearing on therapeutic management for, unless due recognition is given to cognitive factors and the person is shown ways of effectively dealing with them, progress is likely to be

The way in which physical and psychological factors interplay in the clinical situation can be exemplified in the following case study:

Simone is 44 years of age. She lives with her mother and her 12-year-old daughter and until 14 years ago, enjoyed a happy home life with her husband and family. Then, her husband was committed to gaol as the result of a serious offence. She became extremely anxious following this event and was treated with Alprazolam (Xanax) by her general practitioner.

She was unhappy about relying on the drug to cope with everyday life. Her concerns were intensified by an increase in her anxiety levels whenever she tried reducing the dosage. She divorced her husband about three years after he was gaoled and shortly afterwards was diagnosed as having chronic fatigue syndrome (CFS).

Her first panic attack occurred about six months later when she was seated in her car at a set of traffic lights. She felt an overwhelming sense of panic, dizziness, disorientation, and sweating and her first inclination was to run from her vehicle. Because of the intense chest pain she experienced, she said "I felt as if I was having a heart attack." Having managed to reach home, she was taken to hospital for investigation of her chest pain and was released without any further advice when no heart abnormalities were discovered.

Following this initial attack, she harboured constant fears that another attack would strike and, consequently, avoided driving her car. In spite of her continuing use of Alprazolam, the panic attacks persisted even in the home situation. On occasions, they would wake her from sleep and she reached the point where she felt she was losing control of her sanity.

Simone's excursions from home became more and more restricted and she could only venture as far as the local shops accompanied by her daughter or mother. Even these trips were described as being hard to endure and, on many occasions, she was forced to return home because of incipient or full-blown panic attacks (Jackson, 1995).

Simone's story and the onset and course of the disorder are typical of many such sufferers. Several factors probably contributed to the initial onset: Her existing general anxiety disorder, the imprisonment of her husband and breakdown of her marriage, and a superimposed chronic illness. Note that her panic disorder was initially misdiagnosed, a common problem since it can often mimic organic disease. The concern raised in this case by Jackson (1995) was in regard to the therapeutic regime then instituted. It may not be helpful to put the client on medication and tell her that: "It's your nerves; you must learn to relax!" Such advice given to a client who is suffering sheer terror whenever they have a panic attack, does little to help change their belief they will never conquer their problem.

Specific Phobia

The category of Specific Phobia introduced into DSM-IV replaced the category of Simple Phobia used in DSM-IIIR (APA, 1987). The defining feature of a Specific Phobia is a marked and persistent fear of a clearly delineated and circumscribed stimulus, exposure to which provokes an immediate anxiety response. This response may comprise a situationally bound or situationally disposed panic attack The list of stimuli which could precipitate a phobic reaction is extensive, with the most common involving animals (including fear of dogs, snakes, insects, and mice), flying, heights, closed spaces, thunderstorms, and blood or tissue injury. Anything, in fact, has the potential to trigger a fear response. Adults typically understand their fear is excessive and unreasonable but this may not apply in the case of children suffering from the disorder. For a formal diagnosis, the anxiety reaction must be so severe as to result in marked distress and cause significant interference with daily life. Whether or not a formal diagnosis can be made in any particular case, the treatment approaches and management strategies discussed below will be appropriate. In this context, it is worth noting that DSM-IV reports that, although phobias are common in the general population, they rarely are serious enough to warrant a formal diagnosis of Specific Phobia. Community sampling suggests a one-year prevalence rate of 9%, with lifetime rates ranging from 10% to 11.3% (DSM-IV, 1994). While the sex ratio varies across the type of phobic stimulus, the majority of sufferers are female.

The sufferer from a Specific Phobia experiences a marked anxiety response when exposed to the feared situation or even when anticipating such exposure. Generally, the intensity of their reaction is determined by the proximity of the feared stimulus and the severity of previous exposures to the stimulus. It is important to discuss with the client their anticipatory anxiety and self-talk in relation to the feared stimulus, as these may be contributory factors in the development and maintenance of the phobic reaction.

Jackson (1995) argued that the specific phobia for which a person seeks treatment is usually apparent to both therapist and client, but it is important to clarify the validity of what the client believes to be the problem. To safeguard against selecting the wrong anxiety theme or dimension, there are two important questions the therapist can ask. Having sketched out a scene based closely on the client's description of an anxiety-provoking situation, ask: "What would make this even more anxiety-provoking?" and "If you could not get away from this situation, what could you do to make things better?"

These questions help to clarify the correct dimensions of the phobia and ensure the appropriateness of the treatment approach then used (Clarke & Jackson, 1983).

Alison, a 31-year-old clothes buyer for a retail chain store, was referred for the treatment of a flying phobia. Her fear had only become apparent in the past six months and her principal concern appeared to be a forthcoming business flight to the U.S.A.

A detailed history revealed that, in fact, her principal problem was that of panic

disorder. Her relationship with her de facto husband had deteriorated in recent months and it was clear she feared losing him if she went overseas for any prolonged period. Already, she had postponed her trip on several occasions but she was now confronted with having to fulfil her business obligations.

In spite of having suffered a series of panic attacks, she was not forthcoming in mentioning these until specific questions were asked. She believed her difficulty in going overseas was due to her fear of flying. In a sense, the apparent fear provided a raison d'etre for her not flying. Clearly, it would have been inappropriate to desensitise her fear of flying since this was not the true underlying disorder requiring treatment (Jackson, 1995).

Jackson (1995) reviewed aetiological factors in the development of specific phobias. He argued there was some evidence for a genetic predisposition to the disorder (Rose, Miller, & Pogue-Geile, 1981; Seligman, 1971). There is little evidence to support the idea that the person has experienced a traumatic episode which sensitised them to the stimulus, as researchers have, in many cases, been unable to find an apparent exposure (Clarke & Jackson, 1983; Marks, 1969).

Jackson (1995) concluded that specific phobias are a "special form of fear which: (1) are out of proportion to the demands of the situation; (2) cannot be explained or reasoned away; (3) are beyond voluntary control; and (4) lead to avoidance of the feared situation" (Marks, 1969, p. 3). Modelling may also play a part in the development of fears in an individual, and most therapists are familiar with cases in which children exhibit similar fears to a parent.

Social Phobia

Those who suffer social phobia have a marked and persistent fear of social or performance situations in which they may experience embarrassment or ridicule from others. The performance anxiety may be very specific, such as a fear of one's hands trembling when writing in front of others, being unable to think of what to say when speaking in public, or a fear of choking when eating in a public place. Alternately, the anxiety may be of a more general nature, such as saying foolish things or not being able to answer questions in social situations. Both varieties of social phobia are usually accompanied by a great deal of anticipatory anxiety and result in cognitive dysfunction, typified by negative self-talk.

Social phobias often develop in the mid-teens, usually developing out of a history of childhood inhibition or shyness (DSM-IV, 1994; Marks, 1970: Turner, Beidel, & Larkin, 1986). Epidemiological studies suggest a lifetime prevalence of 3% to 13% (DSM-IV, 1994), but the incidence of performance anxiety related to public speaking and social situations may be much higher, given that the strict criteria for a formal diagnosis may not be met. Again, we make the point that treatment may be required to manage what is a distressing concern for the client, whether or not a formal diagnosis may apply in any given case.

Social phobics show evidence of significant general anxiety and mild depression can often be a defining characteristic (Jackson, 1995). The severe distress which occurs when the person is no longer able to avoid the feared situation often drives them to seek treatment. Epidemiological studies suggest social phobia is more common in women than in men but, in most clinical samples, the sexes are equally represented or the majority are males (DSM-IV, 1994).

John is a 34-year-old solicitor. He was happily married with two children, and there were no major external stressors in his life. He was aware he had been "a nervous person for as long as he could remember." Nevertheless, he had coped well with his law studies and, for the past two years, had been a partner in a major law firm. He enjoyed his work but felt over-awed by his senior partners and was fearful of being perceived by them as inadequate in his work. When further questioned about this, he agreed his self-esteem was probably not high and that he had always had a fear of failure in any endeavour in which he had involved himself.

Two events occurred within a week of each other which caused him to feel extremely anxious and, as he described it, "made me feel insecure." The first happened when he was having morning coffee with a senior partner and an important client in the boardroom of the legal firm's office. When asked to pour coffee, he noticed his hand was shaking as he poured. He became fearful he would spill the coffee and felt embarrassed that this would draw attention to him. He avoided the situation by using the pretext he had to make an urgent telephone call.

Several days later, it was necessary for him to sign legal documents in front of a client and he noticed his hand was shaking as he picked up the pen. Following these initial experiences, he felt panic whenever there was a possibility he would have to write in front of others or pour drinks. As a result, he used a variety of strategies to avoid these situations. His level of general anxiety increased and he felt an even greater loss of self-esteem.

His principal concerns were, first, there did not seem to be any reason for the occurrence of the phobia in the first instance and, second, his avoidance behaviours might be recognised by one of his partners. The net result was that he became totally preoccupied with his phobia and was aware this had significant effects on his work performance (Jackson, 1995).

In explaining the aetiology of social phobia, Jackson (1995) reviewed the evidence which suggests clients with high levels of emotional arousal are more susceptible to acquiring phobias than those with low arousal (Asso & Beech, 1975; Hugdahl, Fredrikson, & Ohman, 1977) and arousal levels (anxiety) are excessive in social phobics preceding the onset of the phobia (Hall & Goldberg, 1977). Personality factors, such as shyness and introversion, may be contributing factors to the social interaction difficulties these people often experience (DSM-IV, 1994). Low self-esteem and lack of assertiveness are commonly associated with social phobia and may play a significant role in aetiology (Kagan, Reznick, & Snidman, 1988; Orenstein, Orenstein, & Carr, 1975).

An important factor in the onset and maintenance of social phobias may be the cognitive processes which precede and follow performance situations. As a group, sufferers of phobic disorders are more inclined to irrational beliefs than non-phobics (Rimm, Janda, Lancaster, Nahl, & Dittman, 1977) and this is particularly the case with social phobia sufferers. The importance of cognitive factors in the aetiology of social phobia is hard to determine but, together with low self-esteem, it would appear on clinical grounds alone that both are important contributing factors.

Obsessive-Compulsive Disorder

Sufferers of Obsessive-Compulsive Disorder are characterised by the presence of recurrent, anxiety-provoking, intrusive thoughts, and compulsive acts aimed at trying to reduce anxiety and control the intrusive thoughts. Common obsessions are persistent thoughts of violence (killing one's child), contamination (becoming infected through touching someone), and doubt (repeatedly wondering if one has hurt another person when driving a car).

Compulsions, on the other hand, are repetitive, purposeful, and intentional behaviours that are performed either in response to an obsession, according to set rules, or in a stereotyped fashion. The sufferer realises their behaviour is irrational but has to perform the rituals as a means of relieving anxiety and tension. The most common compulsions are hand-washing, counting objects (e.g., bricks on a wall), checking (e.g., locks, electrical switches), and touching. These compulsive acts also have the effect of producing anxiety, because the sufferer realises the behaviours are irrational, but is unable to resist them (Dadds & Powell, 1992; DSM-IV, 1994).

Obsessive-Compulsive Disorder is relatively uncommon, with a prevalence rate between 0.1% and 5% in psychiatric populations (Kaplan & Sadock, 1991) and 1.5% to 2.5% in the general population (DSM-IV, 1994; Rasmussen & Tsuang, 1984). It is equally common among males and females.

The disorder can start in childhood, when obsessions tend to centre on dirt, germs, or concerns that something terrible will happen. The age of onset for the great majority of obsessive-compulsive disorder sufferers is generally between 10 and 24 years of age. The illness usually fluctuates in intensity, but the client is rarely entirely free of symptoms at any stage. In about two thirds of adult clients, it is associated with significant depressive episodes, and panic attacks, social phobia, and generalised anxiety which frequently complicate the clinical picture (Jackson, 1995).

Peta is an 8-year-old child. Each day, upon being picked up at school, Peta and her mother would make the short walk from the school gate to the car. Peta would become more and more anxious, peppering her mother with questions about whether her books, pens and even her teacher would be safe during her absence. Peta was terrified that her classroom would somehow disappear during the night and, on her return the next day, she would find everything gone. Despite her mother's protestations and attempts to calm her, Peta would become increasingly anxious and

upset until, extremely agitated and in tears, she would run back to the classroom to check if her desk, work materials and teacher were still there. On bad days, the returns to check on her things could last an hour or more.

At home, Peta had begun checking the daily garbage to make sure that none of her possessions were being thrown out. If her parents tried to stop this checking, which sometimes was repeated over and over, she would become hysterical and act aggressively towards her parents. Similarly, Peta was developing a habit of checking on her parents, especially her mother, to make sure she was "still there" (Dadds & Powell, 1992).

Obsessive-Compulsive Disorder may result from dysregulations in seratonin (5HT) neural transmission (Jackson, 1995), or disturbances of the basal ganglia and associated circuits, with a consequent effect on behaviours, such as checking and cleaning (Rapoport, 1990). Support for the involvement of biological processes also comes from studies showing a genetic component, some evidence for cerebral dysfunction in those with the disorder, the beneficial effects of brain surgery for a subpopulation of sufferers, and the successful use of medication for the disorder (Dadds & Powell, 1992). At the present time, however, there are no clearly defined biological markers for Obsessive-Compulsive Disorder.

Recently, attempts have been made to explain the aetiology of Obsessive-Compulsive Disorder in terms of learning theory, emphasising the role of classical conditioning, social learning, and modelling processes in the maintenance of obsessive thoughts and actions. As Dadds and Powell (1992) conclude, however, while these models can explain how the thoughts and behaviours are reinforced, they cannot explain what caused the obsessive cycle in the first place. There is also a suggestion that the disorder may be perpetuated by the cognitive processes characteristic of sufferers, who typically appear to have little confidence in their checking ability, hence they repeat the process (Dadds & Powell, 1992).

Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder is defined as a cluster of symptoms precipitated by a person's exposure to a severe stressor that is outside the range of usual human experience, and which involves a threat to life or well-being. It can result from a severe stressor that could be expected to create anxiety in almost any person, such as physical attack, rape, natural disasters, war experiences, or traumatic accidents.

Peter is a police officer who had six years of good service to his credit, when he was assigned the task of transporting prisoners and bodies to their appropriate destinations. He received what appeared to be a routine call involving suspicion of a dead body in an apartment. When Peter entered the apartment, he was shot at and narrowly missed being killed by an old woman who, unknown to him, had barricaded herself in her bedroom. Peter was able to send for help and the old woman was apprehended and sent to a nursing home where, several weeks later, she committed suicide.

A year later, Peter put himself on sick leave after he confronted a citizen on the

street with a knife and saw the old woman instead of the citizen. In counselling with his therapist, Peter was pleasant and cooperative, but his hands were shaking and his voice quavered. He said he had "come within a hair's breath" of killing the citizen. He related further that he had no problem dealing with the incident involving the old woman for the first few months. Thereafter, he began thinking of the old woman while he was at work. He began to have nightmares about her, which became progressively more intense as he relived the incident over and over.

Over time, he began thinking that the old woman was still alive, even though he knew she was not. He began to think that the only way to get rid of her was to kill her. To do so, he felt, he might have to kill himself, reasoning that, since he knew she was not alive she must exist only in his mind; as a result, to kill her he would have to kill himself. He became increasingly irritable at work and home, lost physical energy and was unable to sleep.

Several aspects of Peter's case are important in an understanding of posttraumatic stress disorder: he responded to the situation with the old woman with fear, connected with coming so close to death. The incident violated his sense of the way the world should be, a world in which little old ladies are not supposed to try to kill you. He displayed significant self-criticism, suggesting that there were: "little signs that I should have picked up on, that someone was alive and potentially dangerous in the apartment," signifying inadequate job performance. The very intensity of his reactions to the trauma seemed to have violated his self-concept. Prior to the trauma, he reported that he was carefree, whereas now he was preoccupied and disturbed (from Ostrov, undated).

These symptoms provide for the formal diagnosis of Post-Traumatic Stress Disorder, but at the sub-clinical level, many other reactions can follow one's experience of a severe stressor which do not result in the person being formally diagnosed as suffering from the disorder. These minor reactions include shock (disbelief, numbness); fear (of the event recurring); anger (at the causal agent and the injustice of it all); sadness (human, material or safety losses); and shame. The sufferer may also experience sleep disorders, physical problems, social isolation, work disruption, loss of appetite, and changes in alcohol and drug usage. Cognitions may be affected, with dreams; nightmares; confusion; and persistent recollections of the event.

Following their traumatic exposure, many PTSD sufferers experience distressing flashbacks to the event (Horowitz, 1976). PTSD sufferers from Vietnam have reported auditory hallucinations of dying comrades (Mueser & Butler, 1987), innocent participants in the Queen Street incident in Melbourne in 1987 reported frequent intrusive thoughts and memories of the incident including dreams and vivid images (Creamer, Burgess, Buckingham, & Pattison, 1989), as have patients who have undergone stressful experiences during surgery (Peebles, 1989). Intrusive ruminations may also take the form of disturbing dreams or nightmares, and/or daydreams (flashbacks). There is often a sense of numbness or detachment from everyday events and an inability to focus on here-and-now things in life. Instead, the person tends to dwell constantly on the past and this is usually linked to a great deal of cognitive dysfunction.

These components to PTSD suggest a "psychic numbing" (Brende, 1985), which helps sufferers avoid conscious traumatic memories of the event. Many patients with PTSD experience a polarisation in which they alternate between intense, vivid, and painful memories and images associated with the traumatic experience, and a kind of pseudonormality in which the victims avoid such painful memories, using traumatic amnesia, other forms of dissociation, and repression, with associated reduction in adaptive capacity and loss of affective responsiveness (Spiegel, Hunt, & Dondershine, 1988).

Other symptoms of the disorder include an exaggerated startle reflex, sleep difficulties, survivor guilt, poor concentration and memory impairment, and an avoidance of situations or thoughts and feelings that remind the person of the event. Anxiety and depression often form part of the clinical picture and some clients describe a diminished responsiveness to the outside world, referred to as "psychic numbing" or "emotional anaesthesia." Clients feel a sense of detachment from many aspects of their life and often find difficulty enjoying or feeling emotions such as intimacy, tenderness, or sexuality.

The epidemiology of the disorder is estimated from 1% to 14% (DSM-IV, 1994). Helzer, Robins, and McEvoy (1987), suggested a prevalence rate of 0.5% for males and 1.2% for females, compared with an estimated 6% of Vietnam veterans with combat-related PTSD. These figures compare favourably with the estimate by Kidson, Douglas, and Holwill (1993) that 45% of Australian World War II veterans suffer from active symptomatology. Rather than address the prevalence issue, it can be agreed that many clients suffer from degrees of symptomatology, without fulfilling precise Post-Traumatic Stress Disorder criteria. In these terms, understanding of the problem and treatment considerations apply over the range of symptoms from mild anxiety symptomatology to those sufferers who meet DSM-IV criteria.

There are a number of theoretical formulations which attempt to explain the development of Post-Traumatic Stress Disorder syndromes.

The personality-type approach suggests that these stress reactions derive from an interaction between a certain personality type and traumatic events. The post-traumatic syndrome reflects the individual's personality and social environment, and provides a common pathway to the disorder, reached through a wide variety of relatively severe stressors (Kaplan & Sadock, 1991).

Freud (1914) argued that the initial trauma overwhelms the ego and the defence mechanisms of repression and undoing (in dreams and compulsive repetition of the trauma) are the ego's attempts to drain off excess libidinal energy. A chronic course leads to ego exhaustion and changes in the ego-superego boundary as a result of overwhelming guilt and shame. On the other hand, Pavlov argued that the emotional response of fear becomes conditioned to the sights and sounds of the traumatic event and that the defensive reaction continues to be elicited by stimuli reminiscent of the initial trauma (Pavlov, 1927).

Information processing models have also been developed to explain trauma reactions. These argue post-traumatic stress reactions result from cognitive re-processing of the events to which people are exposed (Horowitz, 1976). Horowitz argued that traumatic experiences affect our "schemas" — our world views. The stimulus event occurs to the individual, who then responds physiologically, emotionally, and behaviourally to the event. The individual has to interpret these events and responses. Typically, the sufferer may say "I'm going crazy" or "I'm vulnerable." Thus, the individual's schemas have been changed to reflect the experience he or she has been through and their interpretation of the events. New situations are processed to see if they fit in with the changed schema. The victim's responses affect all levels of functioning, because of the powerful and pervasive nature of the event. The meaning given to the event (in terms of the victim's schema) may be to say: "If I'm vulnerable in this [trauma] situation, is anywhere safe?" or "If I couldn't cope in this [trauma] situation, can I cope in any situation?"

The person's appraisal of the trauma and interpretation of the event is influenced by characteristics of the situation, its degree of threat, the unpredictability of the experience, and how rare an event it is — together with such personal characteristics as locus of control, anxiety proneness, and "schemas" or world view.

The greater the appraisal of threat, the more powerful and pervasive is the trauma-related memory network which is formed. This memory network can be reactivated whenever the individual is reminded of the trauma event — even by very superficial reminders, such as clothing similar to that which they were wearing on the occasion. Where there is unsuccessful processing of the memory network, associated with avoidance behaviour and high anxiety, then a posttraumatic stress reaction is likely to develop.

Hodgkinson and Stewart (1991) argued that information-processing models of Post-Traumatic Stress Disorder aetiology only partially explain sufferers' behaviour. They argue that the disorder is a "fear structure" — a schema the victim uses to escape danger, which contains information about the feared situation, behavioural and emotional responses to it, and information about the meaning of the event. Of course, many fear structures exist in everyday life, but what distinguishes this reaction from other anxiety disorders is that the traumatic event is of monumental significance and violates previously held basic concepts of safety. Thus, we can view Post-Traumatic Stress Disorder as primarily a loss of faith in the world which affects every aspect of the individual's day-to-day life. In a cyclic process that develops from the individual's personality and beliefs and the experience of the traumatic event, the person's ruminations about what has happened cause frequent intrusive memories and attempts to suppress these, resulting in cognitive reappraisals of the world, the self and what has occurred. These changes result in emotional distress and arousal, with subsequent avoidance and withdrawal behaviour. Thus, a fear structure is set up (Hodgkinson & Stewart, 1991). The importance of this approach to understanding symptoms lies in the recognition by the therapist that different therapeutic goals, with subsequent differing techniques, will apply depending upon the particular symptoms displayed by the client when commencing therapy.

It is worthwhile drawing attention to so-called psychobiological explanations of Post-Traumatic Stress Disorders, because they make sense of sufferers' physical symptoms. These hypothesise that the disorder is a hyperarousal state associated with excessive sympathetic activity. Exposure to a stressor leads to a massive sympathetic discharge (heart rate, respiratory rate, sweating, muscle tension, blood pressure, and skin conductance), which may persist for days, weeks, or months. If the individual cannot desensitise themselves to the traumatic event or forget it, then the acute arousal becomes chronic as the person remembers or re-experiences the event with repeated accompanying arousal. Sufferers report frequent sleep disturbance, have poor tolerance for arousal and react in an "all or none" manner. They lose the capacity to make an appropriate assessment of stimuli and continue to react with an emergency response to minor stimuli.

Depletions in noradrenaline and increased production of endogenous opiates have also been related to the disorder. Animal studies have shown that, when faced with inescapable shock, animals show a subsequent helplessness syndrome — deficits in learning, motivational decrease, distress, and immunosuppression. These changes are due to noradrenaline and dopamine depletion. PTSD sufferers show similar depletions in noradrenaline, compared with other psychiatric groups. Animals exposed to inescapable shock also develop analgesia, mediated by endogenous opioids and reversed by naxolone. There is a striking similarity between the symptoms of opiate withdrawal and hyperactive symptoms of the PTSD. It is now hypothesised that these opiates may be produced as part of the traumatic response and reproduced when the individual suffers re-exposure to the event (Kihlstrom, 1985; Krantz, Grunberg, & Baum, 1985). These biochemical changes may have implications for treatment.

From a clinical perspective, it would not seem unreasonable for a person to experience marked physiological and behavioural disturbances following a severe and unexpected trauma which may have threatened life and limb. Our concern with some of the theories advanced so far is that there is a degree of circularity in them, in that they use the responses to the trauma as a means of explaining away why they occurred. From the therapist's viewpoint, we think it important to understand the nature, intensity, and importance of the trauma as the primary aetiological factor in evaluating the individual's response to their stressful event (Evans, 1995; Green, Wilson, & Lindy, 1985).

Acute Stress Disorder

Acute Stress Disorder was first introduced with DSM-IV (1994). Its defining characteristic is the development of anxiety, dissociative, and other symptoms of Post-Traumatic Stress Disorder within one month following exposure to the stressor. In all other respects the disorder is the same as PTSD; indeed, symptoms of Acute Stress Disorder are predictive of the later development of Post-Traumatic Stress Disorder, unless treatment is effected (Spiegel, Koopman, & Classen, 1994).

Generalised Anxiety Disorder

Generalised Anxiety Disorder is the most common form of anxiety presenting to medical practitioners and therapists. It is a significant clinical problem, affecting up to 12 % of the general population (DSM-IV, 1994; Marks, 1987).

The disorder is characterised by excessive anxiety and anticipatory concern about a range of activities the person may have to carry out. This anxiety is difficult to control and results in a number of physical and psychological symptoms. These include: restlessness, fatigue, lack of concentration, irritability, muscle tension, and sleep disturbance. Although three or more of these are required for the formal diagnosis of Generalised Anxiety Disorder, a client experiencing one or more of these symptoms at a sub-clinical level could still be suffering the significant distress and impairment of daily living that is also part of a formal diagnosis.

Global anxiety and worry are the core factors in Generalised Anxiety Disorder (Borkovec & Inz, 1990). Some of these centre on anticipations of coping difficulties, especially in social situations. They may also be precipitated by the sudden onset of illness, injury, surgery (Beck & Emery, 1985), or by a variety of life events which are outside the person's control.

Alice is a 62-year-old woman who presented with a history of having been "quite sick all this year." She had felt anxious for many years and most of her stress arose from concerns about her elderly mother who had severe psychiatric problems, and her 33-year-old son who "had been a problem since he was 14."

Initially, her doctor had treated her with diazepam (Valium) for several years but, because she was aware that this was not the ideal approach, she had progressively reduced the medication. This led to severe withdrawal effects and necessitated her recommencing the drug.

She experienced marked indigestion, abdominal distension and flatulence, tightness in her throat, dry eyes, and severe daily tension headaches. The muscle tension in her arms and legs was so severe that she remarked that she felt as though she "couldn't move her arms and legs." Her sleep pattern was extremely poor and she woke consistently at 2.30 am and found it impossible to return to sleep because of an over-active mind.

Sleep was further inhibited by nocturnal bruxism and she described waking with her teeth aching. To add to her woes, she had to seek dental treatment as s result of the damage inflicted by her teeth grinding habit. She said she tended to worry "about anything and everything," admitted she had low self-esteem, and perhaps the thing that concerned her most at this point in her life was that she felt she could no longer cope (Jackson, 1995).

Generalised Anxiety Disorder can become chronic if not adequately treated. In spite of its relative frequency in the general population, only an estimated 23% of sufferers receive treatment (Schapiro, et al., 1984). An estimated twothirds of sufferers are women (DSM-IV, 1994).

Anxiety Disorder due to a General Medical Condition or Substance Use The essential feature of both these conditions is clinically significant anxiety caused by the medical condition or substance use.

In determining whether the anxiety condition is due to a medical condition, the therapist needs to establish the presence of a medical condition and determine that the anxiety is physiologically caused by the condition. If this relationship cannot be established, a formal diagnosis cannot be made and a diagnosis of primary Anxiety Disorder may be appropriate (DSM-IV, 1994).

For a formal diagnosis of Anxiety Disorder caused by substance abuse, there must be direct evidence of intoxication or withdrawal. DSM-IV (1994) makes the point that primary Anxiety Disorders may precede the onset of substance abuse or occur during times of sustained abstinence.

Anxiety Disorder (not otherwise specified)

This general category covers prominent anxiety or phobic avoidance which do not meet the criteria for any specific anxiety disorder. DSM-IV (1994) gives such examples as mixed anxiety-depressive symptoms which do not meet diagnostic criteria for either anxiety or mood disorder; clinically significant social phobic symptoms that are related to having a general medical or psychiatric condition; and cases where the therapist or clinician cannot meaningfully conclude whether the anxiety disorder is primary, or due to a medical condition or substance use.

Summary

It is clear from the classifications in DSM-IV (1994) that the anxiety disorders represent a cluster of syndromes with elevated anxiety as the defining characteristic. The differing prevalence rates and gender features, together with the variety of aetiological factors suggested to explain the onset and course of the different types of anxiety disorders, highlight the need for careful exploration of the diagnosis in each presenting case.

Having reviewed the classification, nature, and aetiology of the anxiety disorders, we move now to examine the efficacy of hypnosis in the treatment of the disorders. This is followed by a detailed examination of treatment approaches for the disorders, highlighting the role of hypnosis.

HYPNOSIS IN THE TREATMENT OF THE ANXIETY DISORDERS

A number of research and clinical studies have suggested that phobic patients show greater hypnotic susceptibility than other groups (Frankel, 1974; Frankel, 1988; Frankel & Orne, 1976; Frischolz, Spiegel, Spiegel, Balma, & Markell, 1982; Foenander, Burrows, Gerschman, & Horne, 1980; Gerschman, Burrows, Reade, & Foenander, 1979; John, Hollander, & Perry, 1983; Kelly, 1984; Rodney, Hollander, & Campbell, 1983), although this has not been universally found (Gerschman, Burrows, & Reade, 1987; Owens, Bliss, Koester, & Jeppsen, 1989).

To explain this phenomenon, Frankel (1974) speculated that an individual's

heightened hypnotic susceptibility may be implicated in the development and maintenance of phobic conditions, a view supported by Evans (1991) and Spiegel et al. (1994). Higher hypnotisability has also been associated with diagnoses of hysteria and multiple personality (Bliss, 1983, 1984), anorexia and bulimia (Pettinati, Kogan, Margolis, Shrier, & Wade, 1989), and post-traumatic stress disorder (Spiegel et al., 1988; Stutman & Bliss, 1985), the latter, of course, now categorised as a form of anxiety disorder.

The available research and clinical data has shown that hypnosis can be used very effectively as an adjunct to other treatment approaches for each of the anxiety disorders. This occurs, not only because of the possible higher hypnotisability of some sufferers but also because many of the specific phenomena of trance, such as the client's inward focus of attention, reduced capacity for critical reasoning, heightened imagery, and distortions of memory can be used by the therapist as part of many anxiety management interventions (Stanley, Burrows, & Judd, 1990). In addition to these uses for hypnosis, there are a number of specific ways in which hypnosis can contribute to other therapeutic modalities.

Using Hypnosis to Enhance Rapport, Client Expectations, and Motivation

As Coman (1997) noted, the introduction of hypnosis into therapy can have a constructive effect on the relationship established between therapist and client. This has been demonstrated with a variety of client groups, including posttraumatic stress disorder (Evans, 1991), phobic (Stanley et al., 1990) and weight management clients (Goldstein, 1981). Hypnosis strengthens non-specific therapeutic factors in the client-therapist relationship, increasing the client's expectation of change and improvement (Goldstein, 1891; Vanderlinden & Vandereycken, 1990). Clients have made an effort to deal with their anxiety problems and hypnosis can have the profound effect of fostering a sense of hope that the problem can be overcome.

Changes in clients' capacity for critical thinking and alterations to information processing, memory distortions and heightened imagery capacity, defining characteristics of trance (Edgette & Edgette, 1995), can also be used in conjunction with hypnotic suggestions to help maintain clients' motivation for treatment and reduce therapeutic resistance (Stanley, 1995). Clients' experiences of involuntary muscle movements and other changes in conjunction with hypnotic suggestions provide a powerful motivation to continue with therapy and enhance their beliefs the therapy will work (Golden, 1994; Goldstein, 1981; Stanley, 1995).

The Efficacy of Communication in Therapy

Clients' reduced capacity for critical thinking in hypnosis is well documented (Clarke & Jackson, 1983; Shor, 1969; Stanley, 1995). The effect of this in therapy is to make the client more susceptible to the persuasive communication of the therapist (McConkey, 1984).

Alterations to cognitive processing in trance also help the client create alternative interpretations of life events, including the significance of these, effectiveness of coping, and what the person expects will be the outcome (Edgette & Edgette, 1995; Stanley, 1995). Such processes of reinterpretation are particularly important in anxiety disorder management, wherein the major goals of therapy are twofold: (1) restructuring cognitive processes which, in the past, have helped maintain the client's anxiety state; and (2) substituting alternative, more effective, cognitions (Jackson, 1995; Stanley, 1995).

Enhancement of Imagery and Feelings of Control in Hypnosis

The increased suggestibility and enhanced imagery capacity shown by clients in trance can be used in conjunction with imagery-based therapies to increase the efficacy of treatment. This applies particularly to systematic desensitisation, one imagery-based therapy which is very effective in the treatment of phobias (Golden, 1994; Lang, 1979; Wolpe, 1969). Its use with anxiety disordered clients is described later in this paper. Those clients who appear to benefit most from systematic desensitisation are those who experience heightened emotional responses to the mental imagery of their feared situations (Lang, 1979). The more realistically clients are able to experience the imagery of their feared situation in trance, the more rapid and effective treatment becomes (Golden, 1994; Stanley, 1995).

Hypnosis may also be used to help clients not only imagine anxiety-provoking situations but to help them rehearse effective coping in those situations, without the emotional response which normally accompanies such imagery and rehearsal. Even though the client is experiencing, with increased realism, the feared situation, they are, at the same time, receiving the message that the event can be experienced without the usual emotional response. This quickly helps clients develop new cognitions in relation to their ability to endure the situation in real life, without anxiety (Beck & Emery, 1985; Edmonston, 1981; Evans, 1991), enhancing feelings of control. Changes in perceived ability to deal with anxiety-provoking situations can be effected through both behavioural or cognitive control (Bandura, 1988; Stanley, 1995). Behavioural control may take the form of doing things to reduce anxiety, while cognitive control is heightened by instilling the belief that the client can manage anxiety-provoking situations.

Absorption in, and Dissociation from, Feared Situations

The anxiety disorders are characterised by sufferers' absorption in their fear state, which begins with exposure to a specific anxiety-provoking situation and then often generalises to coping in general. The anxiety this causes becomes reinforced in clients' negative cognitions about their ability to cope in general, and contributes to the distress and fear these clients have about the world and their ability to cope with it. This absorption in the fear state is similar to the intense absorption in the focal experience shown by hypnotised subjects

(Tellegen & Atkinson, 1974). One result of intense absorption is usually a state of dissociation from one's immediate surroundings and conscious experience (Burrows, 1988) and, in the case of the anxiety sufferer, an inability to lead a "normal life," feeling constantly overwhelmed by their "fear of fear."

Anxiety sufferers' dissociative capacity is also an important dimension to the effectiveness of hypnosis. The research and clinical literature has shown that many anxiety disorder subjects, particularly those with post-traumatic and phobic disorders, have high dissociative ability. Subjects frequently report dissociation during traumatic experiences (Spiegel, 1989), with many reporting a feeling of floating above their bodies, remaining detached from what is taking place. Such reports are particularly common in rape cases (Rose, 1986; Spiegel, 1989). Dissociation during the stressful event is a defence against the powerful negative affect associated with the experience they are enduring (Brende, 1985; Spiegel et al., 1988). This dissociative capacity can be used very effectively in therapy. Given that the hypnotic trance state intensifies the client's focus of attention on reliving the traumatic event and reduces peripheral awareness, hypnotic techniques are useful in helping them regain control over their thought processes. As Spiegel (1989) noted, the very discreteness of the hypnotic state helps the client put a boundary around their anxiety-provoking situation or fear syndrome. The therapist, rather than telling the client not to mull over the details of the experience, instructs the individual to imagine the event, without experiencing the emotional reactions which usually accompany this imaginative experience. Hypnosis is thus used to teach the client to reduce their emotional reactivity to anxiety-provoking situations.

TREATMENT FOR THE ANXIETY DISORDERS

The primary goals of all psychological therapies for anxiety states are:

- 1. Educating the client about the nature of their anxiety disorder and the relationship between anxiety and feelings of arousal.
- 2. Teaching the client relaxation techniques, to help them master feelings of
- 3. Exposing the client (via imagery or reality) to the situation provoking their anxiety, thereby allowing deconditioning, habituation, or desensitisation.
- 4. Assisting them to cognitively re-evaluate these situations to alter the perception of threat.
- 5. Giving the person the insight to evaluate the personal, symbolic significance of the anxiety provocation.
- 6. Increasing the individual's sense of self-efficacy, both behaviourally and cognitively, thus improving their ability to deal with anxiety eliciting situations and the symptoms which then result.
- 7. The rehearsal and practice of new coping strategies (Jackson, 1995; Stanley, 1995).

The therapist needs to complete a full investigation of each presenting client's problems, concerns, and reasons for these, and then develop a treatment approach tailored to the particular client.

The major therapeutic approach for the anxiety disorders is behaviour therapy, or more commonly, cognitive-behaviour therapy, which has been shown to be of value to over 70% of clients (Marks, 1981). The components of therapy are typically relaxation training; imaginal and exposure techniques; and cognitive restructuring. Other techniques useful for each of the disorders include: provision of appropriate information about the disorders; providing a rationale for treatment procedures to be used; behavioural techniques to control hyperventilation; pharmacological treatment; and hypnosis. Our approach in this section of the paper is to review general treatment approaches, and to highlight specific aspects of therapy for individual anxiety disorders. The treatment of Post-Traumatic Stress Disorder and Acute Stress Disorder is considered separately in the final section of the paper.

Presenting the Correct Information

Many anxiety sufferers have a poor understanding of their condition. As we said above, they do not understand what is happening within their body to produce their distressing symptoms, and the role of their negative cognitions in exacerbating their disorder. The first aspect of treatment, therefore, should be to discuss all aspects of the disorder and its physiological, psychological, and social effects on the sufferer.

One approach to this information role reported by Jackson (1995), is to describe to the client how their body normally reacts to stress. When faced with psychological or physical stress, the body produces catecholamines, like adrenalin, to help the individual face the stressor or run away (the fight-flight mechanism [Selye, 1976]). Jackson described how this approach provides a format for describing to the client the way in which their body releases excessive amounts of these chemicals during anxiety and panic disorder. The analogy may well be extended, describing how the body, faced with constant stress, eventually uses up its coping reserves and depletes its ability to cope with the current and future stress. In the same way, the panic disorder sufferer spends all their energy simply trying to cope with the anxiety they feel and do not have the reserves to cope in other areas of life.

Another technique for describing to a client how anxiety overwhelms them is to describe anxiety as being an overload situation of the mind. Each of us has a particular coping threshold when faced with stress, beyond which we find our coping reserves taxed. Any individual's coping threshold is, in part, inherited and, in part, the outcome of our life experiences. Clients can find this appealing because it suggests their problems are not necessarily of their own making. If the pressures of life are such that the threshold level is exceeded, this results in overload and the individual responds with the typical physiological and psychological signs of distress. This explanation may seem simplistic but it can help the client come to a far better understanding of the mind-body relationship. At the same time, it encourages a greater degree of involvement in the use of self-help procedures. A basic rule of therapy is that you will be unable to get full

client cooperation unless they are able to understand the nature of their problem (Jackson, 1995).

Clients are often reassured and feel comfortable with the knowledge that their arousal and anxiety symptoms stem from changes within their body and are not the result of them "having gone crazy." Having described how our bodies respond to stress and arousal, it is then important in therapy to openly discuss with the individual their beliefs and feelings about their mental status. Jackson (1995) commented that most clients are reluctant to discuss their panic feelings and often fail to mention them unless directly questioned. They believe they are the only persons who suffer these problems and are embarrassed about describing them for fear of being thought crazy or stupid.

Providing a Rationale for Treatment

The effectiveness of any therapeutic management plan for the anxiety disorders is, in part, contingent upon explaining to the client the goals of therapy and providing a rationale for the treatment approach (Clarke, 1992; Clarke & Jackson, 1983). Without this, the client may not identify with the therapeutic regime and accept they are ultimately responsible for implementing the treatment and cooperating with the therapist by, for example, completing homework exercises and activities outside the therapeutic setting.

Another important element to therapy is to ensure the client understands the sequencing of therapeutic goals. For example, the client may present to seek help in dealing with the physical symptoms of their panic attacks. The immediate goal of therapy may be to assist the individual to develop relaxation techniques to deal with these symptoms. Over time, as the client achieves success at this level, the goal of therapy may move to developing a sense of mastery and control over the thought processes which contribute to the onset and course of panic attacks. The therapist should assist the client to understand each phase of therapy and the goals and techniques relevant to each.

Explaining the rationale for treatment is particularly important for the client with Generalised Anxiety Disorder. Generally, these sufferers present in the acute phase of the disorder. They are prepared to suffer chronic symptoms until the disorder reaches the point where it seriously interferes with quality of life or is producing severe physical effects and most believe they can rectify the situation without professional advice. Once the disorder has become chronic, it requires an extensive period of therapy and often calls for the client to practise behavioural and cognitive techniques on their own. For this reason, it is imperative to detail for these clients the aims of, and rationale for, treatment strategies.

Whatever the illness or psychological problem, client cooperation is never easily achieved. Many studies (e.g., Dodd, 1971) have shown that in general psychiatric clinics, 20% to 57% of patients fail to return after the first visit. Where self-help issues are concerned, studies are equally gloomy. Reviews of clinical populations suggest that 20% to 30% of patients fail to follow short-term medication regimens when the regimen is curative and 30% to 40% when the regimen is preventive (Sackett & Snow, 1979). Obviously, client compliance may not be easily achieved and may be especially difficult with an anxious person who is already overwhelmed with health concerns and negative cognitions. Achieving client compliance may well centre on how adequately the therapist explains treatment rationale. This may involve discussing such issues as the type of procedures to be used, the duration of the treatment programme, frequency of consultations, and the nature of the client's involvement in home practice techniques (Jackson, 1995).

Relaxation Procedures

Anxiety disorders are typically accompanied by high levels of generalised anxiety and/or depression. This contributes to sufferers' constant feelings of being unable to cope with life, a feeling reinforced when the person suffers panic attacks. For this reason, most therapeutic programmes incorporate the teaching of relaxation techniques to clients, as part of the treatment methodology.

Relaxation techniques are implemented to help clients control their feelings of tension and anxiety — to "let go" emotions and tension (Goldfried & Davison, 1976). Examples of relaxation techniques include deep breathing, muscular tensing and relaxation, pleasant imagery, and suggestions of relaxation (Golden, 1994). Clarke (1992) reports a relaxation procedure in which the client is asked to physically relax with eyes closed, then increase breathing up to a point where they first become aware of approaching panic. Breathing is then controlled and relaxation again induced.

The ability to learn and use relaxation techniques goes a long way towards breaking down the constant arousal and tension which are a feature of anxiety disorders and agoraphobia. Sufferers find it difficult, at first, to achieve worthwhile levels of disengagement from their constant concerns and it is only with persistence in practice and constant reinforcement that finally produce rewards. Achieving a relaxed state helps the client develop the awareness that they can experience feelings other than fear and anxiety. Even if these feelings and thoughts are short-lived at first, they foster a sense of hope that something can be done to alleviate their distress. Increasing morale is an important aspect of treatment, especially in the early stages and it encourages the client to believe they are able to take responsibility for therapy. This is a valuable aid to counterbalancing some of the feelings of hopelessness and helplessness these people experience (Jackson, 1995).

A defining characteristic of clients with a Specific Phobia is their physiological and psychological distress whenever they have to confront their fear stimulus. In therapy, this can be of sufficiently high levels as to interfere with desensitisation procedures and can sometimes have the effect of causing the client to drop out of therapy. For these clients, therefore, training in, and mastery of, relaxation techniques as a means of anxiety reduction is useful, irrespective of the type of therapeutic programme being instigated (Morgenstern, 1974). In addition to these considerations, relaxation training helps ensure client compliance with self-help routines (Jackson, 1995).

Relaxation techniques are an integral part of any treatment approach for Social Phobia clients, to help them reduce excess tension and anxiety, which interferes with functioning away from the social situation. This increases feelings of self control and, when paired with anxiety management using imaginal techniques for the specific feared situation, contribute to self-esteem.

For Obsessive-Compulsive clients, with their high levels of arousal and anxiety, relaxation techniques can help reduce these and, in combination with other techniques, enable the individual to take control of their distressing feelings. Relaxation mastery, tied with hypnosis, is especially useful as a counteranxiety procedure and has the added advantage of reinforcing imagery desensitisation. It provides a valuable way of enhancing positive self-statements designed to reinforce self-esteem. The importance of this lies in the fact that most OCD sufferers exhibit a marked loss of self-esteem and self-worth. They are constantly beset by thoughts that they are quite different from others, and that no one would really wish to befriend them (Jackson, 1995).

Control of high arousal levels is also an important adjunct in the management of Generalised Anxiety Disorder sufferers. Relaxation per se plays a small role in the long-term management of the disorder (Andrews, 1990), but it acts as a powerful motivator for change and control in other areas of the client's life.

Relaxation techniques are valuable procedures in reducing high arousal levels, so that cognitive and behavioural approaches can be implemented in therapy. The more relaxed state of mind resulting from relaxation (and hypnosis) enhances the use of positive self-statements (cognitive reframing), intensifies visualisation processes (coping imagery), and enables the individual to more easily challenge their negative cognitions (cognitive restructuring). Having learned to relax, clients feel more capable of challenging negativity and are more responsive to suggestion. Relaxation also intensifies visualisation techniques, thus providing a valuable means of "mentally practising" positive responses in a wide variety of feared scenes (Jackson, 1995).

Behavioural Techniques to Control Hyperventilation

Hyperventilation is a commonly experienced symptom of panic attacks and it is the symptom for which many clients initially seek treatment (Jackson, 1995). One effective way to help clients deal with this problem is through the use of behavioural cues, which can be accessed whenever the individual feels panic feelings developing. One effective technique is to teach the client to say the following words to themselves, immediately upon feeling the onset of anxiety or a panic attack:

This is part of my fear system ... It will soon pass ... I'll slow down my breathing ... Slow it right down ... Slow down my breathing ...

Slow it right down ... Slow down my breathing ... I feel in control again now.

Each line is timed to coincide with each breath, which must be consciously slowed down. This technique works most effectively if the client memorises the words and practises them when free of anxiety and panic. The person can print the words on a card, which they carry at all times so it can be referred to if necessary (Jackson, 1995).

Cognitive Restructuring

Generally speaking, anxiety sufferers are not only disturbed by their excessive physiological arousal symptoms, distressing as these are, but also by the catastrophic interpretations they place on these (Clarke, 1992). An important element to therapy is to help clients deal with emotionally laden thoughts.

The first step is to explore the person's cognitions and then to show how to challenge them. Most cognitive restructuring procedures involve two stages. First, the client is taught how to self-monitor self-defeating thoughts and beliefs which lead to maladaptive emotions; then these thoughts are replaced with more constructive rational ones (Golden, 1994). While it is true many clients are initially not interested in examining how their thoughts and emotions are connected (they are more interested in controlling the latter), they become receptive when they learn to control emotions by changing thought processes. To aid in the process of cognitive restructuring, Golden uses what he terms the "two column method." Clients record their automatic negative thoughts on the left-hand side of a page. Then, together with the therapist, they formulate therapeutic suggestions that can be used to neutralise these automatic thoughts, which are recorded on the right-hand side of the page. For example, the thought: "I'll get sick and vomit" (when flying) might be usefully replaced with: "I'll use anti-nausea medication, self-hypnosis, distraction, and breathing techniques to control nausea" (Golden, 1994).

One of the principal features of Social Phobia is cognitive dysfunction. The social phobic invariably gets locked into a series of negative self-statements (e.g., "What if I stand up in front of the group and my hands shake and I can't remember my talk?"). Unless this problem is addressed and the client is taught to challenge the validity of this self-talk, it will constantly undermine treatment. It can be difficult to manage, for even if the client realises the self-talk is illogical, they can still find it hard to disprove in the phobic situation. At this point, imaginal and *in vivo* exposure techniques may be useful.

Cognitive restructuring can also be used to help those anxiety clients who develop a chronic form of cognitive dysfunctioning, characterised by the admission that they "worry if they haven't anything to worry about" (Jackson, 1995). Helping the individual break this vicious cycle can prove difficult, but is an essential process if long-term anxiety relief is to be achieved. Cognitive restructuring centres on two aspects: first, helping clients recognise their negative cognitions, and, second, showing them how to prove to themselves their thought processes are not based on logic but on false beliefs. These techniques may require considerable time and skills, as negative thinking can become so ingrained in an anxious client that it is a way of life and having to constantly challenge it sometimes proves a demanding task (Walen, DiGuiseppe, & Wessler, 1980).

Finally, cognitive techniques can be used to help clients confront their feared stimulus in situ. For example, the client can be taught the use of a cue word such as "calm," when confronting their fear. Spoken in time with the exhalation phase of breathing, a cue word can reduce the person's anxiety and enables them to continue confronting the stimulus. The essential feature of this technique is that the cue is practised, at first, in non-fearful situations. Once it has become established as an anxiety circuit-breaker, it reinforces a sense of confidence that they can cope with fear (Jackson, 1995).

Thought stopping and distraction techniques are other useful ways of dealing with clients' anxiety, which can be combined with cognitive therapy. The essential feature of cognitive therapy is to teach the client to challenge their obsessions and prove to themselves there is no rational basis to their thoughts. A recurring question, for example, that can be posed is "What reason do I have to believe that I must think these thoughts?" or "If I resisted them, would anything terrible happen to me?" Training the person to constantly recognise, challenge, and revise their negative thinking patterns is a core aspect of management with these clients.

Imaginal and In Vivo Exposure

The anxiety sufferer's systematic exposure to their feared environment or stimulus is an integral element of almost all therapy. Although there is an understandable reluctance for a person to enter any situation where panic attacks have occurred, there is clear research and clinical evidence to show that it is vital to get the client to address their phobic situation and to remain exposed until there is a drop in anxiety (Clarke, 1992).

Exposure can take a number of forms: imaginal (either systematic or flooding); and in vivo. The differences between types of exposure relate to the amount of anxiety which may be generated and perceptions of control during the procedure. As Clarke (1992) points out, it appears critical that some degree of anxiety must be generated for desensitisation to be successful and he goes on to explain this may be why agoraphobia sufferers respond better to flooding techniques in which anxiety is heightened, compared with systematic desensitisation where anxiety is kept to a minimum.

Imaginal exposure techniques are useful for preparing clients to face their feared situation in the real world, or situations in which it would be difficult to arrange real-life exposure. The most common form of imaginal exposure is systematic desensitisation, in which the client is systematically exposed to their feared stimulus or environment. Together with the therapist, the client draws up a hierarchy of situations associated with their fear, starting with the least and progressing to the most anxiety-provoking. The client's anxiety is rated on a 10-point scale (10=extremely anxious). An anxiety level of 5 or above is excessive and, as part of the therapeutic process, the client is asked to stay with the scene until they feel more comfortable, with an anxiety level below 3. The client cannot progress to the next level on the hierarchy until the previous scene no longer evokes an anxiety response. This systematic desensitisation procedure enables the client to confront each feared situation under ideal conditions, that is, when relaxed.

Jackson (1995) argued one of the shortcomings of imaginal exposure is that the client sometimes feels so distressed by having to "stay in the scene," they unconsciously avoid it by losing attentional focus or going to sleep. This is especially the case when vicarious exposure is carried out in hypnosis. He suggested that, should this problem occur, it could be remedied by allowing the client a means of allaying their anxiety for a short period before having to confront the fear stimulus once more. He termed the procedure "contrast desensitisation," which generally has the effect of creating an even more graduated and gentle confrontation with the fear situation. From a clinical standpoint, it encourages a greater degree of involvement in the exposure process.

The essence of the technique involves the client rating their fear levels in the imagined scene. If these are excessive (e.g., above 5 on a 10-point scale), the therapist suggests the client imagine themselves moving to a place of security (their "inner mental place") in which they can only experience tranquil, pleasant thoughts and feelings. They remain in that scene until they no longer feel anxious, at which stage they return to the original fear situation. If their self-assessment of their anxiety is still excessive, they return once more to their quiet haven. This process is repeated with each level of the fear hierarchy until the client is able to vicariously confront the fear without excessive anxiety. This procedure enables the client to confront each dimension of their fear hierarchy with less distress. Although, as Jackson (1995) suggested, the technique runs against established principles of desensitisation, in the clinical setting it is a valuable way of treating a variety of simple phobias as well as the more complex picture of agoraphobia.

Systematic desensitisation is one of the most valuable ways of treating social phobia. For these clients, the technique involves eliciting a series of scenes from the least fearful (e.g., "You are at home getting ready to go to the meeting"), to the most feared, which provoke increasingly more affective responses. These can be carried out as real-life exposure or can quite effectively be introduced in hypnosis. It is always important that the client be asked to sketch out the major

themes and dimensions, rather than have them arbitrarily set out by the therapist. Only when the client's fear level for any specific scene drops below 3 does the therapist progress to the next scene (Jackson, 1995).

Flooding is another imaginal technique. Keane and Kaloupek (1982) report the case of a Vietnam veteran who suffered from panic attacks, depression, alcohol abuse, traumatic nightmares, and other intrusive phenomena. The therapist spent 10 minutes relaxing the client, then started the flooding by asking him to imagine the weather conditions, terrain, the locale, the people, and the way he was feeling at the time. The details of the event were then gradually presented by the therapist, who regularly elicited feedback from the client regarding the next event in the sequence. When the man became visibly anxious, especially during the most disturbing aspects of his memory, he was encouraged to retain the image as long as possible until it was no longer anxietyprovoking. All scenes were concluded by eliciting the events and emotions associated with the time immediately following the trauma. Flooding appears to be most effective when there is prolonged exposure to the anxiety-provoking stimulus: Indeed, too short an exposure time can overwhelm and sensitise the client (Golden, 1994). At the same time, the therapist needs to ensure the images used are not frightening to the extent that the client's fear is intensified, so realistic, rather than frightening, images are recommended (Emmelkamp, 1982). Imaginal flooding as an imaginal technique is also very useful for social phobia clients (Turner, Beidel, & Jacob, 1991).

Another approach to imaginal flooding involves the client being asked, during the first session, to recall all the circumstances associated with their feared event. Then, in subsequent sessions, the person concentrates on particular aspects of the situation — for example, fear of bodily injury, dying, aggressive behaviour, rejection, and punishment for wrongdoing. Such an approach is helpful when the client has created a number of irrational cognitions in relation to the feared event.

Another behavioural technique similar to flooding can be used when the client has developed strongly held fears or exaggerated startle responses (e.g., following a car accident). The client is taught to relax and is then taught behavioural rehearsal — focusing on the image of driving down a section of road similar to that in the event, until the emotional response is controlled. This can then be practised in vivo.

Which is the better technique: systematic desensitisation or flooding? The research literature is mixed, with some favouring systematic desensitisation and others flooding (Levis & Hare, 1977; Marks, 1975; Paul, 1969). Some researchers have suggested there are no differences between the two types of exposure (Levis & Hare, 1977), but numerous others have argued flooding is more effective with agoraphobia and obsessive-compulsive disorders (Clarke, 1992; Golden, 1994). It is obviously appropriate to use both, with the choice depending on the type of anxiety or trauma experienced by the client and their subsequent ability to create a fear hierarchy. Whatever the type of approach, most imaginal interventions have four steps:

- 1. Training in relaxation techniques and pleasant imagery.
- 2. Imaginal exposure to the anxiety-provoking situation, using systematic desensitisation, flooding, or variations.
- 3. In vivo exposure.
- 4. Encouraging the client to carry out the systematic desensitisation or flooding outside the therapy situation, in practice or in real life.

Having learned to control their anxiety and emotional arousal using imaginal techniques, it may well be appropriate for the client to practise these new skills in the real life situation. Having clients confront their fears through *in vivo* exposure is seen by many as being the most effective form of desensitisation (Emmelkamp & Wessels, 1975; Marks, 1975). In the early stages, it may be useful for the therapist to accompany the client, to provide support and to help ensure the client does not resort to avoidance strategies, rather than confronting their fear and its attendant distressing symptoms.

Pharmacological Treatment

The role of pharmaceuticals in the treatment of the anxiety disorders is a controversial area. A decade ago, benzodiazapines were heralded as the treatment *par excellence* for anxiety. In more recent times, great concerns have been expressed about dependency reactions to this group of drugs. An indication of how serious are these concerns is the report from the U.K. Committee on Safety Medicines (1988), which recommended that benzodiazepines not be used for depression, phobia, or loss or bereavement reactions and only be used for the short-term relief of severe and disabling anxiety or insomnia. It is now argued that benzodiazepines do not cure any anxiety disorders — they suppress symptoms which may return when the drug is stopped (Andrews, 1990; Tyrer, 1989).

Nevertheless, these drugs are still widely prescribed and a recent health survey in Australia revealed that 330,000 people were long-term users of benzodiazepines and 750,000 reported taking the drug in the two weeks prior to the survey (Andrews, 1990).

From the client's point of view, perhaps the most pleasing and important aspect to come out of the controversy is that there is a growing body of opinion supporting treatments such as psychotherapy, relaxation, hypnosis, and behaviour therapy, which have been shown to be more effective than benzodiazpine treatment alone (Catalan, 1984; Jackson, 1995).

With clients who exhibit marked anxiety and chronic worry, moderate doses of tricyclic antidepressants can exert a positive anxiolytic effect. Often, these drugs can be helpful in the early stages of treatment when the therapist is establishing a programme of cognitive-behavioural therapy, and particularly when using hypnosis. As noted earlier, patient compliance with these medications is not high because of possible side-effects.

The tricyclic antidepressants, imipramine and clomipramine have demonstrated efficacy in the treatment of panic disorder. However, dosages needed to control panic attacks can be quite substantial (100-200 mg per day) and at these levels, many clients find the side-effects troublesome (Jackson, 1995).

Social phobia has been successfully treated using monoamine oxidase inhibitors, but the potential serious side-effects associated with these drugs limit their use (Liebowitz, Gorman, Fyer, Campeas, Levin et al., 1988). The betablockers have also been used for social phobia sufferers, but with limited success. Many of the physical responses experienced by these clients are mediated through the beta-adrenergic system and these drugs have a blocking effect on these responses (Liebowitz et al., 1988; Tyrer & Lader, 1974).

Treatment of Obsessive-Compulsive Disorder generally involves a combination of therapies and drugs play a valuable role, in combination with the cognitivebehavioural approach. The drug of value is clomipramine, which has some seratonin (5HT) re-uptake inhibitory action. The dosage of clomipramine is usually higher than that used for depression, and ranges up to 300 mg per day. Unfortunately, like other tricyclic antidepressants, it can produce a variety of unpleasant side-effects, including drowsiness, dry mouth, tremors, sweating, constipation, ejaculation failure, and urinary retention. These effects may be sufficiently serious as to cause the client to stop medication. It is important, therefore, to forewarn the person about these side-effects and to present a detailed rationale for continued use of the drug. Other drugs which have been used where clomipramine is not effective include lithium, buspirone, and haloperidol (Jackson, 1995).

Hypnosis

The general applications for hypnosis have already been discussed. These relate to the enhancement of rapport, expectations, and motivation; increasing the efficacy of communication; enhancing imaginal techniques; providing the client an increased sense of control; and the role of absorption and dissociation in therapy. The therapist can utilise these applications to:

- 1. Help the client re-establish a sense of security and coping through a supportive relationship.
- 2. Help the client establish control over physical symptoms and cognitive anxiety, allowing the introduction of exposure techniques and improving the client's self-esteem.
- 3. Introduce imaginal rehearsals of coping as a prelude to *in vivo* exposure.
- 4. Enhance the client's motivation and determination through the exploration of what freedom from the symptoms means to lifestyle ("Doing what they have always wanted to do").
- 5. Help the client alter their general self-image.
- 6. Enhance dissociation from the anxiety situation and self or symptom focus (a healthy dissociative mechanism)(Stanley, 1995).
 - Generally speaking, it can be argued that hypnosis practitioners typically use

anxiety management techniques similar to those used in behaviour therapy and cognitive-behaviour therapy — relaxation techniques; guided imagery; and desensitisation.

Hypnosis can readily used in conjunction with the range of relaxation techniques described above. Golden (1994) does make the point that therapists need to have a wider range of hypnotic inductions than simply relaxation inductions, as the anxiety and emotional state of the client may be contraindicated for such an approach. Imaginal and desensitisation techniques can also be made much more efficacious when used with hypnosis. As we described earlier, hypnosis allows the client to: (1) experience the feared situation more fully, allowing; (2) more rapid control over anxiety and emotional reactions which normally accompany this exposure, but in a way which; (3) places a boundary around the event. The experience of being able to control, in trance, what was previously an uncontrolled emotional reaction to the feared situation or trauma, highlights for the client a sense of growing power and self-esteem.

Cognitive restructuring is often utilised while the client is in trance. The increased suggestibility and reduced cognitive processing capacity of individuals in hypnosis, described above, mean that trance is a rapid means of creating new, rational cognitions and thoughts to replace the old irrational thoughts.

Self-hypnosis is often a part of the therapeutic programme for the management of anxiety, panic attacks, and agoraphobia. The therapist can build self-hypnotic training around the client's relaxation, desensitisation, and in vivo practice. Prior to confronting an anxiety-provoking situation in situ, the client can enter a selfhypnotic state and rehearse their practised coping strategies and cognitive restructuring statements (Golden, 1994).

Hypnosis can also be used as an adjunct to the treatment for specific phobias, to enhance the effectiveness of imaginal desensitisation techniques. This is achieved through the vividness of the imagined stimulus which can be evoked in trance and the covert modelling utilised for the development of effective coping strategies. Hypnosis is also used to ensure more rapid and effective cognitive restructuring and enhanced self-efficacy in coping, as well as enhancing the client's sense of self-control, and increasing self-confidence (Liebowitz, 1987; Stanley, 1995).

Hypnosis also has utility as a means of helping the client dissociate from their feared stimulus, allowing them to experience the situation without the usual absorption in their anxiety reaction, the latter explaining why these clients develop such an extreme phobic response. Dissociation from the feared stimulus, in trance, facilitates the effectiveness of the client's exposure in imaginal or reallife situations (Stanley, 1995).

Age regression techniques in hypnosis may be used to help the client and therapist explore the symbolism of feared objects and situations, or the uncovering of traumatic experiences which may be related to the object (Clarke & Jackson, 1983). Both these aspects to therapy are illustrated in the case of Paul, on whom hypnotic age regression was used to explore the aetiology of the client's panic attacks.

Regression was initiated by suggesting to Paul that: "In this trance, your mind is very clear and you can remember things very clearly, like this morning, when you were home . . . Where are you?" As he was taken back in time, Paul was asked: "You are able to remember things when you are in a trance that you have repressed . . . memories, events, feelings that are related to your problem . . . And you can tell me about them now . . . as you remember them." (Golden, 1994, p. 272). Upon elicitation of the fear stimulus, the client showed an extreme anxiety response, which was brought under control with hypnotic relaxation and suggestions he would "feel confident" and could "master" these feelings and overcome his fear. Before terminating trance, Paul was taught self-hypnosis, to continue the therapeutic process in his own time.

Hypnotic techniques described for the treatment of other anxiety disorders are equally applicable as an adjunct in the treatment of social phobias. Here, hypnosis is used to reduce anxiety; increase self-esteem; and enhance the effectiveness and rapidity of cognitive restructuring. Altering the client's cognitions by highlighting their positive characteristics and successes is an important technique with these sufferers. The therapist can also help alter cognitions about the possibility of projected social disasters not occurring, and that, even if these do occur, the individual can cope with the resulting anxiety and embarrassment. When the client has been taught self-hypnosis, this can be used *in situ* to help the person develop control over anxiety and bodily processes, in situations where they fear loss of control (Jackson & Stanley, 1987).

Hypnosis may also be used to teach clients to dissociate to a tranquil and relaxed state, whenever an anxiety situation occurs. This dissociated state is best achieved by teaching the client a cue word specific to their feared social situations. The client rehearses and develops this dissociated state using the cue word as part of imaginal rehearsal in trance and can use the technique in real life situations (Stanley, 1995).

Social Skills Training

Later in therapy, when clients have learned to control their anxiety and emotional arousal through the use of imaginal techniques, many can benefit from social skills training. There is research and clinical evidence to suggest that at least some forms of mental disorder, primarily social phobia, are caused or exacerbated by a lack of social competence, which can be cured or alleviated by social skills training (Trower, Bryant, & Argyle, 1978).

Like systematic desensitisation, social skills training is a counterconditioning procedure, designed to improve the client's general social competency and ability to deal with specified fear-provoking social situations. The client is taught general social skills and practises these in imaginal rehearsal, followed by implementation in the anxiety-provoking situations. The aim of this technique is to enable the person to enter a feared scene with far less distress. One way of improving the client's social competency is by practising different ways of dealing with a number of possible scenarios. The principal aim is to provide a variety of behavioural techniques, designed to improve the person's coping abilities in general social settings, as well as the fear situation (Jackson, 1995; Trower et al., 1978).

Support Groups

Clients suffering from Obsessive-Compulsive Disorder can find comfort and support from attending meetings of similarly afflicted people. The realisation that they are not alone in their distress can prove to be very reassuring, for they often hold the belief that they are alone in their symptoms and feelings. Discussing their problems with others in a group forum allays these concerns and often helps to reinforce the person's commitment to continue in treatment. As is the case with most psychological disorders, the drop-out rate from therapy can be high, especially if the rate of progress does not match the patient's expectations. Anything which encourages persistence in treatment must be viewed as of great benefit in long-term management (Jackson, 1995).

GENERAL TREATMENT CONSIDERATIONS FOR ACUTE STRESS DISORDER AND POST-TRAUMATIC STRESS DISORDER

Given the conceptual and aetiological similarities between Acute Stress Disorder and Post-Traumatic Stress Disorder, the treatment considerations for each are the same. Indeed, as we outlined earlier, there is clear research and clinical evidence to show that untreated ASD will likely become PTSD.

The overall aim of treatment is, of course, the reduction of target symptoms, prevention of chronic disability, and occupational and social rehabilitation. Typically treatment interventions involve behavioural techniques, medication, and various forms of psychotherapy, including hypnosis.

Commencement of Treatment, Client Evaluation, and Information Giving

Treatment commenced as soon as possible after the onset of symptoms is usually the most effective (Evans, 1991; McFarlane, 1989; Spiegel et al., 1994). The client must understand their emotional reactions to the anxiety-provoking event and its after-effects are common responses to trauma, and that it is normal to experience such reactions. They are not going mad or losing control.

Information about the incident and its sequelae helps fill in the client's information gaps and assists in the exploration of the event from their perspective so the therapist gets a feel for what has occurred. Information and support provide a rationale for the client regarding the symptom constellation they are experiencing and gives them an understanding about treatment and its goals of self-control and personal empowerment.

In the early stages of treatment, the therapist should:

- 1. Emphasise the normality of PTSD symptoms, following a major trauma.
- 2. Teach the client to contain intrusive imagery, rather than simply trying to stop the imagery, which may heighten anxiety.

- 3. Focus the client's attention on what he or she has achieved in the way of overcoming avoided situations, rather than on the discomfort involved.
- 4. Assess the client's irritability and the reasonableness of their expectations of others. In particular, check whether they are expecting others to be mind-
- 5. Remember that the event that triggered the onset of the PTSD may not itself have been particularly traumatic, but may have served to rekindle earlier traumas that had been denied for many years. Both recent and previous traumas will need addressing (Scott & Stradling, 1992).

Talking About, and Re-Exposure to, the Traumatic Event

Most therapeutic regimes for these disorders involve the client, at some stage during therapy, talking about their traumatic incidents and use of regression techniques to take the client back to that event.

Typically, clients resist talking about what has happened to them and the initial retelling will usually be like a reporter describing the event, without any emotional tone. Over time, the repeating of the event and exposure results in the situation becoming more affect-laden. The aim of exposure is to help the person reintegrate the trauma event. In general, any exposure is graded, prolonged, repeated, and functional.

Normally clients are gradually exposed to what they fear (as in systematic desensitisation), but this may be difficult when the trauma was experienced as one single event. The therapist needs to uncover the details of the trauma and the sequence of events leading up to it, with a view to working with the client to create a hierarchy from least to most anxiety-provoking. The graded exposure should then follow this hierarchical form. Re-exposure to the trauma normally results in increased anxiety. The session should continue until the client's anxiety level has dropped by 50%. If the session is terminated too early, the client's anxiety level may be higher than when the session commenced, conditioning high anxiety to the re-exposure, deepening the disorder. Exposure is repeated until minimal anxiety is evoked by the client. Such re-exposure should be functional, in that moderately high levels of anxiety evoked during re-exposure are optimal, helping the client learn control over anxiety.

After exposure, the client is helped to reintegrate the trauma and its memories and cognitions, using a range of therapeutic strategies, including anxiety management; physical changes (exercise, reducing stimulants); cognitive reframing (coping statements); behavioural changes (daily activities and scheduling to avoid social isolation and return to normal routine); and such cognitive restructuring techniques as changing depressive cognitions, reducing self-blame and guilt, changing feelings of vulnerability and insecurity, and increasing personal control.

Cognitive-Behaviour Therapy

The therapeutic purpose of cognitive-behaviour therapy is cognitive restructuring,

helping the client realise their trauma does not exist in reality but in their construction of it. Cognitive restructuring helps them describe the trauma as it was — not seeking to minimise the negative aspects or negating the positive aspects but balancing negative and positive aspects together. Common cognitive dysfunctions are: intrusive thoughts and imagery, avoidance reactions, anger, irritability, detachment and withdrawal, and feelings of guilt. A number of cognitive-behaviour strategies may be used to help the individual cope with these.

Anger and Irritability. Clients' anger and irritability derive from their typically unreasonable expectations about their environment and people around them. When these expectations are not met, the client reacts with anger and irritability (which, often, they cannot explain and feel guilty about). Clients make such statements as: "You can't talk about it unless you were part of it — what do you know about what really happened?" or "After all I've been through, other people should just leave me alone or try to understand."

Detachment and Withdrawal. PTSD sufferers become detached and withdrawn from social contact for two reasons. First, their view of the world as a safe place (in a natural disaster) or their perception of other people as caring (as in rape or personal injury) has been destroyed. Retreat is seen as the best defence mechanism to use. Alternatively, they may develop irrational beliefs about their impact on the lives of others.

Guilt. This is one of the hardest cognitions to alter in PTSD. Typical statements may be: "I didn't do enough — maybe I should have dived back into the water," "I shouldn't have walked down that street in the dark." or "Maybe it was my fault, because I looked at the person."

All irrational statements made by the client need to be reality tested — the reality of the traumatic situation and the range of possible reactions of the client in the circumstances have to be made explicit. The specific aim of all cognitive restructuring is to prevent the client from overgeneralising his or her behaviour in the traumatic situation, to the real world. For example: "The water was so cold and if I had gone back in I may never have got out again. Perhaps there were more people to be rescued but I might not be here now if I'd tried to do it all myself."

Reality Testing. This is another effective cognitive technique. Another is the ABC of rational emotive therapy — Activating Event — Beliefs — Consequences. Help the client draw out the link between beliefs and expectations and anger/ irritability and develop alternate rational beliefs. For example: "I can't expect people to really understand what happened and I can't always expect them to make allowances for the way I feel from moment to moment."

Distraction. Is another cognitive technique that is frequently used in the treatment of these disorders. Here the technique is used to help the client escape from, or avoid thinking about, the trauma and its triggering symptoms. Such techniques can be most appropriate early in therapy when one of the presenting features is a preoccupation with what has happened. Distractional techniques (which are used to reduce symptoms by avoidance and/or not thinking about the trauma) must be accompanied by the use of other techniques which promote control and mastery. If this is not done, the client is never able to attend to, and deal with, the emotion of the trauma.

Anger Control. Anger control can be achieved through the use of cognitive techniques. The therapist needs to educate the client about the positive elements of anger and try to help them understand the feelings of other people, using role-plays or imagery under trance. The client can be given self-statements during trance which they are taught to recall and repeat when anger-provoking situations occur.

Other Cognitive Techniques

Containment. Sufferers often try hard to get rid of their intrusive thoughts or to stop them occurring. With the strategy of containment, the therapist does not seek to stop the memory re-occurring, but to contain it. This can be done by having the person put a rubber band on their arm and each time the intrusive thought occurs, they pull the band and let the thought go. At the same time, they tell themselves that they will watch a mental video of the event for 20 minutes, at some later time in the day. Such controlled re-exposure heightens perceptions of self-control over what were uncontrollable flashbacks to the trauma. Alternatively, the person is taught to say: Stop! to cut out the intrusive memory.

Desensitisation. This strategy involves having the client making a short audiotape describing their trauma which they play at least once a day, but not switch the tape off until they have become more relaxed (recall graded exposure earlier). Unless there is decrease in distress during a session there will be no decrease in distress from session to session. The tapes tend to be effective within two to three weeks.

There are some important conditions for the use of desensitisation:

- 1. PTSD clients tend to be more difficult to engage in counselling than those with disorders such as depression and anxiety. Because of this, great care has to be taken not to prematurely introduce a procedure that is initially likely to amplify the client's distress before reducing it. Use this technique only when other cognitive strategies, such as containment and cognitive restructuring, have proven inadequate.
- 2. Clients usually do not like the idea of recording their trauma and then listening to it — typically they've spent months trying to forget it. Offer to create the tape with the client and initially, at least, let them listen to the tape in your office.
- 3. This technique is suited to a trauma that consisted of a single event. There is usually greater reluctance and difficulty making a tape of a series of traumas, for example, childhood sexual abuse. If the trauma was of the client's own making; for example having committed a crime, then making a tape can evoke considerable distress and evidence suggests that this strategy should only be used with in-patients.

4. Having the client write about the trauma for one half an hour per day for four consecutive days can help them engage with the material of the trauma. Familiarity with the events can help the person diminish the intensity of their response.

There are numerous examples of systematic desensitisation in the literature. Schindler (1980) was treating a Vietnam veteran suffering from PTSD after seeing a fellow soldier virtually disintegrate after he stepped on a land mine. Schindler taught a progressive relaxation technique followed by systematic exposure to a seven-stage hierarchy that followed the sequence of the client's recurring dream. The client progresses up the hierarchy from least to most disturbing, using relaxation while imagining each scene, and progressed to the next scene, when anxiety levels were rated as nil.

Another technique used in cognitive-behaviour therapy frequently reported in the literature is *imaginal flooding*, discussed earlier in the treatment of all anxiety disorders.

Behavioural interventions such as systematic desensitisation and imaginal flooding are frequently the techniques of choice used to allow the client to return to their traumatic experience and achieve mastery over the event, thus reducing their anxiety and the impact of the trauma on their lives. This can be done in a graded hierarchical way (as in systematic desensitisation) or without a graded approach (as in flooding). Whatever approach is used, it should follow the general proscription discussed earlier — the exposure should be graded, prolonged, repeated, and functional.

Pharmacological Interventions

Drug therapy has received relatively little attention, but we do know that drug treatment *alone* is rarely sufficient to provide complete symptom remission. By the same token, symptom relief through medication may enable the individual to participate in the various psychotherapies.

The benzodiazepines reduce the symptoms of autonomic arousal and anxious mood. However, the significant abuse potential of these limit their use. Studies suggest that low-dose, time-limited benzodiazepines can be very helpful (especially if no history of alcohol/drug abuse, or personality disorder).

MAOIs reportedly decrease nightmares, startle reactions, and flashbacks, possibly as a result of suppression of rapid eye movement sleep processes. They are powerful inhibitors of REM sleep.

The tri-cyclic antidepressants (Phenelzine, Imipramine) dampen arousal through their anti-panic action, reduce intrusive recollections and nightmares, and suppress flashbacks. They may also enhance endogenous opioids through stimulation of synergistic serotonergic mechanisms. They may also moderate fluctuations in endogenous opioids.

Antipsychotics should be used only for psychotic symptoms, including brief reactive psychoses, severe agitation, anger and/or paranoia.

Lithium and Carbamazepine have been used with limited success, primarily in patients who report constantly feeling on the verge of exploding and with feelings of being out of control.

The current state of knowledge regarding pharmacological interventions is extremely limited, with few carefully controlled studies.

Eye Movement and Desensitisation Reprocessing (EMDR)

Another behavioural treatment which had created considerable interest in the last decade is eye movement desensitisation and reprocessing (Shapiro, 1989a, 1989b). The client closes their eyes and focuses on the memory for which they want relief. Having conjured up the image, the individual is asked to focus on the full range of sensory inputs, including smells, sounds, and feelings. They then open their eyes and visually track the therapist's index finger as it is moved rapidly and rhythmically back and forth across the line of vision from the extreme right to the extreme left at a distance of 30 to 35 cm. This back-and-forth lateral movement is repeated 20 to 30 times at the rate of one a second. The client closes their eyes again, takes a deep breath and brings up the original picture. This process is repeated until the original imagery experienced by the client no longer evokes the usual heightened anxiety level. During the procedure, the client is asked to talk about any changes in the traumatic imagery.

The client reports subjective units of distress [SUDS] at the commencement and termination of each EMDR procedure. Shapiro recommends clients be allowed to leave the counselling session only when their anxiety levels have been reduced to the extent that normal activities are not inhibited. It is also important that the procedure is used in conjunction with appropriate briefing of the client, so they are prepared for the procedure and are alert to the possible after-effects of tiredness and a feeling of light-headedness (Shapiro, 1989a).

The clinical and anecdotal evidence suggests that EMDR works not only for PTSD but also phobias, obsessive compulsive behaviours, and unresolved grief — any situation where the patient has automatic thoughts with a strong visual component (Marquis, 1991; Shapiro, 1989a; Wolpe & Abrams, 1991).

Some clinicians argue that the simple eye movement elicits a relaxation response, which is somewhat akin to flooding techniques, which inhibits the client's anxiety reaction (Fulcher, 1992). Shapiro herself argues that it is an information-processing effect. Traumatic events result in information processing problems, causing the trauma to remain in its anxiety-producing form, preventing processing and integration. The rhythmic saccadic eye movements used in EMDR allow information processing to proceed to resolution in some way. Evidence for this comes from the statements of clients using EMDR who report progressive changes in imagery and insights as the procedure continues, suggesting that the traumatic material is actually being reprocessed and integrated in a different way (Shapiro, 1989b).

There are some obvious similarities between EMDR and the trance state: the relaxed state and the internal processing of the trauma material as attention is focused on the therapist's finger — but obvious differences as well: the client's state and the focus of attention. Research has yet to establish whether clients who respond best to EMDR may be highly hypnotisable. Such research has yet to be carried out, as does research into the nature and effectiveness of the technique itself, given that only anecdotal evidence for its success has been provided to date. Some researchers and clinicians have expressed concerns about the apparent simplicity of the technique, which, while it may do some clients some good, may be potentially harmful to others, if therapists believe the technique is all their clients need.

Hypnosis

A number of researchers and clinicians have reported the use of hypnotic techniques with PTSD sufferers. These have included cases of PTSD following surgery (Peebles, 1989), combat (Brende, 1985; Grigsby, 1987), accidents (Mutter, 1987), burns injuries (Dobkin de Rios & Friedmann, 1987), rape (Spiegel, 1989), bereavement (McFarlane, 1989), and child abuse (Havens, 1990). Since many people mobilise what is akin to the hypnotic state during traumatic experiences, it seems sensible to use hypnosis as a means of helping PTSD sufferers retrieve their repressed or dissociated memories of the event and emotional reactions to the experience they have endured. However, the therapist should ensure that the hypnotisability of the client is assessed, as many PTSD sufferers do show high hypnotisability. Hypnotic interventions should be used judiciously, to avoid the possibility of hypnosis contributing to, rather than minimising, the client's emotional and psychological problems.

Hypnotic interventions can be used in a number of ways. These are: as a supportive technique when the client requires help in controlling and minimising anxiety; as a means of uncovering repressed or dissociated thoughts and memories of the traumatic event; and as a means of reintegrating the experience into the client's consciousness (Brende, 1985).

Therapists treating clients with PTSD should be attuned to the particular needs of these sufferers. Clients tend to show low compliance behaviour and a tendency to drop out of therapy (Burnstein, 1986). They are typically difficult individuals with whom to establish effective communication because of their reluctance to enter into therapeutic relationships and their perception that the majority of therapists will not be able to comprehend the enormity of their traumatic experience (Lindy, Grace, & Green, 1981; Lindy, Green, Grace, & Titchener, 1983). The therapist should be experienced in dealing with PTSD in the therapeutic setting and needs to give careful consideration to these aspects of therapy.

An important element early in the therapeutic relationship is that the client has made a decision to challenge their isolation by seeking help. The therapist needs to provide both a sense of hope to the client and information explaining the reasons for the emotional distress and anxiety that the person is likely to be experiencing at the time (McFarlane, 1989). Hypnotic suggestions for relaxation and control may be very useful at this stage of the therapy to help the client understand their feelings and reactions, to reduce anxiety, and to increase motivation to continue with therapy (Brende, 1985). A progressive relaxation induction may be appropriate, utilising the visualisation of the client moving "energy" into his/her body (Dobkin de Rios & Friedmann, 1987).

Many sufferers seek out treatment as a means of obtaining relief from their heightened emotional reactions to their intense absorption of reliving the stressful experience and their commitment to treatment may be enhanced if these distressing symptoms can be controlled (McFarlane, 1989). The therapist should utilise techniques which help maintain a sense of calmness and control for the client, contributing to the effectiveness of therapy.

The therapist should bear in mind the research finding that over 50% of PTSD clients have some form of psychiatric illness associated with post-traumatic stress symptoms, with panic disorder and major depressive symptoms being the most common diagnoses (Davidson, Swartz, Storck, Krishnan, & Hammett, 1985). Hypnosis can be used quite effectively for treatment of phobic and anxiety conditions (Frankel, 1988) but is contraindicated for the treatment of depression (Burrows, 1988). It is important to ensure than any psychiatric symptomatology can be treated concurrently with the PTSD symptoms, given that the onset or increased severity of the psychiatric symptoms can increase symptoms and associated anxiety (McFarlane, 1989).

Hypnosis may also be used in the early phases of treatment to help build trust between the client and therapist. For example, you may use the following suggestion: I would like you to relax and imagine that I am helping you with the burden that you are carrying. It's been there ever since your [include exact type of trauma experienced by patient] and has contributed to all the pain/emotion you are feeling. Imagine that I am right here with you now, helping you hold up the burden. As you let me share that burden with you, it will be easier for you in the future to talk about what is bothering you and to share your feelings with me. (adapted from Brende, 1985, p. 203)

With the client in an hypnotically induced state of relaxation, the therapist can explore the aetiology of the post-traumatic stress disorder. You should ask about the type of traumatic event to which the client has been subjected and consider whether the person is experiencing acute or chronic PTSD. For example, there are considerable cognitional and emotional differences between involvement in a combat situation, being the victim of rape, and being caught in a natural disaster (McFarlane, 1989; Spiegel, 1989). These different traumatic situations cause a range of feelings regarding the possibility of one maintaining or establishing control over the situation and trust in others, factors which will also vary depending on the severity of the traumatic experience and the closeness of death experienced by the client (McFarlane, 1989). Additionally, the therapist must be aware of the time period between the traumatic event and the client's presentation for therapy. With acute PTSD disorders, the majority of clients will have developed the early stages of social and personal dysfunction and these will still be amenable to treatment. In cases of chronic PTSD, the therapist's attention will be focused on remedying the client's reduced affect and social withdrawal (McFarlane, 1988, 1989).

As Brende (1985) noted, reliving events in one's life is a common experience for most people. Such reliving helps ensure control over one's life and the maintenance of a sense of personal identity and continuity with the past. However, PTSD sufferers may exhibit the symptoms of amnesia for the traumatic events, thereby lacking the sense of continuity needed to establish mastery over their situations (Horowitz, 1976). This amnesia may result from the psychic numbing PTSD sufferers experience in their attempts to keep traumatic experience from consciousness. However, the resultant instability gives rise to repetitive re-enactments of the traumatic event, which are unconscious and potentially uncontrollable attempts by the person to achieve a resolution of the intrapsychic split caused by the alternate repression and recall of the trauma (Horowitz, 1976). Hypnosis may assist in the opening up of the client's repressed memories of the traumatic event.

In the process of helping the client "uncover" repressed memories, it is important the therapist achieves a greater understanding of what the person experienced, as a means of comprehending the nature of reported intrusive cognitions and associated feelings (Horowitz, 1976; McFarlane, 1989). This may not only be of therapeutic value to the client but may also reduce their feelings that the therapist is distant from the traumatic event and, therefore, unable to comprehend its magnitude (Lindy et al., 1981; Lindy et al., 1983).

It is also important for the therapist to separate out the client's intrusive memories and reliving of the traumatic experience (cognitions) from feelings of loss, anxiety, or depression (emotions). As McFarlane (1989) noted, there are quite different therapeutic goals between helping the client accept that the traumatic event has occurred and helping the person deal with the range of painful emotional states evoked by the event.

Hypnotic regression can be a successful hypnotic technique for helping clients retrieve repressed memories of their traumatic experiences (Mutter, 1987; Spiegel, 1989). The most important aspect to the use of any technique which may enable clients to re-live their trauma is to ensure the individual is taught how to dissociate the mental experience from the physical experience. This serves two purposes. First, it reminds the client that the traumatic event is not physically recurring. Second, it may prevent the subject from experiencing an anxiety or panic reaction in response to the reliving of the event. Metaphors which suggests physical relaxation, as in a bath or pool, and a sense that the subject is floating, can be useful for this purpose. The traumatic event may then be re-experienced by having the subject picture the event occurring on an imaginary screen (Spiegel, 1989). The client divides the screen into two halves. On one side there is a re-creation of the traumatic event, while, on the other, the individual visualises any action he or she took at the time to control what was happening or to escape the situation. The negative picture on the one side is then balanced, to some extent, by the client's attempt's to provide protection, maintain dignity and, in some way, to exert mastery over the situation, as revealed on the other side of the screen (Spiegel, 1989).

PTSD sufferers are likely to experience strong emotional reactions to the reliving of their traumatic experience, despite efforts to control for this possibility. The goal for the clinician is to help the client understand these emotional reactions are possible and that their controlled expression is more therapeutic than their repression (Brende, 1985; Mutter, 1987; Spiegel, 1989). Many people express the fear that, if they attempt to recall their experiences, they will become victim to greater anxiety and fear (Brende & Benedict, 1980). Suggestions for control and relaxation can be used to help the client recall the repressed event and then consolidate the memory in a therapeutic way (Grigsby, 1987; Spiegel, 1989). Suggestions for personal mastery and control are very therapeutic for PTSD clients, given they have feelings of low control and perceived low ability to cope with the traumatic event and current stressors (Hyer, Boudewyns, & O'Leary, 1987). Ebert (1990) uses the following suggestion: "Take your time with this growing sense of power, control, and comfort because you will discover that, the more you relax with the techniques, the more the fears will simply fade away." Another technique is to have the client imagine a person whom he or she sees as having the strength to deal with the trauma and then tell them to: "Take the strength you need from this person, store it deeply inside you and utilise it whenever you choose by recalling the image when you need to feel strong and in control" (adapted from Ebert, 1990).

Hypnotic suggestions can be used to explore the client's social withdrawal (Spiegel, 1989). Encouragement of renewed involvement with others who may provide social support and re-engagement in relationships may be difficult with PTSD sufferers, given their sense of vulnerability and lack of trust in others (Kelly & Reddy, 1989; Strupp, 1972). Suggestions for anxiety reduction, egostrengthening, and cognitive reframing can be used as ways of reducing fear and anxiety and instilling the belief that social re-engagement is possible, desirable, and under the client's control. Cognitive reframing suggestions can be used to help the client re-evaluate the importance of social relationships in stress management, re-establish in the person's mind their ability to restore social contacts, and help them re-establish trust in other people.

It will always be pertinent to explore the client's fears regarding the recurrence of the traumatic event (Horowitz, 1976). Those who exhibit an intense fear of the event recurring often show an inability to develop effective coping strategies to help them deal with stressful events, which may result in intense feelings of vulnerability and hypervigilance (McFarlane, 1989). Feelings of vulnerability can be reduced with trance-induced suggestions of control, power, and strength. Hypervigilance may be reduced using hypnotic suggestions for anxiety reduction and other cognitive techniques, such as thought-stopping and cognitive reframing. One perpetuating factor important in the morbidity and treatment of PTSD is the possibility of re-exposure to the traumatic experience. Combat veterans are returned home so that the trauma is focused in their memories and imagination, while victims of natural disasters, accidents, and personal attacks may be often and involuntarily re-exposed to their trauma. For clients who may be faced with the scene of their traumatic experience, the therapist can utilise

such coupling techniques as: "Whenever a thought about this event occurs or you are faced with the scene of the event, you will add to your thoughts the idea that you can control your emotional response and that, each time it happens, you feel greater and greater control over your feelings." This can be coupled with a post-hypnotic suggestion, to the effect that anytime a flashback occurs or the person is confronted by the trauma, the imagery would immediately be coupled with the above suggestion.

Summary: Spiegel's 8 'Cs'

The treatment approach to PTSD, whether using hypnotic techniques or not, can be summarised with Spiegel's 8 'Cs.'

- 1. *Confront* trauma.
- 2. Find a *condensation* to the traumatic experience. This allows a finite series of memories to symbolise the trauma, making the memories finite and manageable.
- 3. Allow for *confession*. Many trauma victims find their memories degrading and humiliating. The very act of admitting them to someone else makes them feel less isolated and unacceptable.
- 4. Provide *consolation*. Appropriate expressions of empathy go a long way towards acknowledging the normality of extreme reactions to an extreme experience. Detachment or disinterest conveys rejection. Trauma victims need to feel acceptable even with their burden of uncomfortable recollections and experiences.
- 5. Make conscious previously dissociated material. The need to keep important events out of conscious awareness exacts an emotional and cognitive toll, interfering with normal functioning. Furthermore, making the material conscious facilitates working through the traumatic memories.
- 6. Utilise focused *concentration* in the working through of traumatic memories. The process of psychotherapy provides ceremonial boundaries around the accessing of traumatic memories, conveying the message that they may be put aside once the therapy session is over.
- 7. Enhance the client's sense of control over the traumatic memories. The process of therapy must reinforce the content by giving the victim a greater sense of control over traumatic memories and in the relationship with the therapist.
- 8. Facilitate the development of congruence, the incorporation of traumatic memories into an integrated and acceptable view of the self. Psychotherapy and other forms of support can enhance adjustment to trauma and mitigate both acute and chronic stress response syndromes.

CONCLUSION

The research reviewed in this paper clearly shows that hypnosis is an appropriate and powerful treatment modality for all the anxiety disorders. It is a powerful adjunct to other forms of therapy, enhancing the efficacy of these.

Hypnosis should always be the adjunctive treatment of choice for the treatment of post-traumatic stress disorder. It allows the client to regress to or recall the traumatic experience and abreact the emotionally charged content of the event. The hypnotic techniques useful in this process allow the therapist to gain a fuller understanding of what the person experienced, facilitating greater empathy and trust. Additional material pertinent to the aetiology of the disorder may also be elicited during this process. The client can be desensitised to their traumatic experience and have the powerful emotions of anxiety, fear, and loss of control replaced by feelings of control and mastery. The emotionally charged split that characterises PTSD symptomatology can be reintegrated using coupling and post-hypnotic suggestions. Most importantly, it may be used as an ego-strengthening technique, helping clients redevelop a sense of mastery over their lives (Mutter, 1986; Spiegel, 1989).

ACKNOWLEDGEMENT

The contents of this paper are a significantly extended and updated version of material published in the first five chapters of Hypnosis in the management of anxiety disorders, published by the Australian Journal of Clinical and Experimental Hypnosis in 1995. We acknowledge the contributions made by the authors of those chapters to the present paper.

REFERENCES AND SUGGESTED FURTHER READING

All research and clinical works cited in the paper follow. In addition, the reader is referred to a number of papers on the treatment of the anxiety disorders published by the Australian Journal of Clinical and Experimental Hypnosis in recent years. Hammond's book Handbook of hypnotic suggestions and metaphors also contains a number of detailed scripts for these disorders.

- Bills, I. G. (1993). The use of hypnosis in the management of dental phobia. Australian Journal of Clinical and Experimental Hypnosis, 21, 13-18.
- Desland, M. (1997). Post-traumatic stress disorder. Australian Journal of Clinical and Experimental Hypnosis, 25, 61-73.
- Evans, B. J. (Ed.) (1995). Hypnosis in the management of anxiety disorders. Heidelberg: Australian Society of Hypnosis.
- Ffrench, C. (1995). The meaning of trauma: Hypnosis and PTSD. Australian Journal of Clinical and Experimental Hypnosis, 23, 113-122.
- Gaffney, S. (1993). Hypnosis in the alleviation of anxiety. Australian Journal of Clinical and Experimental Hypnosis, 21, 19-26.
- Ginsberg, S. (1993). Hypnosis as an adjunct to broad spectrum psychotherapy in the treatment of simple phobia. Australian Journal of Clinical and Experimental Hypnosis, 21, 39-60.
- Laidlaw, T. (1994). Hypnosis and breathing training in the treatment of anxiety: Three cases. Australian Journal of Clinical and Experimental Hypnosis, 22, 137–146.

- Leung, J. (1994). Treatment of post-traumatic stress disorder with hypnosis. Australian Journal of Clinical and Experimental Hypnosis, 22, 87-96.
- Scott, G. (1994). Hypnosis in the treatment of dental phobia. Australian Journal of Clinical and Experimental Hypnosis, 22, 65-72.
- Stafrace, S. (1994). Hypnosis in the treatment of panic disorder with agoraphobia. Australian Journal of Clinical and Experimental Hypnosis, 22, 73–86.
- Stanton, H. (1996). Combining hypnosis and NLP in the treatment of telephone phobia. Australian Journal of Clinical and Experimental Hypnosis, 24, 53–58.
- Willshire, D. (1996). Trauma and treatment with hypnosis. Australian Journal of Clinical and Experimental Hypnosis, 24, 125-136.
- American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed., rev). Washington, DC: Author.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.
- Andrews, G. (1990). The diagnosis and management of pathological anxiety. Medical Journal of Australia, 152, 656-659.
- Andrews, G. (1991). The management of anxiety. Australian Prescriber, 14, 17–19.
- Asso, D., & Beech, H. R. (1975). Susceptibility to the acquisition of a conditioned response to the menstrual cycle. Journal of Psychosomatic Research, 19, 337–344.
- Bandura, A. (1988). Self-efficacy conception of anxiety. Anxiety Research, 1, 77–98.
- Beck, A. T., & Emery, G. (1985). Anxiety disorders and phobias: A cognitive perspective. New York: Basic Books.
- Bliss, E. L. (1983). Multiple personalities. Related disorders and hypnosis. American Journal of Clinical Hypnosis, 26, 114-123.
- Bliss. E. L. (1984). Hysteria and hypnosis. Journal of Nervous and Mental Disease, 172, 203–206.
- Bootzin, R., Bower, G., Crocker, J., & Hall, E. (1991). Psychology today: An introduction. New York: McGraw-Hill Inc.
- Borkovic, T., & Inz, J. (1990). The nature of worry in generalized anxiety disorder: A predominance of thought activity. Behavior Research and Therapy, 28, 153–158.
- Brende, J. O. (1985). The use of hypnosis in post-traumatic conditions. In W. Kelly (Ed.). Posttraumatic stress disorder and the war veteran patient (pp. 193-210). New York: Brunner/ Mazel.
- Brende, J. O., & Benedict. B. D. (1980). The Vietnam combat delayed stress response syndrome: Hypnotherapy of "dissociative symptoms". American Journal of Clinical Hypnosis, 23, 34-40.
- Burnstein, A. (1986). Treatment of non-compliance in patients with post-traumatic stress disorder. Psychosomatic Medicine, 27, 37-40.
- Burrows, G. D. (1988). Affective disorders and hypnosis. In G. D. Burrows & L. Dennerstein (Eds.). Handbook of hypnosis and psychosomatic medicine (pp. 149–170). Amsterdam: Elsevier/ North.
- Catalan, J. (1984). The effects of non-prescribing of anxiolytics in general practice. British Journal of Psychiatry, 144, 593-602.
- Creamer, M., Burgess, P., Buckingham, W., & Pattison, P. (1989). The psychological aftermath of the Queen Street shootings. Melbourne: University of Melbourne.
- Clarke, J. C. (1992). The nature and treatment of panic disorder and agoraphobia. In S. Schwartz (Ed.). Case studies in abnormal psychology (pp. 192–213). Brisbane: John Wiley and Sons.
- Clarke, J. C., & Jackson, J. A. (1983). Hypnosis and behavior therapy: The treatment of anxiety and

- phobias. New York: Springer.
- Coman, G. (1997). Hypnosis in the treatment of Bulimia Nervosa: A review of the literature. In B. Evans, G. Coman, & G. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 179–197). Heidelberg: Australian Society of Hypnosis.
- Dadds, M., & Powell, M. (1992). Obsessive compulsive disorder. In S. Schwartz (Ed.). Case studies in abnormal psychology (pp. 33–52). Brisbane: John Wiley and Sons.
- Dally, P., & Watkins, M. J. (1986). Psychology and psychiatry: An integrated approach. London: Hodder and Stoughton.
- Davidson, J., Swartz. M., Storck, M., Krishnan, R. R., & Hammett, E. (1985). A diagnostic and family study of post-traumatic stress disorder. American Journal of Psychiatry, 142, 90-93.
- DeLoof, C., Zandbergan, J., Lonsbergen, H., Pols, H., & Grieze, E. (1989). The role of life events in onset of panic disorder. Behavior Research and Therapy, 27, 461–463.
- Dobkin de Rios, M., & Friedmann, J. K. (1987). Hypnotherapy with Hispanic burn patients. International Journal of Clinical and Experimental Hypnosis, 35, 87–94.
- Dodd, J. A. (1971). A retrospective analysis of variables related to duration of treatment in a university psychiatric clinic. Journal of Nervous and Mental Disease, 151, 78-85.
- Ebert, B. W. (1990). Hypnotic suggestions with rape victims. In C. Hammond (Ed.). Handbook of hypnotic suggestions and metaphors (p. 334). New York: Norton.
- Edgette, J., & Edgette, J. (1995). The handbook of hypnotic phenomena in psychotherapy. New York: Brunner/Mazel.
- Edmonston, W. E. (1981). Hypnosis and relaxation: Modern verification of an old equation. New York: Wiley.
- Emmelkamp, P. (1982). Phobic and obsessive-compulsive disorders. New York: Plenum.
- Emmelkamp, P. M., & Wessels, H. (1975). Flooding in imagination vs flooding in vivo. Behavior Research and Therapy, 13, 7–16.
- Evans, B. J. (1991). Hypnotisability in post-traumatic stress disorders: Implications for hypnotic interventions in treatment. Australian Journal of Clinical and Experimental Hypnosis, 19, 49-58.
- Evans, B. J. (1995). Understanding Post-Traumatic Stress Disorder: Treatment implications. In B. Evans (Ed.). Hypnosis in the management of anxiety disorders (pp. 51-76). Heidelberg: Australian Society of Hypnosis.
- Frankel, F. H. (1974). Trance capacity and the genesis of phobic behavior. Archives of General Psychiatry, 31, 261–263.
- Frankel, F. H. (1988). Phobic disorders and hypnosis. In G. D. Burrows & L. Dennerstein (Eds.). Handbook of hypnosis and psychosomatic medicine (pp. 171-184). Amsterdam: Elsevier/North.
- Frankel, F. H., & Orne, M. T. (1976). Hypnotizability and phobic behavior. Archives of General Psychiatry, 33, 1259–1261.
- Freud, S. (1914). The standard edition of the complete psychological works of Sigmund Freud Vol 12. London: The Hogarth Press and Institute of Psychoanalysis.
- Frischolz, E. J., Spiegel, D., Spiegel, H., Balma, D. L., & Markell, C. S. (1982). Differential hypnotic responsiveness of smokers, phobics and chronic-pain control patients: A failure to confirm. Journal of Abnormal Psychology, 91, 269-272.
- Foenander, G., Burrows, G. D., Gerschman, J., & Horne, D. J. (1980). Phobic behaviour and hypnotic susceptibility. Australian Journal of Clinical and Experimental Hypnosis, 8, 41-46.
- Fulcher, G. (March, 1992). New treatment for trauma patients. Medical Observer, 6 March, 56-58.
- Gerschman, J. A., Burrows. G. D., & Reade, P. C. (1987). Hypnotisability and dental phobic disorders. International Journal of Psychosomatics, 33, 42-47.

- Gerschman, J. A., Burrows, G. D., Reade, P. C., & Foenander, G. (1979). Hypnotisability and the treatment of dental phobic illness. In G. D. Burrows, & D. R. Collison (Eds.). Hypnosis 1979 (pp. 33–39). Amsterdam: Elsevier/North.
- Goldberg, D., & Huxley, P. (1980). Mental illness in the community. London: Tavistock.
- Golden, W. (1994). Cognitive-behavioral hypnotherapy for anxiety disorders. *Journal of* Cognitive Psychotherapy: An International Quarterly, 8, 265–274.
- Goldfried, M., & Davison, G. (1976). Clinical behavior therapy. New York: Holt, Rinehart & Winston.
- Goldstein, Y. (1981). The effect of demonstrating to a subject that she is in a hypnotic trance as a variable in hypnotic interventions with obese women. International Journal of Clinical and Experimental Hypnosis, 21, 15–23
- Green, B. L., Wilson, J. P., & Lindy, J. D. (1985). Conceptualizing post-traumatic stress disorder: A psychosocial framework. In C. R. Figley (Ed.). Trauma and its wake (pp. 53–69). New York: Brunner/Mazel.
- Grigsby, J. P. (1987). The use of imagery in the treatment of post-traumatic stress disorder. Journal of Nervous and Mental Disease 175, 55-59.
- Hall, R., & Goldberg, D. (1977). The role of social anxiety in social interaction difficulties. British Journal of Psychiatry, 131, 610-615.
- Havens, R. A. (1990). Saying goodbye to the abused child: An approach for use with victims of child abuse and trauma. In D. Hammond (Ed.). Handbook of hypnotic suggestions and metaphors (pp. 334-335). New York: Norton.
- Helzer, J. E., Robins, L. N., & McEvoy, L. (1987). PTSD in the general population. New England Journal of Medicine, 317, 1630-1633.
- Hodgkinson, P. E., & Stewart, M. (1991). Coping with catastrophe. London: Routledge.
- Horowitz, M. J. (1976). Stress response syndromes. New York: Aronson.
- Hugdahl, K., Fredrikson, M., & Ohman, A. (1977). "Preparedness" and "arousability" as determinants of electrodermal conditioning. Behavior Research and Therapy, 15, 345–353.
- Hyer, L., Boudewyns, P. A., & O'Leary, W. C. (1987). Key determinants of the MMPI-PTSD subscale: Treatment considerations. Journal of Clinical Psychology, 43, 337–340.
- Jackson, A. (1995). The nature, classification, aetiology, and treatment of anxiety disorders. In B. Evans (Ed.). Hypnosis in the management of anxiety disorders (pp. 3–32). Heidelberg: Australian Society of Hypnosis.
- Jackson, H. J., & Stanley, R. O. (1987). The missing factors: influences in choice of treatment strategies. Australian Journal of Clinical and Experimental Hypnosis, 15, 83–91.
- John, R., Hollander, B., & Perry, C. (1983). Hypnotizability and phobic behavior: Further supporting data. Journal of Abnormal Psychology, 92, 390–392.
- Kagan, J., Reznick, J. S., & Snidman, N. (1988). Biological basis of childhood shyness. Science, 240, 167-171.
- Kaplan, H. I., & Sadock, B. J. (1991). Synopsis of psychiatry (6th ed.). Baltimore: Williams and Wilkins.
- Kelly, S. F. (1984). Measured hypnotic response and phobic behaviour: A brief communication. The International Journal of Clinical and Experimental Hypnosis, 32, 1–5.
- Keane, T. M., & Kaloupek, D. G. (1982). Imaginal flooding in the treatment of a posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 50, 138-140.
- Kelly, S., & Reddy, P. (Eds.) (1989). Outrageous fortune. Sydney: Allen & Unwin.
- Kelly, S. F. (1984). Measured hypnotic response and phobic behaviour: A brief communication. *The International Journal of Clinical and Experimental Hypnosis*, 32, 1–5.

- Kidson, M. A., Douglas, J. C., & Holwill, B. J. (1993). Post-traumatic stress disorder in Australian World War II veterans attending a psychiatric outpatient clinic. Medical Journal of Australia, 158, 563-566.
- Kihlstrom, J. F. (1985). Hypnosis. In M. R. Rosenzweig & L. W. Porter (Eds.). Annual review of psychology (pp. 385-418). Palo Alto, CA: Annual Reviews Inc.
- Krantz, D. S., Grunberg, N. E., & Baum, A. (1985). Health Psychology. In M. R. Rosenzweig & L. W. Porter (Eds.). Annual review of psychology (pp. 349-384). Palo Alto, CA: Annual Reviews Inc.
- Lang, P. J. (1979). A bio-informational theory of emotional imagery. Psychophysiology, 16, 495-
- Levis, D. J., & Hare, D. J. (1977). A review of the theoretical rationale and empirical support for the extinction approach of implosive (flooding) therapy. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.). Progress in behavior modification Vol 4 (pp. 300-376). New York: Academic Press.
- Liebowitz, M. R. (1987). Social phobia. In D. F. Klein (Ed.)., Modern problems in psychopharmacology. Basel: Karger Publishing. PAGE NUMBERS
- Liebowitz, M. R., Gorman, J. M., Fyer, A. J., Campeas, R., Levin, A. P., Sandberg, D., Hollander, E., Papp, L., & Goetz, D. (1988). Pharmacotherapy of social phobia: An interim report of a placebo controlled comparison of phenelzine and atenolol. Journal of Clinical Psychiatry, 49, 252-257.
- Lindy, J. D., Grace, M. C., & Green, B. L. (1981). Outreach to a reluctant population. American Journal of Orthopsychiatry, 51, 468–478.
- Lindy, J. D., Green, B. L., Grace, M., & Titchener, J. (1983). Psychotherapy with survivors of the Beverly Hills Supper Club fire. American Journal of Psychotherapy, 37, 593-610.
- McConkey, K. M. (1984). Clinical hypnosis: Differential impact on volitional and non-volitional disorders. Canadian Journal of Psychology, 25, 79.
- McFarlane, A. C. (1988). The longitudinal course of post-traumatic morbidity: The range of outcomes and their predictors. Journal of Nervous and Mental Disease, 174, 4-14.
- McFarlane, A. C. (1989). The treatment of post-traumatic stress disorder. British Journal of Medical Psychology, 62, 81-90.
- Marks, I. (1969). Fears and phobias. London: Academic Press.
- Marks, I. (1970). The classification of phobic disorders. British Journal of Psychiatry, 116, 377-386.
- Marks, I. (1975). Behavioural treatments of phobic and obsessive-compulsive disorders: A critical appraisal. In M. Hersen, R. M. Eisler, & P. M. Miller (Eds.). Progress in behavior modification Vol 1 (pp. 66-158). New York: Academic Press.
- Marks, I. (1981). Review of behavioral psychotherapy: Obsessive-compulsive disorders. American Journal of Psychiatry, 138, 584-592.
- Marks, I. (1987). Fears, phobias and rituals. New York: Oxford University Press.
- Marquis, J. N. (1991). A report on seventy-eight cases treated by eye movement desensitisation. Journal of Behavior Therapy and Experimental Psychiatry, 22, 187–192.
- Meuser, K. T., & Butler, R. W. (1987). Auditory hallucinations in combat-related chronic posttraumatic stress disorder. American Journal of Psychiatry, 144, 299–302.
- Morgenstern, K. P. (1974). Issues in implosive therapy: Reply to Levis. Psychological Bulletin, 81, 380-382.
- Murphy, D. L., Siever, L. J., & Insel, T. R. (1985). Therapeutic responses to tricyclic antidepressants and related drugs in non-affective disorder patient populations. Neuropsychopharmacological and Biological Psychiatry, 9, 3–13.

- Mutter, C. B. (1986). Post-traumatic stress disorder. In T. Dowd, & J. Healy (Eds.). Case studies in hypnotherapy (pp. 34-45). New York: Guilford Press.
- Mutter, C. B. (1987). Post-traumatic stress disorder: Hypnotherapeutic approach in a most unusual case. American Journal of Clinical Hypnosis, 30, 81-86.
- Orenstein, H., Orenstein, E., & Carr, J. E. (1975). Assertiveness and anxiety: A correlational study. Journal of Behavior Therapy and Experimental Psychiatry, 6, 203–207.
- Ostrov, E. (undated). Critical incident psychological casualties among police officers: A clinical review. Unpublished manuscript.
- Owens, M. E., Bliss, E. L., Koester, P., & Jeppsen, E. A. (1989). Phobias and hypnotisability: a re-examination. International Journal of Clinical and Experimental Hypnosis, 37, 207-216.
- Paul, G. L. (1969). Outcome of systematic desensitisation. II: Controlled investigations of individual treatment variations and current status. In C. M. Franks (Ed.). Behavior therapy: Appraisal and status. New York: McGraw Hill.
- Pavlov, I. P. (1927). Conditioned reflexes. New York: Oxford University Press.
- Peebles, M. J. (1989). Through a glass darkly: The psychoanalytic use of hypnosis with posttraumatic stress disorder. International Journal of Clinical and Experimental Hypnosis, 37, 192-206.
- Pettinati, H. M., Kogan, L. G., Margolis, C., Shrier, L., & Wade, J. H. (1989). Hypnosis, hypnotizability and the bulimic patient. In L. Hornyak & E. Baker (Eds.). Experiential therapies for eating disorders (pp. 34–59). New York: Guilford Press.
- Rapoport, J. L. (1990). Obsessive compulsive disorder and basal ganglia dysfunction. Psychological Medicine, 20, 465–469.
- Rasmussen, S. A., & Tsuang, M. T. (1984). The epidemiology of obsessive compulsive disorder. Journal of Clinical Psychiatry, 45, 450–457.
- Rickels, K., Case, W. G., & Schweizer, E. (1988). The drug treatment of anxiety and panic disorder. Stress Medicine, 4, 231-239.
- Rimm, D. C., Janda, L. H., Lancaster, D. W., Nahl, M., & Dittman, K. (1977). An exploratory investigation of the origin and maintenance of phobias. Behavior Research and Therapy, 15, 231-238.
- Rodney, J., Hollander, B., & Campbell, P. (1983). Hypnotisability and phobic behaviour: Further supporting data. Journal of Abnormal Psychology, 92, 390–392.
- Rose, D. S. (1986). Worse than death: Psychodynamics of rape victims and the need for psychotherapy. American Journal of Psychiatry, 143, 817-824.
- Rose, R. J., Miller, J. Z., & Pogue-Geile, M. F. (1981). Twin family studies of common fears and phobias. In L. Gedda, P. Parisi, & W. E. Nance (Eds.). Twin research: Intelligence, personality and development (pp. 169-174). New York: Alan Liss.
- Sackett, D. L., & Snow, J. C. (1979). The magnitude and measurement of compliance. In S. E. Taylor, & D. L. Sackett (Eds.). Compliance in health care (pp. 11–22). Baltimore: Johns Hopkins University Press.
- Schapiro, S., Skinner, E. A., Kessler, L. G., Von Korff, M., German, P. S., Tischler, G. L., Leaf, P. J., Benham, L., Cottler, L., & Regier, D. A. (1984). Utilization of health and mental services - three epidemiologic catchment area sites. Archives of General Psychiatry, 41, 971–978.
- Schindler, F. E. (1980). Treatment by systematic desensitisation of a recurring nightmare of a real life trauma. Journal of Behavior Therapy and Experimental Psychiatry, 11, 53–54.
- Scott, M. J. & Stradling, S. G. (1992). Counselling for post-traumatic stress disorder. London: Sage.
- Seligman. M. E. P. (1971). Phobias and preparedness. Behavior Therapy, 2, 307–320.
- Selye, H. (1976). The stress of life. New York: McGraw-Hill.

- Shapiro, F. (1989a). Eve movement desensitisation: A new treatment for post-traumatic stress disorder. Journal of Behavior Therapy and Experimental Psychiatry, 11, 53-54.
- Shapiro, F. (1989b). Efficacy of the eye movement desensitisation procedure in the treatment of traumatic memories. Journal of Traumatic Stress, 2, 199-223.
- Shor, R. E. (1969). Hypnosis and the concept of the generalized reality-orientation. In C. T. Tart (Ed.). *Altered states of consciousness* (pp. 233–250). New York: Wiley.
- Spiegel, D. (1989). Hypnosis in the treatment of victims of sexual abuse. Psychiatric Clinics of North America, 12, 295-305.
- Spiegel, D., Hunt, T., & Dondershine, H. E. (1988). Dissociation and hypnotizability in posttraumatic stress disorder. American Journal of Psychiatry, 145, 301–305.
- Spiegel, D., Koopman, C., & Classen, C. (1994). Acute stress disorder and dissociation. Australian Journal of Clinical and Experimental Hypnosis, 22, 11–23.
- Stanley, R. (1995). The use of hypnosis in the treatment of anxiety disorders: General considerations and contraindications. In B. Evans (Ed.). Hypnosis in the management of anxiety disorders (pp. 33-40). Heidelberg: Australian Society of Hypnosis.
- Stanley, R. O., Burrows, G. D., & Judd, F. K. (1990). Hypnosis in the management of anxiety disorders. In R. Noyes, M. Roth, & G. D. Burrows (Eds.). Handbook of anxiety Vol 4: The treatment of anxiety (pp. 537–548). Amsterdam: Elsevier/North.
- Strupp, H. S. (1972). On the technology of psychotherapy. Archives of General Psychiatry, 26, 270-278.
- Stutman, R. K., & Bliss, E. L. (1985). Post-traumatic stress disorder, hypnotizability and imagery. American Journal of Psychiatry, 142, 741–743.
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"). a trait related to hypnotic susceptibility. Journal of Abnormal Psychology, 83, 268-277.
- Torgersen, S. (1983). Genetic factors in anxiety disorders. Archives of General Psychiatry, 40, 1085-1089.
- Trower, P., Bryant, B., & Argyle, M. (1978). Social skills and mental health. London: Methuen and
- Turner, S. M., Beidel, D. C., & Larkin, K. T. (1986). Situational determinants of social phobia in clinic and nonclinic samples: Physiological and cognitive correlates. Journal of Consulting and Clinical Psychology, 54, 523-527.
- Turner, S. M., Beidel, D. C., & Jacob, R. G. (1991). Pharmacological and behavioral treatment of social phobia. Unpublished manuscript, University of Pittsburgh.
- Tyrer, P. J. (1989). Prescribing psychotropic drugs in general practice. British Medical Journal, 298, 201.
- Tyrer, P. J., & Lader, M. H. (1974). Response to propranolol: Diazepam in somatic and psychic anxiety. British Medical Journal, 2, 14-15.
- U. K. Committee on Safety in Medicines (1988). Benzodiazepines, dependence and withdrawal symptoms. Current Problems, 21, 1–2.
- Vanderlinden, J., & Vandereycken, W. (1990). The use of hypnosis in the treatment of bulimia nervosa. International Journal of Clinical and Experimental Hypnosis, 38, 101–111.
- Walen, S. R., DiGiuseppe, R., & Wessler, R. L. (1980). A practitioner's guide to rational-emotive therapy. New York: Oxford University Press.
- Wolpe, J. (1969). The practice of behavior therapy. Elmsford, NY: Pergamon Press.
- Wolpe, J., & Abrams, J. (1991). Post-traumatic stress disorder overcome by eye movement desensitisation: A case report. Journal of Behavior Therapy and Experimental Psychiatry, 22, 39-43.

AN INTRODUCTION TO PSYCHONEUROIMMUNOLOGY, MIND-BODY HEALING, AND HYPNOSIS

Barry J. Evans University of Melbourne

The field of psychoneuroimmunology provides a fascinating view of the interrelationships which exist between the body's central nervous system, the immune system, and mental processes. The papers in this section address the nature of these relationships and explore how hypnosis may be used to condition what were previously considered to be autonomic physiological processes, and to not only ameliorate immunosuppression, but also to enhance immunocompetence.

In recent years, much experimental and clinical work has examined the relationship between psychological factors, immunity, and disease susceptibility. It is now clear that personality characteristics and behavioural variables influence immunological factors through direct innervation of the central nervous system, immune systems, or through hormonal pathways. Behavioural changes associated with the individual's personality characteristics or which occur as adaptations or coping responses to stressful events may also influence immunity (for a full review, see Cohen & Herbert, 1996).

What is now clear is that psychological processes, and hypnosis, may play a far more important role in helping individuals to develop the capacity to ameliorate immunosuppression and significantly enhance their immunocompetence. These issues are addressed in the papers in this section, which provide a background to the symposium on hypnosis and mind-body healing. In the symposium, Graham Wicks discusses the integration of mind-body communication down to the cellular/genetic level via state/dependent physiology, memory, learning, and behaviour and how psychological and psychosomatic problems can be caused by, and treated using, hypnosis (Cheek & LeCron, 1968; Rossi, 1986; Rossi & Cheek, 1988).

In the first paper in this section, a detailed research and clinical background review of the field of psychoneuroimmunology, Roger Booth carefully articulates the proposition that the relationships between the nervous system, immune system, and the mind are bi-directional and argues that the immune system is engaged in a broad process of self-determination, sharing with the neurological and psychological domains the common goal of establishing and maintaining self-identity. He then discusses the experimental research addressing the relationship between classical conditioning and immune responses, then stress and immunity. The paper concludes with a review of studies of the effects of hypnosis on immune functioning.

The remaining two papers in the section highlight the use of hypnosis in mind-body healing. Antonio Madrid and Susan Barnes discuss a range of hypnosis protocols for a variety of medical disorders, arguing that every hypnosis script should reflect the patient's background and presenting problem. The final paper, by Patricia Ruzyla-Smith and her colleagues, describes how hypnosis can be used to enhance the immune response, with changes to specific cells. Both studies highlight how specific hypnotic suggestions can induce specific changes in the immune system.

It can be argued that the field of psychoneuroimmunology began with the serendipitous discovery by Robert Ader and Nicholas Cohen in 1975, when working on conditioning taste aversion in rats, that the immune system, long thought to function autonomously of psychosocial stimuli, can also be conditioned. Ader was attempting to produce aversion to a saccharine solution in rats by pairing the saccharine with an injection of cyclophosphamide, which rapidly causes nausea, producing a strong reaction to the normally attractive taste of saccharine. After this taste aversion had been established, Ader stopped the administration of cyclophosphamide to see how long the aversion would last in the absence of reinforcement, whereupon the rats gradually returned to drinking the saccharine solution. Unexpectedly, they also began to die from infections and cancer. Trying to discover the reasons for these deaths, the researchers found that rats conditioned this way suffered from seriously impaired immunity. Cyclophosphamide is an immunosuppressant, and, even though one dose would not by itself result in the level of immune impairment found in this study, pairing the drug with the saccharine solution apparently resulted in a conditioned suppression of the immune system (Ader & Cohen, 1975, 1981). This conclusion was confirmed by subsequent experiments, which showed that pairing immunosuppressants with other stimuli can indeed lead to conditioned immune suppression (Rogers, Reich, Strom, & Carpenter, 1976).

Conditioning can affect the immune system in other ways. For example, conditioning has been used to reduce the immune system's tendency to reject skin grafts, to alter NK cell activity, and the release of histamines during allergic reactions (Lloyd, 1987). Conditioning has been used to enhance the immune response. For example, temporal pairing of an camphor odour with the injection of an immunity-enhancing drug has been shown to result in a conditioned increase in NK cell activity, such that, after conditioning, exposure to the camphor alone increased NK cell activity (Ghanta, Hiramoto, Solvason, & Spector, 1985).

The papers in this section detail some potential clinical applications. Antonio Madrid and Susan Barnes discuss a range of hypnotic conditioning procedures which can be used to condition the body to elicit physical changes in patients suffering from such conditions as allergies, systemic lupus erythematosus, and cluster headaches. This finding in relation to autoimmune diseases, such as systemic lupus erythematosus, is an exciting one. In conditions like lupus, the immune system becomes hyperactive and attacks the body's own cells. Currently such conditions are treated with powerful immunosuppressant drugs that can reduce the impact of the disease but also have toxic side effects and the suggestion that the condition responds to hypnotic conditioning has significant clinical implications.

The research examined by Roger Booth also highlights the relationship between immunity, immunocompetence and stress. Although the relationships are not clear, research and clinical evidence shows that stress can suppress the immune system, limiting the system's effectiveness in identifying and destroying antigens. Stress can impact on immunocompetence in several different ways.

First, stress can alter the number and type of immune system cells circulating in blood and other body fluids. This has been shown in studies of residents of Three Mile Island, the site of a potential nuclear accident in 1979. People living near the disaster site exhibited fewer B, killer T, and NK cells than did people living 80 miles away, ten years after the event (McKinnon, Weisse, Reynolds, Bowles, & Baum, 1989). Since these cells are key players in immunity, a decrease in their numbers can be an indication of reduced ability to fight off invaders.

Second, stress may also affect the responsiveness of leukocytes. Several studies have examined the effects of negative effects of stress on the ability of phagocytes to digest antigens or the capability of killer T and NK cells to kill invading or abnormal cells. Most studies have found that leukocytes are less responsive when the organism is under stress, a finding applicable to both animals (Kandil & Borysenko, 1987) and humans (Antoni, 1987; Irwin, Daniels, Smith, Bloom, & Weiner, 1987; Kiecolt-Glaser, Glaser, Strain, Stout, Tarr, et al., 1986; Locke, Kraus, Leserman, Hurst, Heisel, et al., 1984).

Thirdly, there is some evidence to suggest that stress can increase the rate of tumour development, a suppressive effect on the immune system that can be substantially ameliorated by the presence of familiar others and social support (Weinberg & Emmerman, 1989). People who enjoy high levels of social support tend to exhibit higher levels of immunocompetence than people with less social support. Studies of immune functioning among the spouses of cancer patients have found that spouses who report high levels of social support show greater NK cell activity as well as a stronger immune response to chemical challenge than those with less social support (Baron, Cutrona, Hicklin, Russell, & Lubaroff, 1990). Similarly, Jemmott and Magloire (1988) found that students with higher levels of perceived social support exhibited higher levels of salivary IgA (indicating greater immunocompetence) during exam periods than did students who perceived less social support.

The range of experimental and clinical studies reviewed by Roger Booth raise the question of how we might enhance immunity and ameliorate stress effects. Although much work needs to be done in this area, the papers by Madrid and Barnes and Ruzyla-Smith and her colleagues, clearly suggest that simple hypnotic techniques do alter immune responsiveness and have the potential to increase immunocompetence. It may be possible to teach patients and clients how to use social support and stress management techniques to enhance immunocompetence.

Another psychosocial strategy for enhancing immune functioning is through the process of actively confronting one's past traumatic experiences which are influencing present health status. Roger Booth discusses the beneficial effect of active disclosure of negative events to others, rather than active repression, on immune functioning (Pennebaker, Kiecolt-Glaser, & Glaser, 1988). This suggests that perhaps hypnosis, psychotherapy, and psychological therapies have physical as well as psychological effects.

Studies of relaxation and self-hypnosis also show positive effects of these on stress-related immunosuppression. Kiecolt-Glaser and her colleagues (Kiecolt-Glaser et al., 1986) studied the effect of relaxation and self-hypnosis on students' examination stress. Those subjects allocated to a hypnotic/relaxation condition in which they were provided an overview of hypnosis and other relaxation methods, were hypnotised, and then encouraged to practise relaxation techniques during and outside scheduled group sessions. The majority exhibited reduced immunocompetence during exams, but this reduction was significantly less for those subjects who frequently practised relaxation techniques. Similarly, relaxation training has been shown to increase immunocompetence among a group of elderly residents in an independent living facility (Kiecolt-Glaser, Glaser, Williger, Stout, Messick, et al., 1985).

The evidence reviewed in these papers shows that hypnotic and other psychosocial interventions ameliorate immunosuppression and enhance immunocompetence. The case material suggests the more specific the hypnotic suggestion, the greater the likelihood of a positive effect. There are a number of hypnosis scripts reported in the papers in this section, but the reader could also profitably consult the scripts for general self-healing and cancer treatment in Hammond (1990). Although written specifically for cancer patients, many of the scripts may be modified for use with other medical conditions.

REFERENCES

- Ader, R., & Cohen, N. (1975). Behaviorally conditioned immunosuppression. Psychosomatic Medicine, 37, 333-340.
- Ader, R., & Cohen, N. (1981). Conditioned immunopharmacologic responses. In R.Ader (Ed.). Psychoneuroimmunology (pp. 281–319). Orlando, FL: Academic Press.
- Antoni, M. H. (1987). Neuroendocrine influences in psychoneuroimmunology and neoplasma: A review. Psychology and Health, 1, 3-24.
- Baron, R. S., Cutrona, C. E., Hicklin, D., Russell, D. W., & Lubaroff, D. M. (1990). Social support and immune function among spouses of cancer patients. Journal of Personality and Social Psychology, 59, 344-352.
- Cheek, D., & LeCron, L. (1968). Clinical hypnotherapy. New York: Grune and Stratton.
- Cohen, S., & Herbert, T. B. (1996). Health psychology: Psychological factors and physical disease from the perspective of psychoneuroimmunology. Annual Review of Psychology, 47, 113-142. New York: Annual Reviews Inc.
- Ghanta, V. K., Hiramoto, R. N., Solvason, H. B., & Spector, N. H. (1985). Neural and environmental influences on neoplasma and conditioning of NK activity. Journal of Immunology, 135 (Suppl 2), 848s-852s.
- Hammond, D. C. (Ed.)(1990). Handbook of hypnotic suggestions and metaphors. New York: W.W. Norton.
- Irwin, M., Daniels, M., Smith, T. L., Bloom, E., & Weiner, H. (1987). Impaired natural killer cell activity during bereavement. Brain, Behavior, and Immunity, 1, 98–104.
- Jemmott, J. B., & Magloire, K. (1988). Academic stress, social support, and secretory

- immunoglobulin A. Journal of Personality and Social Psychology, 55, 803-810.
- Kandil, O., & Borysenko, M. (1987). Decline of natural killer cell activity in mice exposed to rotation stress. Health Psychology, 6, 89-99.
- Kiecolt-Glaser, J. K., Glaser, R., Strain, E. C., Stout, J. C., Tarr, K. L., Holliday, J. E., & Speicher, C. E. (1986). Modulation of cellular immunity in medical students. Journal of Behavioral *Medicine*, 9, 5–21.
- Kiecolt-Glaser, J. K., Glaser, R., Williger, D., Stout, J. C., Messick, G., Sheppard, S., Ricker, D., Romisher, S. C., Briner, W., Bonnell, G., & Donnerberg, R. (1985). Psychosocial enhancement of immunocompetence in a geriatric population. Health Psychology, 4, 25-41.
- Locke, S. E., Kraus, L., Leserman, J., Hurst, M. W., Heisel, J. S., & Williams, R. M. (1984). Life change stress, psychiatric symptoms, and natural killer-cell activity. Psychosomatic Medicine, 46, 441-453.
- Lloyd, R. (1987). Explorations in psychoneuroimmunology. Orlando, FL: Grune & Stratton.
- McKinnon, W., Weisse, C. S., Reynolds, C. P., Bowles, C. A., & Baum, A. (1989). Chronic stress, leukocyte subpopulations, and humoral response to latent viruses. Health Psychology, 8, 389-402.
- Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. Journal of Consulting and Clinical Psychology, *56*, 239–245.
- Rogers, M. P., Reich, P., Strom, T. B., & Carpenter, C. B. (1976). Behaviorally conditioned immunosuppression: Replication of a recent study. Psychosomatic Medicine, 38, 447–452.
- Rossi, E. (1986). The psychobiology of mind-body healing: New concepts of therapeutic hypnosis. New York: W.W. Norton.
- Rossi, E., & Cheek, D. (1988). Mind-body therapy: Ideomatic healing in hypnosis. New York. W.W. Norton.
- Weinberg, J., & Emmerman, J. T. (1989). Effects of psychosocial stressors on mouse mammary tumour growth. Brain, Behavior, and Immunity, 3, 234–246.

PSYCHONEUROIMMUNOLOGY, AND MIND-BODY HEALING

Roger J. Booth

Department of Molecular Medicine, Faculty of Medicine and Health Science, University of Auckland

Psychoneuroimmunology is a relatively new research discipline that seeks to understand the relationships among neurophysiological and immunological operations within a body, and the manner in which the person identifying with that body lives his or her life. We know that the operation of our physiology affects how we think and feel, and conversely that how we think and feel influences the operation of our physiology. Psychoneuroimmunology explores the degree, density, and diversity of such effects, and endeavours to makes sense of disease, illness, health, healing, and well-being in terms of them. This paper presents an overview of research published in this area and discusses its interpretations and implications together with some of its pitfalls and difficulties.

WHAT DO WE MEAN BY PSYCHONEUROIMMUNOLOGY?

The title of this paper contains three terms — psychoneuroimmunology, mindbody, and healing — each of which is inclined to be used (or overused) to mean an assortment of things in a variety of situations. I will therefore begin by exploring what I understand by the term psychoneuroimmunology, with a particular focus on what is meant by the immune part of the conglomerate.

Taken syllabically, psychoneuroimmunology indicates connections between how we think and feel and generally live our lives (psycho), the operation of our nervous systems (neuro), and the functioning of our immune systems (immunology). Two of these (nervous system and immune system) are distinctions that we can make about certain constellations of operations occurring within the physiology of an organism (its body), while the third (psychological or psychosocial domain) is something we often associate with our minds and our actions in relation to others. I will return to mind in a while but let me begin with the domains of nervous system and immune system activity and examine the connections between them implied by neuroimmunology.

The concept of an immune system arose originally out of observations that people who had recovered from certain infectious illnesses often subsequently had resistance or at least altered susceptibility to those illnesses. This phenomenon later came to be termed immunological memory in order to signify a change or adaptation within the immune system of an organism specifically in relation to a particular infectious agent. Increasingly the immune system came to be synonymous with defensive or protective aspects of the body, and indeed, the word immune is derived from a middle English term (immunis) which meant exempt from public service or charge.

The physiological mechanisms associated with immune processes hinge on the activities of lymphocytes and their ability, through cell-surface receptors, to recognise and respond to specific macromolecular shapes (or antigens). There are a variety of effector functions associated with immune system activity — such as antibody production, cytotoxicity, phagocytosis, inflammation — controlled and regulated by a complex network of molecular and cellular interactions. In fact, the degree of complexity within the immune system is such that, until relatively recently, immunologists rarely looked outside their own lymphocyte-based discipline and worked under the tacit assumption that the immune system, as they construed it, was essentially autonomous and self-regulating.

The Immune System is more than a Defence Mechanism

Although the immune system appears to respond effectively to foreign shapes (for example those of a virus or bacterium) by producing specific effector functions that operate to neutralise, inactivate or remove that foreignness, it does not appear to behave in a similar way towards shapes that are present on the normal tissue components of the body in which it resides. This means that, built into the immune system, is a capacity to discriminate between self and non-self antigens and to appear self tolerant. Such discrimination is not absolute however, and there are clinical conditions in which immunological reactivity against self components (or autoimmunity) manifests pathologically.

Two important implication arise from this. The first is that we often talk about the immune system as something that responds to a stimulus (the antigens produced by an infectious process for example). In doing so, we generate a picture of a system armed and ready to do battle when encountering a potentially damaging invasion. Yet it is crucial to realise that what we observe as a response to a stimulus is only so because we have distinguished and linked the two through the characteristics of our observation. From the perspective of the immune system operating within the physiology of an individual's body, there is no stimulus and no immune response, but only changes which trigger various other changes in order to maintain a set of relationships. The second notion is that if, in the activity of the immune system, we observe effective recognition and response towards non-self antigens, there must be some knowledge or appreciation of self in order to distinguish that which is non-self. The manner in which the components of the immune network are generated is such that self/ non-self discrimination cannot be completely pre-programmed genetically but, instead, must be something that the immune system learns during its ontogeny (a full explanation is outside the scope of this paper).

Taken together, these notions indicate that "defence" is a particularly restricted way of understanding immune system activity. Certainly we can label an observed immune response to a particular stimulus as constituting a defence of the body against a potentially harmful invader, but we should recognise that that activity is part of a system involved moment-by-moment in making

distinctions between self and non-self and maintaining a particular relationship between the two. Therefore we can view the immune system not so much as something that defends a self but as something involved in determining, constructing and adequately maintaining that self within an ever-varying context of otherness (Booth, 1990; Booth & Ashbridge, 1992, 1993).

Maintaining an Adequate Relationship between Self and Context

When we consider the general features of immune system behaviour as a whole (as listed in Table 1) a striking similarity is noticed in the behaviour of the nervous system (Cunningham, 1981). Given that both the immune system and nervous system are operationally involved in continuously maintaining an adequate relationship between an organism and its environment, this similarity is not surprising. It does, however, evoke the question of whether these two isomorphic systems also influence one another to any appreciable degree.

Table 1. General features of the immune system with strong similarity to those of the nervous system.

Receipt and processing of information (molecular topological information in the case of the immune system).

Recognition of a diverse range of stimuli (antigens).

Ability to generate a response that is specific and generally appropriate for the stimulus.

Capacity to respond to unexpected stimuli.

Generally effective discrimination between self- and non-self.

Adaptivity in the form of specific memory.

Regulation by complex internal networks.

Much of modern immunological thinking and research still tends to treat immune behaviour in a linear fashion in which the system, armed and awaiting challenge, responds to potentially threatening antigens by producing effectors to neutralise, inactivate, or destroy the invader. However, research over recent years has revealed that the immune and nervous systems, as well as being isomorphic, share a large number of interactive molecular and cellular pathways. With the recognition that the immune system is not autonomous but is intimately intertwined with endocrine and nervous system activities, alternative immune metaphors are emerging in which the system is viewed as interacting with, or making sense of, the organism's environment rather than simply protecting against it. For example, Blalock has suggested that, as a system involved in molecular shape recognition linked to the nervous system, the immune system is, in essence, a molecular sense organ (Blalock, 1984; Blalock & Smith, 1985), providing a living individual with information about the microscopic topological environment in a manner akin to the way the visual system provides information about the photon environment.

Because the immune and nervous systems have traditionally been investigated

separately, their shared processes are often referred to as bi-directional communication pathways between the two systems. Yet of course, a living body makes no such intrinsic distinction between subsystems — my physiology recognises no nervous system nor immune system, and the effect of a biochemical trigger on a neurone or a lymphocyte is not determined by the source of that trigger. Nevertheless, as observers we endeavour to interpret bodily mechanics in terms of our historically-constructed subsystems, and so I will elaborate neuro-immune connections in that context

Effects of the Immune System on the Nervous System

If the hypothalamus of an animal is monitored during the course of an immune response to an administered antigen, changes in electrical activity and in neurotransmitter levels are observed to correlate with the time course of the response, suggesting that immune activity is affecting brain function in some manner. Potentially there are at least two ways in which this could occur. Responding lymphocytes could secrete neurological mediators, or alternatively, immune regulatory substances could directly affect neural tissues. In practice, both pathways operate. As summarised in Table 2, a variety of neuroendocrine mediators have been found to be produced by cells of the immune system under various conditions of activation. **Table 2.** Neuroendocrine mediators derived from cells of the immune system.

Neuroendocrine Mediator	Produced by:	
Corticotrophin (ACTH)	Lymphocytes, monocytes	
CRF-like activity	Lymphocytes	
Thyroid-Stimulating Hormone	Lymphocytes	
ß-endorphin	Lymphocytes, monocytes	
Vasoactive Intestinal Peptide	Polymorphs, mast cells	
Substance P	Basophils, mast cells, monocytes	
Somatostatins	Basophils, mast cells, monocytes	
Oxytocin & Neurophysin	Thymus tissue	
Human Chorionic Gonadotrophin	Lymphocytes	

Among the complex internal processes that control immune system behaviour, one particular class of molecules is pivotal. This class consists of a large set of regulatory macromolecules called cytokines which control the flow of activities within the immune and haemopoietic systems. Because of their powerful influence on immune functions, the cytokines have often been referred to as the hormones of the immune system and, perhaps because of this, there has been a tendency to consider immunological effects to be their primary function. However, many cytokines have multiple activities not only within the immune system but also outside its traditional boundaries. Some cytokines are also produced by cells not of the lymphoid or myeloid lineages (i.e., cells not conceptually part of the traditional immune system). As an example, one particular group of cytokines (often referred to as the inflammatory cytokines) are strongly connected to activities within the nervous system. An important molecule within the inflammatory cytokine group is interleukin-1 (IL-1) which, as well as being produced by cells of the immune system, is secreted by astrocytes and glial cells in the brain and acts as a neurotransmitter in pre-optic and hypothalamic neurones.

Activation of the immune system to produce IL-1 subsequently leads to altered electrical activity in the brain, and metabolism of the neurotransmitters norepinephrine, serotonin, and dopamine in certain brain regions. These neural changes can also be produced by injected IL-1 and can be blocked by an IL-1 receptor antagonist. Does this mean then that immune-produced IL-1 acts directly on the brain?

Certainly neurones in the preoptic nucleus have receptors for IL-1 (as well as for other cytokines). Although IL-1 is a large, lipophobic protein which may have difficulty crossing the blood-brain barrier easily, it might cross the vascular endothelium in regions of the brain, such as the preoptic nucleus of the hypothalamus, where the barrier is weak or absent. IL-1 also stimulates peripheral nerves, such as the vagus, so modulating afferent signals to the brain. Indeed, if the vagus nerve is cut just below the diaphragm, stress-induced, IL-1-mediated effects on the brain are considerably diminished (Watkins, Goehler, Relton, Tartaglia, Silbert, et al., 1995). IL-1 also stimulates proliferation of certain cells in nervous tissue (astroglia and oligodendrocytes), affects sleep patterns (especially by increasing slow wave sleep), enhances the production of ACTH by the pituitary and corticosterone from the adrenal cortex, affects brain centres associated with body temperature regulation, and promotes illness behaviours.

Effects of the Nervous System on the Immune System

The central nervous system (CNS) can be considered as having two arms — the autonomic arm, corresponding to the sympathetic and parasympathetic nerves, and the neuroendocrine arm corresponding to the neurohormonal aspects of the system. In reality, there are extensive interconnections between them. The limbic system of the brain, which is strongly associated with aspects of affective and cognitive behaviour, directly regulates the neurohormonal and autonomic outflow of the CNS. As the hypothalamus is central to this process, it is instructive that perturbation of the hypothalamus affects immune responses. For example, experimentally introducing lesions into the anterior lobe of the hypothalamus depresses antibody responses, while electrically stimulating the hypothalamus at time of immunisation enhances antibody responses. Lesions in hypothalamus and hippocampus have also been found to alter such immune responses as Natural Killer (NK) activity and T lymphocytes functions.

Activity of the autonomic nervous system can directly affect immune system behaviour. Histochemical staining techniques to identify small nerves have revealed extensive innervation of all lymphoid tissue (both primary and secondary lymphoid organs) by noradrenergic nerve fibres. In lymph nodes these nerves appear to terminate predominantly in the T cell-rich regions suggestive of possible links to cytokine-based immunoregulatory functions.

Surgical or chemical ablation of sympathetic nerves to lymphoid organs augments antibody responses in those organs, while in contrast, ablation of parasympathetic innervation generally depresses immune responsiveness.

The neurohormonal output of the CNS is controlled through what is often referred to as the hypothalamus-pituitary-adrenal (HPA) axis. Unlike the more hard-wired autonomic system, this can be regarded as a communication system in which the medium of information transfer is predominantly soluble hormones or other small chemical mediators. It has been known for many years that corticosteroids (produced by the adrenal cortex) have profound inhibitory effects on a variety of immune parameters. For example, they generally depress antibody responses, depress phagocytosis, inhibit macrophage activation, inhibit B and T lymphocyte activation, and alter lymphocyte migratory patterns.

Table 3. Neuropeptides, neurological mediators and immune function.

Neurological Mediator	Activities	
Neuropeptides		
Vasoactive Intestinal Peptide	Activates lymphocytes. Modulates migration of gut lymphocytes.	
Substance P	Chemotactic for phagocytic cells. Mediator of local inflammatory responses. Enhances T cell proliferation. Enhances IgA antibody production.	
Oxytocin and vasopressin	Enhance T lymphocyte proliferation.	
Melatonin	Enhances antibody synthesis and T lymphocyte functions.	
Neurotransmitters		
Met-enkephalin	Enhances NK cell activity, modulates T cell activation.	
ß-endorphin	Inhibits T cell proliferation. Decreases cell surface receptor II expression. Enhances NK cell activity. Suppresses antibody responses.	
Catecholamines	Suppress lymphocyte proliferation.	
Acetylcholine	Increases cell proliferation.	
Neurohormones		
Prolactin	Enhances macrophage activation. Stimulates some cytokine production.	
Somatostatin	Stimulates histamine release from mast cells. Inhibits histamine release from basophils. Inhibits T cell proliferation and IgA antibody production.	
Growth hormone	Enhances antibody synthesis and macrophage activation and modulates cytokine production.	
ACTH	Affects macrophage activation, cytokine production, NK activity and antibody synthesis.	
Angiotensin II	Modulates macrophage activity. Suppresses T cell activation.	
Nerve Growth Factor	Stimulates neutrophil chemotaxis.	
Thyroxine	Enhances T cell activation and antibody production.	

In addition to the well-known effects of corticosteroids, a number of the nonsteroidal hormones, neuropeptides and other neurological mediators associated with the HPA axis have been found to influence immune responses (some examples are shown in Table 3). These molecules could act directly on cells of the immune system to produce their effects or they could act indirectly by inducing immunological mediator production (such as cytokines) from other cell populations. As receptors for a number of these mediators are present on cells of the immune system, it is likely that at least some of their effects are a consequence of direct binding.

The Neuroimmune Network and Psychoneuroimmunology

We can see from the material in the previous sections that there is a rich and diverse network of interconnections between the nervous system and the immune system in living individuals. The extent of cross-talk is such that we cannot hope to comprehend fully the operation of each of these systems in isolation. Perhaps even considering them as distinct systems might thwart our capacity to understand their involvement in living processes. How might we best incorporate this knowledge of neuroimmune mechanisms into a conception of psychoneuroimmunology in order to return to the title of this paper — psychoneuroimmunology and mind-body healing?

In discussing psychological and/or psychosocial processes, we are identifying behaviours or activities of living organisms distinguished as unities acting within a domain populated with other unities. Living organisms exist as self-generating wholes within particular contexts. The cellular and molecular constituents of a living organism operate within its physical boundary as the biochemical and physiological processes that determine its structure. I have already mentioned how processes, such as those occurring within the nervous system and the immune system, operate adaptively throughout the life of the organism in order to conserve mutually satisfactory relationships with the outside world.

Organisms are, therefore, structurally-determined, self-generating unities that continuously produce themselves within the context of their medium or environment. Moreover, the structural components of the organism's physiology constrain but do not specify the behaviours of organisms as wholes (nor do their behaviours specify the changes in their structural components).

By inventing a discipline of psychoneuroimmunology, we are endeavouring to integrate two mutually-influential, but non-overlapping domains — psychosocial (behaviour of organisms within an environment) and neuroimmune (behaviour of structural components and operational processes within an organism). In doing this, it is important to always remember that the psychosocial domain is fundamentally distinct from, and incommensurate with, that which encompasses the physiological mechanisms of the nervous system and the immune system. Formally then, the field of psychoneuroimmunology does not

(or should not) seek to explain behaviour in terms of neuroimmune physiology, nor the converse — we can no more do this than we can understand a traffic jam by pulling apart the engine of a car. Rather, it addresses questions about the manner and degree to which psychosocial processes influence and, in turn, are affected by mechanisms operating within the neuroendocrine network.

Psychoneuroimmunology and the Measurement of Immune Function

From this brief discussion of the nature of the immune system it should be apparent that immune processes are many and varied, and that they are intimately and inextricably interwoven with those of the nervous system. What we might observe as an immune response to a particular substance is part of the continuous self-evaluating and self-defining process of immune adaptation. How then, can we assess the relationships between immune activity and psychosocial factors in a useful way? Answering this question requires an examination of what we can measure of the immune system and what, if anything, those measurements tell us. If we restrict ourselves to humans, then we are limited in what we can sample. Components of blood such as lymphocyte populations, antibodies, and cytokines are an obvious and well-used source of immune material but what is not always appreciated is that the lymphocyte population in the venous circulation comprises less that 10% of the body's total lymphoid pool. Moreover, the distribution and activities of blood lymphocytes is not representative of the total lymphoid pool, and lymphocyte mobilisation into and out of the peripheral circulation can be quite rapid and significantly affected by relatively trivial things (for example the difference between the exertion of climbing the stairs or taking the elevator to the immunology laboratory). Two other common ways of assessing aspects of human immune system behaviour are (a) the IgA antibodies in saliva, and (b) dermal immune reactivity to allergens injected into the skin (immediate hypersensitivity) or antigens against which the individual has been previously exposed injected beneath the skin (delayed-type hypersensitivity). Salivary IgA concentrations represent a specific compartment of the mucosal-associated lymphoid tissues and are subject to variations affected by salivary secretion rates.

Skin tests on the other hand, require people who have allergic sensitivities (typically only around 10–20% of the population) or who have been previously exposed to or immunised with the antigen in question. The magnitude of evoked skin responses are also difficult to quantify and prone to significant day-to-day variations (Laidlaw, Booth, & Large, 1994).

In summary, there is no representative measure of human immune behaviour, partly because of the limited access to immune components in humans, but more especially because the notion of a representative measure of the immune system is essentially meaningless — immunity is not a unidimensional variable. This has important implications for how we interpret studies in psychoneuroimmunology. For example, it is commonplace to talk about factors which enhance or suppress the immune system, but what is meant by immunosuppression or immunoenhancement?

When the defence system metaphor is assumed as a guide for research, the notion of "more means better" is readily adopted and a fall in an immune measure is interpreted as immunosuppression. In my opinion, too much of the research in psychoneuroimmunology has been done in this way, perhaps stemming from an over-zealous desire to prove the importance of mind over matter. For example, the application of a particular stressor to a group of volunteers leading to a decrease in the number of helper T lymphocytes in the blood will often be interpreted as stress suppressing the immune system. This is a little like claiming that the quality of a symphony diminishes when the violas play more softly.

In assessing the relationships between psychosocial and immune processes therefore, it is imperative not to over-interpret changes in immune measures but simply to accept them as an indication of a psycho-immune connection. It then becomes important to ask whether that connection also correlates with any observable health changes. In the next few sections, I will briefly review some of the research findings relating to immune system activity and the psychosocial processes of conditioning, stress perception, emotional expression, and hypnosis.

Classical Conditioning and Immune Responses

In 1975, Robert Ader and Nicholas Cohen discovered that immune responsiveness in rats could be influenced by Pavlovian-type behavioural conditioning schedules (Ader & Cohen, 1975). They repeatedly paired administration of saccharin-sweetened drinking water with the injection of the immunosuppressive drug cyclophosphamide, and found that if the rats were subsequently given saccharin-sweetened water alone, immune responses to injected antigens were diminished, as if the rats had concurrently received cyclophosphamide. Since that observation, classical conditioning of immune responses in animals has been studied extensively. Although the immune changes observed are not large, the phenomenon has been found to be generally applicable to antibody responses, T lymphocyte proliferation, T cell-mediated cytotoxicity, DTH responses, T helper cell balance, Natural Killer (NK) cells activity and allergic responses (Ader & Cohen, 1993; Ader, Felten, & Cohen, 1990; Cohen & Ader, 1988; Cohen, Moynihan, & Ader, 1994).

Further, a variety of sensory cues — taste, smell, sight, sound, and touch — have been employed as conditioning stimuli and, where studied, the phenomena display extinction properties characteristic of classical conditioning as studied in psychology. Although the majority of these studies have concentrated on inhibition of immune responsiveness, some have demonstrated conditioned enhancement of specific immune responses. Although conditioned immune changes are generally small, in some studies they have demonstrably affected the health or survival of the animal experimental subjects (Ader & Cohen, 1982; Grota, Schachtman, Moynihan, Cohen, & Ader, 1989). Recent work implicates the vagus nerve as integrally involved in psychoimmune conditioning phenomena (Watkins et al., 1995).

The literature concerned with conditioned immune responses in animal studies is now quite extensive, but little comparable work has been reported with human subjects. Some studies have reported evidence consistent with conditioned changes in immune variables in humans (Buske-Kirschbaum, Kirschbaum, Stierle, Lehnert, & Hellhammer, 1992; Giang, Goodman, Schiffer, Mattson, Petrie, et al., 1996; Olness & Ader, 1992), while others have been not been able to demonstrate human immune conditioning (Booth, Petrie, & Brook, 1995; Kirschbaum, Jabaaij, Buske-Kirschbaum, Hennig, Blom, et al., 1992). To what degree immune conditioning effects play a role in placebo phenomena is still an open question (Ader, 1989).

Stress and the Neuroimmune Network

Numerous animal studies have demonstrated that a wide variety of stressors can alter many aspects of the immune response. Much of the animal work has concentrated on applied, physical stressors (see Table 4) but there have been studies with more naturalistic or ethologically-relevant stressors such as maternal separation in young animals, social defeat, exposure to the odours emitted by litter-mate animals under stress. A wide variety of immune measures have been found to be affected. Stressors have also been shown to alter the migration patterns of immune cells between, and into compartments of, the immune system. Indeed, it is difficult to find many measurable aspects of the immune system that cannot be altered by some stressor.

Table 4. Types of stressor studied in psychoneuroimmunology.

Applied stressors:	Physical	electric shocks, overcrowding, sleep deprivation, noise, rotation, restraint, immersion in cold water, isolation
	Mental	maternal separation, frustrating laboratory tasks, conflict resolution, public speaking, examinations
Naturalistic stressors:	Interpersonal	social defeat, separation, marital conflict, divorce, bereavement, job loss, care-giving to chronically ill relatives, examinations, battle task vigilance, natural disasters

Studies in neuroimmunology have identified complex feedback loops that operate in response to physiological threats. These centre on the hypothalamus-pituitary-adrenal axis and corticosteroid production but also involve prolactin, growth hormone, enkephalins, oxytocin and the sex hormones (Felten, Felten, Bellinger, & Madden, 1993; Hooghe, Delhase, & Vergani, 1993; Sternberg, 1997; Watkins, 1994), and include an interplay with cytokines, most notably the inflammatory cytokines (Biondi & Zannino, 1997; Chrousos & Gold, 1992; Khansari, Murgo, & Faith, 1990; Ottaviani & Franceshi, 1996). In addition there is activation of the sympathetic nervous system and consequent release of catecholamines (Chrousos & Gold, 1992). Thus, a broad range of neuroendocrine,

hormonal and soluble immune factors interact in physiological stress responses and provide a physical substrate upon which psychological or perceived stress may be active.

Many studies have explored the relationship between human immune markers and the stresses associated with life events (Herbert & Cohen, 1993; Stone & Bovbjerg, 1994; van Rood, Bogaards, Goulmy, & van Houwelingen, 1993). Blood-derived immune measures associated with experimental or environmental stresses in humans include reduction in lymphocyte mitogenesis (Bachen, Manuck, Marsland, Cohen, Malkoff, et al., 1992; Brosschot, Benschop, Godaert, De Smet, Olff, et al., 1994; van Rood, Goulmy, Blokland, & Pool, 1995; Zakowski, 1995), changes in CD4/CD8 T lymphocyte ratios (Bachen et al., 1992; Brosschot, 1992; Naliboff, Benton, Solomon, Morley, Fahey, et al., 1991) and elevated Natural Killer cell numbers or activity (Bachen et al., 1992; Benschop, Brosschot, Godaert, De Smet, Geenen, et al., 1994; Benschop, Rodriguez-Feuerhahn, & Schedlowski, 1996; Brosschot et al., 1994; Naliboff et al., 1991). As well as HPA-axis-driven, corticosteroid-mediated effects (Cacioppo, Malarkey, Kiecolt-Glaser, Uchino, Sgoutas Emch, et al., 1995), some of these immune changes are dependent on sympathetic nervous system activation through catecholamine effects (Bachen, Manuck, Cohen, Muldoon, Raible, et al., 1995; Benschop, Rodriquez Feuerhahn, & Schedlowski, 1996; Cacioppo et al., 1995) while others display some association with endogenous opioid production (Naliboff, Solomon, Gilmore, & Benton, 1995). Further, the presence of chronic stress differentially modifies the sensitivity of the immune and cardiac systems to mild, acute stressors (Benschop et al., 1994).

Stressful Life Events, Perception of Stress and Modulation of Immunity

Much animal research has involved physical insults, but the relationship between stress and immunity cannot be explained simply in physical terms. The meaning of the stressor or stressful situation and the attitude which the animal adopts towards the situation are also highly pertinent. For example, early research with rats demonstrated that perceiving a stressor to be controllable or escapable modulates its effects on immune responsiveness (Laudenslager, Ryan, Drugan, Hyson, & Maier, 1983). When a rat is placed into the established territory of another rat for a brief period of time, its ability to produce antibodies in response to an administered antigen is reduced, particularly if the introduced animal adopts submissive postures. Antibody responses in non-submissive animals are relatively unaffected (Fleshner, Laudenslager, Simons, & Maier, 1989).

With humans, there is a considerable literature about neuroimmune relationships associated with experimentally-applied stressors, but the general correlation between stressful life events and illness is typically modest. This is due to a number of methodological problems such as reliance on retrospective data (Schroeder & Costa, 1984) and not monitoring whether the stresses were successfully resolved (Turner & Avison, 1992). As with animal work, human

stress research has nevertheless highlighted the importance of psychological appraisal and the manner in which stressful events are interpreted. For example, in students vaccinated against hepatitis B virus, the speed of development and overall level of antibody response were negatively influenced by perceived stress (Glaser, Kiecolt-Glaser, Bonneau, Malarkey, & Kennedy, et al., 1992; Jabaaij, Grosheide, Heijtink, Duivenvoorden, Ballieux, et al., 1993). Moreover, students who reported greater social support demonstrated a stronger immune response to the vaccine (Glaser et al., 1992).

Perceived stress, as opposed to stress measured by life-event methodology, has been found to be more closely associated with a number of illnesses and correlated immune changes in studies using prospective research designs. In a ground-breaking series of studies involving controlled challenge of volunteers with upper respiratory tract viruses, Cohen and colleagues explored the effects of perceived stress, negative affect, and social support on susceptibility to infection. Rates of both respiratory infection and symptoms of clinical colds increased in a dose-response manner with increases in the degree of perceived stress reported at the time of virus challenge (Cohen, Tyrrell, & Smith, 1991). Increased risk of acute respiratory illness was attributable to increased rates of infection rather than to an increased frequency of symptoms after infection, although state and trait negative affect were associated with symptom reporting (Cohen, Doyle, Skoner, Fireman, Gwaltney, et al., 1995; Cohen, Tyrrell, & Smith, 1993). Most recently, these researchers examined the impact of social involvement as a potential modulator of infection and found that more diverse involvement in social networks were associated with greater resistance to upper respiratory illness (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997).

Other studies have found relationships between the stress of caring for chronically-ill relatives and slower wound healing (Kiecolt-Glaser, Marucha, Malarkey, Mercado, & Glaser, 1995), as well as diminished responsiveness to vaccination (Kiecolt-Glaser, Glaser, Gravenstein, Malarkey, & Sheridan, 1996). In these studies, care-giver groups also had correspondingly reduced production of various cytokines instrumental in wound healing (Kiecolt-Glaser et al., 1995) and integral to the response stimulated by viral vaccines (Kiecolt-Glaser et al., 1996).

In summary, while it has long been known that some relationship exists between one's psychosocial environment and the frequency and severity of infections, the impact of such factors as perceived stress, anxiety, family functioning, social support and life events on susceptibility to infectious diseases has only recently been researched more systematically. Extensive reviews of this area (Cohen & Williamson, 1991; Herbert & Cohen, 1993; Stone & Bovbjerg, 1994; van Rood et al., 1993) have concluded that there is substantial convincing evidence for an association between perceived stress and increased illness behaviour, and provocative evidence for a similar association between psychological states and infectious pathology.

Emotional Disclosure, Immune Variables and Health

The stress research aspects of psychoneuroimmunology tell us that how we interpret and understand events in our lives has an impact on the way our immune systems function. Could this be capitalised on therapeutically in any way?

There is overwhelming evidence that traumatic experiences promote mental and physical health problems, and mounting evidence from several disciplines that talking or writing about these events can be beneficial. Spontaneous nonverbal expression of emotion is known to be associated with immediate reductions in autonomic nervous system activity. Changes in autonomic activity also occur when individuals are encouraged to express their emotions verbally. These physiological changes are most likely to occur among individuals who are either verbally or nonverbally highly expressive, suggesting that when individuals must actively inhibit emotional expression, they are at increased risk for a variety of health problems. Conversely, expressing traumatic experiences by writing or talking improves physical health and is associated with fewer medical visits (Pennebaker, 1989, 1993; Pennebaker, Barger, & Tiebout, 1989; Pennebaker, Colder, & Sharp, 1990; Watson & Pennebaker, 1989).

Moreover, subjects who disclosed more severe traumas reported fewer physical symptoms over subsequent months, compared with low-severity trauma subjects, and health benefits occurred when severe traumas were disclosed, regardless of previous disclosure (Greenberg & Stone, 1992).

Clearly, if such factors as emotions and stressful events can have an impact on immune system behaviour then it is conceivable that coping and response styles may also be immunomodulatory and that repressing or expressing such feelings may affect immune behaviour in different ways. Factors which reduce the ability of the individual to confide or discuss upsetting events may aggravate immunological dysfunction and increase the likelihood of illness (Glaser, Pearson, Bonneau, Esterling, Atkinson, et al., 1993; Kennedy, Kiecolt-Glaser, & Glaser, 1988; Kiecolt-Glaser, Malarkey, Chee, Newton, Cacioppo, et al., 1993). There is also evidence that victims of traumatic life events that are socially embarrassing or difficult to confide to others, such as sexual abuse and rape, may have greater vulnerability to poor health (Pennebaker, Kiecolt-Glaser, & Glaser, 1988; Petrie, Booth, & Davison, 1995a). Such studies also suggests that nondisclosure of upsetting events or actively inhibiting emotional expression can aggravate the adverse health toll of such traumas (Greenberg & Stone, 1992; Murray & Segal, 1994; Pennebaker, 1989; Pennebaker, Hughes, & O'Heeron, 1987).

Various investigations have demonstrated relationships between emotional disclosure and changes in immune variables. An early study revealed that when volunteers were asked to write emotionally about personally traumatic events, they manifested significant changes in response of T lymphocytes to stimulation when compared with those of control subjects asked to write descriptively about mundane topics (Pennebaker et al., 1988). In another study, repression of negative affect, as measured by a laboratory task involving disclosure of

emotional material, correlated with poorer control of latent Epstein-Barr virus (EBV) infection (Esterling, Antoni, Kumar, & Schneiderman, 1990). Subjects assigned to write or talk about stressful events displayed significantly less evidence of EBV reactivation over a four week period when compared with subjects assigned to the trivial disclosure control group (Esterling, Antoni, Fletcher, Margulies, & Schneiderman, 1994) and an ability to become absorbed in the disclosure process was predictive of this effect (Lutgendorf, Antoni, Kumar, & Schneiderman, 1994). In more recent work in which subjects verbally disclosed personal information regarding a traumatic or stressful experience, significant increases in NK cell cytotoxicity were observed compared with nondisclosure controls (Christensen, Edwards, Wiebe, Benotsch, McKelvey, et al., 1996). Furthermore, the effect of self-disclosure on NK cell activity was moderated by the individual's level of hostility, with high hostility subjects exhibiting a significantly greater increase in NK cytotoxicity than low hostility subjects.

Our own research has assessed the relationship between psychological variables and the production of antibodies in response to recombinant hepatitis B vaccination (Petrie, Booth, Pennebaker, Davison, & Thomas, 1995b). We found that subjects in the emotional writing group subsequently generated significantly higher serum antibody concentrations against hepatitis B over the following six months compared with those in the descriptive writing control group. We have also explored the effects of emotional disclosure on short-term changes in circulating lymphocyte subpopulations and found elevated T lymphocyte levels in the control writing group relative to the emotional writing group for two weeks following the writing intervention; a finding which was also consistent with the emotional disclosure intervention having a buffering effect on stressful events (Booth, Petrie, & Pennebaker, 1997). Our most recent research investigated the effects of thought suppression on short-term changes in lymphocyte subpopulations and revealed differential effects of emotional writing, descriptive writing, and thought suppression on changes in circulating lymphocyte populations over the course of the intervention (Petrie, Booth, & Pennebaker, 1998b).

Hypnosis-Related Effects

Hypnosis has been used effectively in the management of asthma and allergies (Wyler-Harper, Bircher, Langewitz, & Kiss, 1994). Given that immune mechanisms involving the IgE antibody class are important in many allergies, various studies have been conducted to investigate whether hypnosis could affect response to allergic provocation. The most usual method has used the immediate hypersenitivity skin test in which small samples of allergens are pricked into the top layer of skin on a person's arm. A raised weal and reddened flare is produced within a few minutes if the person is allergic to the substance. A similar reaction is produced in all people with a solution of histamine, which is one of the body substances that mediates the weal and flare reaction to allergens. A spate of papers published in the 1960s reported that hypnosis could be used to alter responses to allergic provocation (Black, 1963a, 1963b; Black, Humphrey, & Niven, 1963; Fry, Mason, & Pearson, 1964; Levine, Geer, & Kost, 1966). More recently, this approach has been revisited (Zachariae, Bjerring, & Arendt-Nielsen, 1989; Zachariae & Bjerring, 1993). Our initial studies also indicated that there was considerable day-to-day variation in such skin responses (Laidlaw, Richardson, Booth, & Large, 1994) and that much of it could be explained by changes in daily mood factors (Laidlaw et al., 1994a). In later work, we explored the question of how much hypnotically-induced changes in skin response to allergic provocation could be due to hypnotically-induced mood changes and whether hypnotisability might also be as a contributory factor. We found that volunteeers could deliberately decrease their reactivity to histamine and allergen skin prick testing using a hypnotic visualisation procedure (Laidlaw, Booth, & Large, 1996; Laidlaw, Large, & Booth, 1997) and that mood and physiological variables but not hypnotisability scores were important contributors to the effect. Feelings of irritability and tension and higher blood pressure readings were associated with less hypnotically-induced change in weal size, while peacefulness and a lower blood pressure were associated with larger decreases in skin reactivity under hypnosis. How much of this effect was due to changes in immune parameters is not known at present, and it is conceivable that hypnotically-induced alteration in local blood flow was a more important factor (Zachariae, Oster, & Bjerring, 1994).

Another skin-based immune measure is the delayed-type hypersensitivity (DTH) reaction in which individuals who have immunological memory for a specific organism (e.g., Mycobacterium tuberculosis) generate a raised red lump in the skin 24–48 hours after intradermal injection of a small amount of the antigen from that organism (e.g., tuberculin). Although various researchers have assessed whether the size of the skin reaction in DTH can be affected by hypnosis, the results have been inconsistent, with some studies reporting a hypnotically-related change (usually a reduction) in the size of the skin lesion (Black, et al., 1963; Zachariae, et al., 1989) and other failing to find any effect (Locke, Ransil, Covino, Toczydlowski, Lohse, et al., 1987; Locke, Ransil, Zachariae, Molay, Tollins, et al., 1994).

Changes in salivary IgA concentrations have also been reported to alter following hypnosis or relaxation training. In a group of 50 volunteers Green and Green (1987) compared four relaxation methods and found significant increases in salivary IgA concentrations (but no changes in salivary cortisol) after relaxation compared with control groups. Olness, Culbert, and Uden (1989) examined control of salivary IgA in children by comparing learned self-hypnosis including suggestions to increase immune substances in saliva, with a control non-hypnotic intervention. They found that the hypnosis/suggestion intervention group had a statistically significant change in salivary antibodies but the effect was unrelated to hypnotic susceptibility as measured by the Stanford Children's Scale (Morgan & Hilgard, 1979).

A variety of other immune measures have been reported to be affected by hypnotic interventions. Short-term changes in the activities of monocytes and neutrophils (important phagocytic cell types in the blood) have been affected by hypnotic means. In the study by Zachariae, Bjerring, Zachariae, Arendt Nielsen, Nielsen et al. (1991), 11 highly hypnotically-susceptible volunteers, while in a deep trance, were given suggestions to re-experience earlier life experiences involving intense anger and depression. Significant differences in monocyte chemotactic activity occurred between the angry and the depressed emotional states, and between the happy relaxed emotional state and the other states including the before-hypnosis values. None of these effects could be explained by changes in concentrations of stress hormones such as serum cortisol or catecholamines. In another study (Hall, Minnes, Tosi, & Olness, 1992), subjects with prior cyberphysiologic training that included suggestions for voluntary immunomodulation were able to induce a significant increase in adherence of blood neutrophils (a marker of neutrophil activation).

Changes in numbers of circulating lymphocyte subpopulations (Ruzyla-Smith, Barabasz, Barabasz, & Warner, 1995), proliferative capacity of blood lymphocytes, and Natural Killer (NK) cell activity (Zachariae, Hansen, Andersen, Jinquan, Petersen, et al., 1994), have also been reported following hypnotic interventions, although the results have not all been consistent. Recently, selfhypnosis as a means of managing stress and fatigue during student examination time was investigated for immune effects (Whitehouse, Dinges, Orne, Keller, Bates, et al., 1996). Although subjects in the self-hypnosis condition reported significantly less distress and anxiety than their non-intervention counterparts, the two groups did not differ with respect to immune function. Nevertheless, within the self-hypnosis group, the quality of the exercises predicted both the number and activity of NK cells.

In summary, while there are data suggesting that hypnosis can affect some immune parameters, the magnitude of the effects are not large and may be variable. It is also not clear what aspects of the hypnotic procedure are effective, and the fact that a number of studies found no correlation with hypnotic susceptibility could be taken to indicate that it may be the relaxation or focused attention aspects of the intervention rather that hypnotic suggestion that are pertinent.

Teleological Coherence and Harmony of Purpose

How then, can we make sense of all these findings in terms of the title of this paper Psychoneuroimmunology and mind-body healing? Elsewhere, I have suggested a model which seeks to go beyond a purely biophysical construction of the immune system and to link its self-generative and self/non-selfdistinguishing characteristics to psychological, social and cultural processes (Booth & Ashbridge, 1992, 1993).

This model proposes that the immune system, engaged in a broader process of self-determination, shares with the neurological and psychological domains the common goal of establishing and maintaining self-identity. Further, the nature of the relationships is governed by the requirement for coherent coordination among all these self-defining aspects of an individual.

From the perspective of a living individual, this means that the framework in which immune recognition occurs cannot be considered only as the antigenic or receptor-related, molecular context, but as all the domains of life in which the individual defines him or herself. As a result, the meaning of events surrounding an antigenic stimulus may condition the features (nature, specificity, magnitude, duration, etc.) of any observed immune response. Conversely, the behaviour of the immune system towards self and non-self antigens can influence self and relational perceptions within psychosociocultural domains. We experience this in a transient way when we contract a cold, for example, and see the world and our relationship to it differently. Physiologically, these effects can be explained through mechanisms of hormonal cross-talk (cytokines, etc.) between the traditional immune system and the nervous system as discussed earlier, but such explanations tell us little about the events in the context of coherent self-generation and maintenance.

One important implication of this model is that the sort of immune behaviour observed at different developmental stages of an individual's life will differ, but all will be appropriate to and coherent with necessities of that stage. Moreover, parallels should be observable among the different domains. For example (as discussed in more detail elsewhere (Booth & Ashbridge, 1992, 1993), there are broad parallels between psychosocial and immunological patterns of behaviour during different developmental stages of life. The neonatal period is a time of nascent self/non-self boundary formation and development of a diverse repertoire of response patterns. During the adult years, the potentials of established boundaries and response patterns are explored and refined, while old age can be seen as a time more of introspection, accommodation, involution and disintegration of self boundaries. This analysis contrasts with the current tendency to consider immune activity as something that builds to reach a pinnacle in early adult life and then gradually diminishes or decays.

Another intriguing finding in accord with a harmony of purpose model concerns the multiple functions of certain vital immune components called Major Histocompatibility Complex (MHC) molecules (in humans the main ones are called HLA). The MHC molecules are fundamental antigen-presenting structures of the immune system and are intimately involved in determining whether tissue grafts from one person to another are accepted or rejected. It is perhaps not surprising therefore that these same MHC molecules are important in an aspect of the limbic system also intimately involved in self-identity — the olfactory system. Soluble MHC molecules are excreted in urine and other body fluids carrying a profile of volatile specific compounds (Eggert, Holler, Luszyk, Muller Ruchholtz, & Ferstl, 1996), that influence both body odours and body odour preferences (Wedekind, Seebeck, Bettens, & Paepke, 1995). Thus, the MHC not only plays a key role in the immune system self/non-self recognition, but contributes as well to non-immunological functions associated with self-identity.

Self-Expression, Harmony of Purpose and Healing

In conclusion, the over-riding metaphor of the immune system is therefore still deeply rooted in defence against a threatening outside (non-self) world, and for many the tendency is to try to understand many of the findings of psychoneuroimmunology under this rubric. With increased understanding of the physiology and molecular mechanics of immune system operation, together with the successes of immunisation as a medical intervention, has come a popular perception of the importance of a well-functioning immune system in human health. Indeed, our research has shown that people rate their immune systems as functioning well when they are feeling full of energy and vitality, and functioning poorly when lethargic or fatigued (Petrie, Booth, Holmes, & Cameron, 1998). In this discourse, illness is viewed as a deviant state related to the effectiveness of immune function such that depressed or defective immunity is correspondingly associated with poor health. Such notions accord well with the considerable popularity of natural health remedies and psychosocial interventions as methods for boosting immunity by giving medical legitimacy to the quest for something to make one feel more vigorous and therefore more healthy.

I claim however, that the immune system does not work in this way. Instead, it functions appropriately and in harmony with the context of the individual at all times. Understanding immune behaviour in terms of harmony of purpose among the different self-defining domains of an individual means that we begin to see immunity much more in terms of coherence of self-expression than as defence. Metaphorically the immune system functions less as a soldier and more as a gardener; or more like a neighbourhood watch than a posse. It follows then, that the meaning of events in a psychosociocultural context may have implications for the meaning of self in an immunological context. Moreover, just as our world-view is altered during immune-related illness, altering the meaning of potent events in our lives (e.g., by emotional expression; by hypnosis; by cognitive changes) might be expected also to affect immune activity (Booth, 1996).

This is the strength of psychoneuroimmunology if it guides us to conceive of different paths to altering self-defining processes, different ways of making sense of the events of our lives and integrating them into a vital wholeness — as in the original derivation of the word healing.

REFERENCES

- Ader, R. (1989). Conditioning effects in pharmacotherapy and the incompleteness of the double-blind, cross-over design. Integrative Psychiatry, 6, 165-170.
- Ader, R., & Cohen, N. (1975). Behaviorally conditioned immunosuppression. Psychosomatic Medicine, 37, 333-340.
- Ader, R., & Cohen, N. (1982). Behaviorally conditioned immunosuppression and murine systemic lupus erythematosus. Science, 215, 1534–1536.
- Ader, R., & Cohen, N. (1993). Psychoneuroimmunology: Conditioning and stress. Annual Review of Psychology, 44, 53-85.

- Ader, R., Felten, D., & Cohen, N. (1990). Interactions between the brain and the immune system. Annual Review of Pharmacology and Toxicology, 30, 561-602.
- Bachen, E. A., Manuck, S. B., Cohen, S., Muldoon, M. F., Raible, R., Herbert, T. B., & Rabin, B. S. (1995). Adrenergic blockade ameliorates cellular immune responses to mental stress in humans. Psychosomatic Medicine, 57, 366–372.
- Bachen, E. A., Manuck, S. B., Marsland, A. L., Cohen, S., Malkoff, S. B., Muldoon, M. F., & Rabin, B. S. (1992). Lymphocyte subset and cellular immune responses to a brief experimental stressor. Psychosomatic Medicine, 54, 673-679.
- Benschop, R. J., Brosschot, J. F., Godaert, G. L., De Smet, M. B., Geenen, R., Olff, M., Heijnen, C. J., & Ballieux, R. E. (1994). Chronic stress affects immunologic but not cardiovascular responsiveness to acute psychological stress in humans. American Journal of Physiology, 266, R75-80.
- Benschop, R. J., Rodriguez-Feuerhahn, M., Schedlowski, M. (1996). Catecholamine-induced leukocytosis: Early observations, current research, and future directions. Brain, Behavior and Immunity, 10, 77-91.
- Biondi, M., & Zannino, L. G. (1997). Psychological stress, neuroimmunomodulation, and susceptibility to infectious diseases: A review. Psychotherapy and Psychosomatics, 66, 3-26.
- Black, S. (1963a). Inhibition of immediate-type hypersensitivity response by direct suggestion under hypnosis. British Medical Journal, 1, 925–929.
- Black, S. (1963b). Shift in dose-response curve of prausnitz-kustner reaction by direct suggestion under hypnosis. British Medical Journal, 1, 990–992.
- Black, S., Humphrey, J. H., & Niven, J. S. F. (1963). Inhibition of mantoux reaction by direct suggestion under hypnosis. British Medical Journal, 1, 1649–1652.
- Blalock, J. E. (1984). The immune system as a sensory organ. Journal of Immunology, 132, 1067– 1070.
- Blalock, J. E., & Smith, E. M. (1985). The immune system: Our mobile brain? Immunology Today, *6*, 115–142.
- Booth, R. J. (1990). The psychoneuroimmune network: Expanding our understanding of immunity and disease. New Zeland Medical Journal, 103, 314-316.
- Booth, R. J. (1996). New directions in psychoneuroimmunology: A commentary on a commentary. Advances, 12, 12-6.
- Booth, R. J., & Ashbridge, K. R. (1992). Teleological coherence: Exploring the dimensions of the immune system. Scandinavian Journal of Immunology, 36, 751–759.
- Booth, R. J., & Ashbridge, K. R. (1993). A fresh look at the relationship between the psyche and immune system: Teleological coherence and harmony of purpose. Advances, 9, 4-23.
- Booth, R. J., Petrie, K. J., & Brook, R. J. (1995). Conditioning allergic skin responses in humans: A controlled trial. Psychosomatic Medicine, 57, 492–495.
- Booth, R. J., Petrie, K. J., & Pennebaker, J. W. (1997). Changes in circulating lymphocyte numbers following emotional disclosure: Evidence of buffering? Stress Medicine, 13, 23–29.
- Brosschot, J. F., Benschop, R. J., Godaert, G. L., De Smet, M. B., Olff, M., Heijnen, C. J., & Ballieux, R. E. (1992). Effects of experimental psychological stress on distribution and function of peripheral blood cells. *Psychosomatic Medicine*, 54, 394–406.
- Brosschot, J. F., Benschop, R. J., Godaert, G. L., Olff, M., De Smet, M., Heijnen, C. J., & Ballieux, R. E. (1994). Influence of life stress on immunological reactivity to mild psychological stress. Psychosomatic Medicine, 56, 216–224.
- Buske-Kirschbaum, A., Kirschbaum, C., Stierle, H., Lehnert, H., & Hellhammer, D. (1992) Conditioned increase of natural killer cell activity (NKCA) in humans. Psychosomatic Medicine, 54, 123-132.

- Cacioppo, J. T., Malarkey, W. B., Kiecolt-Glaser, J. K., Uchino, B. N., Sgoutas Emch, S. A., Sheridan, J. F., Berntson, G. G., & Glaser, R. (1995). Heterogeneity in neuroendocrine and immune responses to brief psychological stressors as a function of autonomic cardiac activation. Psychosomatic Medicine, 57, 154-164.
- Christensen, A. J., Edwards, D. L., Wiebe, J. S., Benotsch, E. G., McKelvey, L., Andrews, M., & Lubaroff, D. M. (1996). Effect of verbal self-disclosure on natural killer cell activity: Moderating influence of cynical hostility. *Psychosomatic Medicine*, 58, 150–155.
- Chrousos, G. P., & Gold, P. W. (1992). The concepts of stress and stress system disorders. Overview of physical and behavioral homeostasis. Journal of the American Medical Association, 267, 1244-1252.
- Cohen, N., & Ader, R. (1988). Immunomodulation by classical conditioning. Advances in Biochemical Psychopharmacology, 44, 199-202.
- Cohen, S., Doyle, W. J., Skoner, D. P., Fireman, P., Gwaltney, J. M., Jr., & Newsom, J. T. (1995). State and trait negative affect as predictors of objective and subjective symptoms of respiratory viral infections. Journal of Personality and Social Psychology, 68, 159–169.
- Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M. (1997). Social ties and susceptibility to the common cold. Journal of the American Medical Association, 277, 1940-1944.
- Cohen, N., Moynihan, J. A., & Ader, R. (1994). Pavlovian conditioning of the immune system. International Archives of Allergy and Immunology, 105, 101–106.
- Cohen, S., Tyrrell, D. A., & Smith, A. P. (1991). Psychological stress and susceptibility to the common cold. New England Journal of Medicine, 325, 606-612.
- Cohen, S., Tyrrell, D. A., & Smith, A. P. (1993). Negative life events, perceived stress, negative affect, and susceptibility to the common cold. Journal of Personality and Social Psychology, 64, 131-140.
- Cohen, S., & Williamson, G. M. (1991). Stress and infectious disease in humans. Psychological Bulletin, 109, 5-24.
- Cunningham, A. J. (1981). Mind, body, and immune response. In R. Ader & N. Cohen (Eds.). Psychoneuroimmunology (pp. 609-617). New York: Academic Press.
- Eggert, F., Holler, C., Luszyk, D., Muller Ruchholtz, W., & Ferstl, R. (1996). MHC-associated and MHC-independent urinary chemosignals in mice. Physiology and Behavior, 59, 57-62.
- Esterling, B. A., Antoni, M. H., Fletcher, M. A., Margulies, S., & Schneiderman, N. (1994). Emotional disclosure through writing or speaking modulates latent Epstein-Barr virus antibody titers. Journal of Consulting and Clinical Psychology, 62, 130-140.
- Esterling, B. A., Antoni, M. H., Kumar, M., & Schneiderman, N. (1990). Emotional depression, stress disclosure responses, and Epstein-Barr viral capsid antigen titers. Psychosomatic Medicine, 52, 397-410.
- Felten, D. L., Felten, S. Y., Bellinger, D. L., & Madden, K. S. (1993). Fundamental aspects of neural-immune signaling. Psychotherapy and Psychosomatics, 60, 46–56.
- Fleshner, M., Laudenslager, M. L., Simons, L., & Maier, S. F. (1989). Reduced serum antibodies associated with social defeat in rats. Physiology and Behavior, 45, 1183-1187.
- Fry, L., Mason, A. A., & Pearson, R. S. B. (1964). Effect of hypnosis on allergic skin responses in asthma and hay-fever. British Medical Journal, 1, 1145–1148.
- Giang, D. W., Goodman, A. D., Schiffer, R. B., Mattson, D. H., Petrie, M., Cohen, N., & Ader, R. (1996). Conditioning of cyclophosphamide-induced leukopenia in humans. Journal of Neuropsychiatry and Clinical Neurosciences, 8, 194-201.
- Glaser, R., Kiecolt-Glaser, J. K., Bonneau, R. H., Malarkey, W., Kennedy, S., & Hughes, J. (1992). Stress-induced modulation of the immune response to recombinant hepatitis B vaccine. Psychosomatic Medicine, 54, 22–29.

- Glaser, R., Pearson, G. R., Bonneau, R. H., Esterling, B. A., Atkinson, C., & Kiecolt-Glaser, J. K. (1993). Stress and the memory T-cell response to the Epstein-Barr virus in healthy medical students. Health Psychology, 12, 435–442.
- Green, R. G., & Green, M. L. (1987). Relaxation increases salivary IgA. Psychological Reports, 61, 623-629.
- Greenberg, M. A., & Stone, A. A. (1992). Emotional disclosure about traumas and its relation to health: Effects of previous disclosure and trauma severity. Journal of Personality and Social Psychology, 63, 75-84.
- Grota, L. J., Schachtman, T. R., Moynihan, J. A., Cohen, N., & Ader, R. (1989). Voluntary consumption of cyclophosphamide by Mrl mice. Brain, Behavior and Immunity, 3, 263-73.
- Hall, H. R., Minnes, L., Tosi, M., & Olness, K. (1992). Voluntary modulation of neutrophil adhesiveness using a cyberphysiologic strategy. International Journal of Neuroscience, 63, 287-297.
- Herbert, T. B., & Cohen, S. (1993). Stress and immunity in humans: A meta-analytic review. Psychosomatic Medicine, 55, 364–379.
- Hooghe, R., Delhase, M., & Vergani, P. (1993). Growth hormone and prolactin are paracrine growth and differentiation factors in the hemopoietic system. Immunology Today, 14, 212-214.
- Jabaaij, L., Grosheide, P. M., Heijtink, R. A., Duivenvoorden, H. J., Ballieux, R. E., & Vingerhoets, A. J. (1993). Influence of perceived psychological stress and distress on antibody response to low dose rDNA hepatitis B vaccine. Journal of Psychosomatic Research, 37, 361–369.
- Kennedy, S., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Immunological consequences of acute and chronic stressors: Mediating role of interpersonal relationships. British Journal of Medical Psychology, 61, 77-85.
- Khansari, D. N., Murgo, A. J., & Faith, R. E. (1990). Effects of stress on the immune system. Immunology Today, 11, 170-175.
- Kiecolt-Glaser, J. K., Glaser, R., Gravenstein, S., Malarkey, W. B., & Sheridan, J. (1996). Chronic stress alters the immune response to influenza virus vaccine in older adults. Proceedings of the National Academy of Sciences, 93, 3043-3047.
- Kiecolt-Glaser, J. K., Malarkey, W. B., Chee, M., Newton, T., Cacioppo, J. T., Mao, H. Y., & Glaser, R. (1993). Negative behavior during marital conflict is associated with immunological down-regulation. Psychosomatic Medicine, 55, 395-409.
- Kiecolt-Glaser, J. K., Marucha, P. T., Malarkey, W. B., Mercado, A. M., & Glaser, R. (1995). Slowing of wound healing by psychological stress. *Lancet*, 346, 1194–1196.
- Kirschbaum, C., Jabaaij, L., Buske-Kirschbaum, A., Hennig, J., Blom, M., Dorst, K., Bauch, J., DiPauli, R., Schmitz, G., Ballieux, R. et al. (1992). Conditioning of drug-induced immunomodulation in human volunteers: A European collaborative study. British Journal of Clinical Psychology, 31, 459–472.
- Laidlaw, T. M., Booth, R. J., & Large, R. G. (1994a). The variability of type I hypersensitivity reactions: The importance of mood. *Journal of Psychosomatic Research*, 38, 51–61.
- Laidlaw, T. M., Booth. R. J., & Large, R. G. (1996). Reduction in skin reactions to histamine after an hypnotic procedure. Psychosomatic Medicine, 58, 242–248.
- Laidlaw, T. M., Large, R. G., & Booth, R. J. (1997). Diminishing skin test reactivity to allergens with an hypnotic intervention. In W. J. Matthews, & J. H. Edgette (Eds.). Current thinking and research in brief therapy: Solutions, strategies, narratives, Vol. 1 (pp. 203-212). New York: Brunner/Mazel.
- Laidlaw, T. M., Richardson, D. H., Booth, R. J., & Large, R. G. (1994). Immediate-type hypersensitivity reactions and hypnosis: Problems in methodology. Journal of Psychosomatic Research, 38, 569-580.

- Laudenslager, M. L., Ryan, S. M., Drugan, R. C., Hyson, R. L., & maier, S. F. (1983). Coping and immunosuppression: inescapable but not escapable shock suppresses lymphocyte proliferation. Science, 221, 568-570.
- Levine, M. I., Geer, J. H., & Kost, P. F. (1966). Hypnotic suggestion and the histamine wheal. Journal of Allergy, 37, 246-250.
- Locke, S. E., Ransil, B. J., Covino, N. A., Toczydlowski, J., Lohse, C. M., Dvorak, H. F., Arndt, K. A., & Frankel, F. H. (1987). Failure of hypnotic suggestion to alter immune response to delayed type hypersensitivity antigens. Annals of the New York Academy of Science, 496, 745-749.
- Locke, S. E., Ransil, B. J., Zachariae, R., Molay, F., Tollins, K., Covino, N. A., & Danforth, D. (1994). Effect of hypnotic suggestion on the delayed-type hypersensitivity response. Journal of the American Medical Association, 272, 47-52.
- Lutgendorf, S. K., Antoni, M. H., Kumar, M., & Schneiderman, N. (1994). Changes in cognitive coping strategies predict EBV-antibody titre change following a stressor disclosure induction. Journal of Psychosomatic Research, 38, 63-78.
- Morgan, A. H., & Hilgard, J. R. (1979). Stanford hypnotic clinical scale and the revised Stanford hypnotic clinical scale for children. American Journal of Clinical Hypnosis, 21, 134-147.
- Murray, E. J., & Segal, D. L. (1994). Emotional processing in vocal and written expression of feelings about traumatic experiences. Journal of Trauma Stress, 7, 391–405.
- Naliboff, B. D., Benton, D., Solomon, G. F., Morley, J. E., Fahey, J. L., Bloom, E. T., Makinodan, T., & Gilmore, S. L. (1991). Immunological changes in young and old adults during brief laboratory stress. Psychosomatic Medicine, 53, 121-132.
- Naliboff, B. D., Solomon, G. F., Gilmore, S. L., & Benton, D. (1995). The effects of the opiate antagonist naloxone on measures of cellular immunity during rest and brief psychological stress. Journal of Psychosomatic Research, 39, 345–359.
- Olness, K., & Ader, R. (1992). Conditioning as an adjunct in the pharmacotherapy of lupus erythematosus. Journal of Developmental Behavioral Pediatrics, 13, 124–125.
- Olness, K., Culbert, T., & Uden, D. (1989). Self-regulation of salivary immunoglobulin A by children. Pediatrics, 83, 66-71.
- Ottaviani, E., & Franceschi, C. (1996). The neuroimmunology of stress from invertebrates to man. Progress in Neurobiology, 48, 421-440.
- Pennebaker, J. W. (1989). Confession, inhibition, and disease. Advances in Experimental Social Psychology, 22, 211-244.
- Pennebaker, J. W. (1993). Putting stress into words: Health, linguistic, and therapeutic implications. Behavior Research and Therapy, 31, 539-548.
- Pennebaker, J. W., Barger, S. D., & Tiebout, J. (1989). Disclosure of traumas and health among Holocaust survivors. *Psychosomatic Medicine*, 51, 577–589.
- Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. Journal of Personality and Social Psychology, 58, 528–537.
- Pennebaker, J. W., Hughes, C. F., & O'Heeron, R. C. (1987). The psychophysiology of confession: Linking inhibitory and psychosomatic processes. Journal of Personality and Social Psychology, 52, 781-793.
- Pennebaker, J. W., Kiecolt-Glaser, J. K., & Glaser, R. (1988). Disclosure of traumas and immune function: Health implications for psychotherapy. Journal of Consulting and Clinical Psychology, 56, 239-245.
- Petrie, K. J., Booth, R. J., & Davison, K. P. (1995). Repression, disclosure and immune function: Recent findings and methodological issues. In J. W. Pennebaker (Ed.). Emotion, disclosure and health (pp. 223–238). Washington, DC: American Psychological Association.

- Petrie, K. J., Booth, R. J., Holmes, H., & Cameron, L. D. (1998). Psychological influences on the perception of immune function. *Psychological Medicine* (in press).
- Petrie, K. J., Booth, R. J., Pennebaker, J. W., Davison, K. P., & Thomas, M. G. (1995). Disclosure of trauma and immune response to a hepatitis B vaccination program. *Journal of Consulting and Clinical Psychology*, 63, 787–792.
- Petrie, K. J., Booth, R. J., & Pennebaker, J. W. (1998). The immunological effects of thought suppression. *Journal of Personality and Social Psychology* (in press).
- Ruzyla-Smith, P., Barabasz, A., Barabasz, M., & Warner, D. (1995). Effects of hypnosis on the immune response: B-cells, T-cells, helper and suppressor cells. *American Journal of Clinical Hypnosis*, 38, 71–79.
- Schroeder, D. H., & Costa, P. T. (1984). Influence of life event stress on physical illness: Substantive effects or methodological flaws? *Journal of Personality and Social Psychology*, 46, 853–863.
- Sternberg, E. M. (1997). Emotions and disease: From balance of humors to balance of molecules. *Nature Medicine*, *3*, 264–267.
- Stone, A. A., & Bovbjerg, D. H. (1994). Stress and humoral immunity: A review of the human studies. *Advances in Neuroimmunology*, *4*, 49–56.
- Turner, R. J., & Avison, W. R. (1992). Innovations in the measurement of life stress: Crisis theory and the significance of event resolution. *Journal of Health and Social Behavior*, 33, 36–50.
- van Rood, Y. R., Bogaards, M., Goulmy, E., & van Houwelingen, H. C. (1993). The effects of stress and relaxation on the in vitro immune response in man: A meta-analytic review. *Journal of Behavioral Medicine*, 16, 163–81.
- van Rood, Y. R., Goulmy, E., Blokland, E., & Pool, J. (1995). Stress related changes in immunological and psychological variables induced by the preparation and defense of a PhD-thesis. *Psychology and Health*, *10*, 229–244.
- Watkins, A. D. (1994). Hierarchical cortical control of neuroimmunomodulatory pathways. Neuropathology and Applied Neurobiology, 20, 423–431.
- Watkins, L. R., Goehler, L. E., Relton, J. K., Tartaglia, N., Silbert, L., Martin, D., & Maier, S. F. (1995). Blockade of interleukin-1 induced hyperthermia by sub-diaphragmatic vagotomy: Evidence for vagal mediation of immune-brain communication. *Neuroscience Letters*, 183, 27–31.
- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. *Psychological Review*, 96, 234–254.
- Wedekind, C., Seebeck, T., Bettens, F., & Paepke, A. J. (1995). MHC-dependent mate preferences in humans. Proceedings of the Royal Society of London Series B: *Biological Sciences*, 260, 245–249.
- Whitehouse, W. G., Dinges, D. F., Orne, E. C., Keller, S. E., Bates, B. L., Bauer, N. K., Morahan, P., Haupt, B. A., Carlin, M. M., Bloom, P. B., Zaugg, L., & Orne, M. T. (1996). Psychosocial and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. *Psychosomatic Medicine*, 58, 249–263.
- Wyler-Harper, J., Bircher, A. J., Langewitz, W., & Kiss, A. (1994). Hypnosis and the allergic response. *Schweizerische Medizinische Wochenschrift Supplementum*, 62, 67–76.
- Zachariae, R., & Bjerring, P. (1993). Increase and decrease of delayed cutaneous reactions obtained by hypnotic suggestions during sensitization: Studies on dinitrochlorobenzene and diphenylcyclopropenone. *Allergy*, 48, 6–11.
- Zachariae, R., Bjerring, P., & Arendt-Nielsen, L. (1989). Modulation of type I immediate and type IV delayed immunoreactivity using direct suggestion and guided imagery during hypnosis. *Allergy*, 44, 537–542.

- Zachariae, R., Bjerring, P., Zachariae, C., Arendt-Nielsen, L., Nielsen, T., Eldrup, E., Larsen, C. S., & Gotliebsen, K. (1991). Monocyte chemotactic activity in sera after hypnotically induced emotional states. *Scandinavian Journal of Immunology*, 34, 71–79.
- Zachariae, R., Hansen, J. B., Andersen, M., Jinquin, T., Petersen, K. S., Simonsen, C., Zachariae, C., & Thestrup Pedersen, K. (1994). Changes in cellular immune function after immune specific guided imagery and relaxation in high and low hypnotizable healthy subjects. Psychotherapy and Psychosomatics, 61, 74–92
- Zachariae, R., Oster, H., & Bjerring, P. (1994). Effects of hypnotic suggestions on ultraviolet B radiation-induced erythema and skin blood flow. *Photodermatology, Photoimmunology and Photomedicine*, 10, 154–160.
- Zakowski, S. G. (1995). The effects of stressor predictability on lymphocyte proliferation in humans. *Psychology and Health*, 10, 409–425.

A HYPNOTIC PROTOCOL FOR ELICITING PHYSICAL CHANGES THROUGH SUGGESTIONS OF BIOCHEMICAL RESPONSES

Antonio D. Madrid Susan v.d.H. Barnes Erickson Institute – Santa Rosa, California

We employed brief hypnotherapy to effect physical changes in patients suffering from medical disorders including allergies, rectal bleeding, systemic lupus, hyperemesis, headache, asthma, and chronic pain. We present, in language appropriate to the individual patient, considerations and suggestions to effect the release of healing biochemicals. Ideomotor signals indicated the patient's awareness of the healing. We hypothesise that the technique triggered novel state-dependent memory, learning, and behaviour.

The interaction between mind and body is well documented and is now widely accepted in medicine and psychology. Rossi (1987; Rossi & Cheek, 1988) has summarised a vast body of research documenting the mind's ability to bring about biochemical changes. He proposes that psychosomatic problems may be rooted in state-dependent memories and when these are accessed, mind-body healing can result. Although it is becoming clear that the mind can alter the body's functioning, the question to be answered is: "How can we bring about such changes?"

Negative physical symptoms caused by hypnosis have long been studied. Graham and others (Grace & Graham, 1952; Graham, Stem, & Winokur, 1958; Graham, 1962) studied the effect of hypnotically induced attitudes on autonomic patterns that resembled psychosomatic disorders. In these studies they hypnotised over 150 very hypnotisable subjects and presented them with suggestions that led to the autonomic reaction.

There were 12 different psychosomatic disorders elicited: urticaria, eczema, Raynaud's disease, vasomotor rhinitis, asthma, diarrhoea, constipation, nausea and vomiting, duodenal ulcer, migraine headache, arterial hypertension, and low back pain. They elicited each disorder by a different suggestion. For example, they asked subjects who developed eczema to feel that they were being interfered with or prevented from doing something and that they could not overcome the frustration. They were concerned with the obstacle rather than the goal (e.g., "I want to make my mother understand but I can't"). They suggested that duodenal ulcer subjects feel that they were seeking revenge and wished to injure a person or thing that had injured them.

Those studies demonstrated how a subject in hypnosis can regulate autonomic activity in a negative manner, that is, mimicking psychosomatic responses. In this paper we present a protocol for altering the body's mechanisms toward health. The procedure offers the patient a structured task using hypnotic techniques that can bring about a positive physical change.

THE HYPNOTIC PROTOCOL

- 1. Tell patients they can heal themselves by allowing the body to supply its own biochemicals needed to make them well. If a specific biochemical is known, such as cortisone or endorphins, name it.
- 2. Hypnotise the patient. Resistant or hard to hypnotise patients need not be deeply hypnotised because patients, using this protocol, will automatically go into trance while accomplishing the next task of accessing and using ideomotor signals (Erickson, 1980; Rossi & Cheek, 1988).
- Tell patients their index finger will automatically and involuntarily twitch and float when the body releases the biochemicals it needs. This ideomotor response (Rossi & Cheek, 1988) is the sole physical response required of the patient. Rossi hypothesises that the ideomotor response correlates with biochemical changes (Rossi & Cheek, 1988).
- 4. Next, ask the patient to consider some things (as described below). Present the considerations one after another until one of them triggers the ideomotor response.
- 5. In some instances, ask patients to practise on their own. Many patients who have dramatic emotional reactions during or at the completion of the task may not need to practise on their own.

THE "CONSIDERATIONS"

The "considerations" fall into different categories, not altogether unrelated or exclusive. A few categories with examples of the tasks are as follows:

- 1. Psychodynamic: "Consider that you are not blamed for anything; that you are, in fact, perfect just the way you are; that you are loved by those you care about." "Consider that you can forgive whoever needs forgiving for hurting you." "Consider that there are no longer any threats; everything is better; everything is as it used to be."
- 2. Autosuggestion: "Tell your body to heal. It knows what to do; so ask it to do it." "Tell your adrenal glands to produce the steroids that your body needs." "Allow a glowing light to permeate that injured back, filling it with healing energy."
- 3. *Incompatible responses:* "Cover yourself with a cool breeze, cooling the injured leg." "Imagine your back getting slack and limp and relaxed." "Imagine your stomach lining becoming smooth and moving with easy, ocean-like waves."
- 4. Emotion calling: "Consider yourself feeling very happy with everything, for no reason at all." "Consider yourself getting angry at someone - your mother, your wife (husband), your boss, your lawyer."
- 5. Bargaining: "Tell yourself that you will heal if you agree to stay away from that job." "Tell yourself you will heal by allowing your right arm to begin to hurt when you are over-exerting yourself." "Tell yourself that you will heal in exchange for something else, not so serious, to replace this disease and to serve the same function."

We present the considerations to the patient, one after the other, tailored to the patient's specific case, until their finger twitches or floats, indicating a biochemical response. Seven cases follow which demonstrate the procedure.

CASE PRESENTATIONS

Case 1: Allergies

A 12-year-old girl had been suffering with a stuffy and running nose continually for seven years, since she moved to the country. She was intelligent and well-adjusted. After she was hypnotised, she was told:

Your body has forgotten how to heal itself. I am going to have you consider some things; and when your body remembers how to heal itself, and STARTS DOING IT, your index finger will start twitching and floating uncontrollably.

First imagine yourself somewhere really nice, enjoying yourself. (No response.) Now imagine yourself getting angry at someone, maybe your brother, or your mother, or your father, or your teacher, or someone who gets you mad. (No response.) Tell your body to do what it knows how to do. (No response.) Consider that your nose is too small to be fighting off these pollens all by itself. You need to use the rest of your body to get involved in dealing with these irritants. Use your arms and chest and legs and stomach to handle these things. Your nose is so small and can't do it all. (Her finger twitched and floated and her legs and torso jerked for 15 seconds.) That's right; it's working now. And you can keep doing that now.

And your body will remember how to do it.

When she awoke her nose was clear. We told her to remember what we did and to do it whenever she felt she needed to. At a 3-month follow-up she was still clear.

Case 2: Rectal Bleeding

A 52-year-old woman presented with rectal bleeding that occurred occasionally for no known medical reason. She suffered a number of episodes over a course of several years, with each episode lasting for a few weeks. Her current bleeding had started a week before she consulted us. We asked her to give a 10-minute autobiography; the only item that seemed conflictual was a divorce that she talked about in a reasonable, civil manner. She said there was no anger, hurt, or resentment involved.

She was hypnotised easily, though not deeply, and was told:

When your body produces those biochemicals that are necessary to heal your bleeding, your index finger will twitch and float uncontrollably. First, consider being somewhere peaceful and enjoyable. (No response.) Now tell your body to do what it needs to do. (No response.) Now imagine yourself getting angry at someone important, like your parents, some colleague, your husband, your ex-husband. (Response at the mention of her ex-husband.

Her face flushed and she cried.) That's it now; your body is doing what it needs to do for you to get well. And it will continue to do so.

She awoke stating that she did not know that she was angry with her ex-husband. We told her that she may need to allow herself to continue feeling what she had saved up until now to feel. We saw her the next week and she reported that the bleeding had stopped the day of the hypnosis. Six weeks later there was no relapse. We attempted no other therapy (nor did we think it was needed) to help her deal with these feelings which had been blocked from her awareness.

Case 3: Systemic Lupus

A 36-year-old secretary had been diagnosed with systemic lupus three years before her consultation with us. She was frequently bedridden, in pain from inflamed joints. The only remedy she had found was from courses of prednisone. She was now seeking relief from pain. There was nothing significant in her history.

She was unable to be hypnotised and after an hour of tedious work we asked her to return with suggestions from her doctor about the proper post-hypnotic suggestions she should be given if she could be hypnotised. She returned in a week reporting that her doctor said to get her to produce her own cortisone since he was afraid that her adrenals might be closing down. After an unsuccessful half-hour of hypnotic inductions we asked her to close her eyes and told her:

Your adrenal glands can produce cortisone. And when they do, your index finger will start to twitch and float uncontrollably. Now close your eyes and imagine that you are somewhere comfortable. (No response.) Now imagine that you are scared of something, on a high building looking down. (No response.) Imagine now that you are mad at someone, I don't know, maybe your husband. (Her finger started twitching violently, her face flushed, her finger quieted down.) Now when your adrenals promise to continue functioning, your finger will twitch some more. And you keep doing what you've got to do to make that happen. (Positive response.)

When she awoke she was amnesic for the procedure, saying: "What happened? I don't remember anything. There was something about my husband, but I don't know what." Her doctor reported five years later that she had been symptomfree since the second appointment, and she still did not remember what happened in that hypnotic session.

Case 4: Hyperemesis of Pregnancy

A 38-year-old prima patens was worried about her severe vomiting and had been hospitalised twice in the five months before she consulted us. She was now in her seventh month and was nauseous almost continually. She had an amniocentesis that showed her baby to be normal. There was nothing significant about her history. Because she was unable to go into hypnosis, we asked her to close her eves and told her:

Your body knows what biochemicals it needs to release for you to feel well. When it does so, your index finger will twitch and float uncontrollably. (A number of suggestions were made, until she responded to the following): Ask your baby to make you well. Tell him or her that you need to feel well and healthy. (Positive response.) And when your body will continue to function well, your finger will float again. (No response until the following suggestion was given.) You must promise to check in with your baby regularly to see if you are resting enough and doing the right things for him. You must follow the baby's directions. (Positive response.)

Her vomiting and nausea stopped for the remainder of the pregnancy. She reported that she learned to ask the baby about the amount of sleep she needed, the right foods to eat, other aspects of her pregnancy, and especially the amount of activity that was good for both of them.

Case 5. Cluster Headaches

A 32-year-old woman with a history of headaches since adolescence sought hypnosis when her headaches were unrelenting for five months. Her history was eventful, but she stated that previous psychotherapy had not been helpful in relieving her headaches. She could not be hypnotised so we told her to close her eyes and gave her the usual directions. We took her through many considerations, including anger, fear, ordering her body to heal, asking for help from her spiritual "source," and others. Finally she had a positive ideomotor response when we told her to imagine herself someplace nice and enjoyable, like a Caribbean island.

She practised this technique daily and was able to stop the headaches as they were starting. We did no other psychotherapy with her. We saw her a total of three times, at 3-week intervals. Four years later she returned to therapy when there was trouble in her marriage and her headaches returned. When she engaged in marriage counselling, her ability to relieve her headaches returned.

Case 6: Adult Onset Asthma

This 68-year-old woman had been suffering from asthma since she was 35, when she divorced her first husband. Her asthma was progressively worsening. When first seen, she had been taking 7mg of prednisone for eight years. She was a good hypnotic subject, but there were no ideomotor responses indicating that her body could produce what it needed. She did not respond to considerations involving emotion, relaxation, or invoking heaven (she was a devout Christian). She finally responded to the following suggestion:

Your body can do what it needs. It's just sluggish. Now, for God's sake, get doing it. I will hear of no feet dragging. Get yourself in gear and do what you've given up doing. Get those chemicals pouring into your blood stream and fixing what needs fixing.

She attended an asthma group monthly for two years. At those group meetings we encouraged her to practise this routine daily, sometimes three times a day. As part of the group therapy, we hypnotised her and gave her the special directions. She gradually lowered her steroid use until she was steroidfree for six months.

Case 7: Chronic Pain

An orthopaedic surgeon referred a 28-year-old woman who had injured her shoulder on the job, lifting heavy boxes. Surgery was not indicated, but seven months had elapsed without improvement. Her history was eventful: physical abuse as a child, foster homes, two divorces, poverty.

When questioned in various ways while hypnotised about whether her injury was related to or influenced by her past, the answer was consistently negative. Attempts to reduce the pain through conventional pain reduction methods were effective for only short periods of time. She was unable to relieve the pain herself through self-hypnosis. Following a long list of unresponsive considerations, this suggestion was effective:

Your body needs to heal. The pain will stay away for long periods of time if you know that your body is healing. Something is keeping it from healing. Now listen carefully. Your body knows what to do to bring about healing. It knows what chemicals to release into your blood stream, what chemical to bring to the injured area. And when it does so, and promises to continue, then your finger will twitch and float. Tell your body to heal and promise it that you will protect it from further injury. (A small, positive response.) Even when you have little or no pain you must promise to be especially careful not to reinjure yourself. You work too hard and often push yourself before you are ready. (Stronger positive response.) And if your mind and body agree to do this, I will also protect you by insisting that you do not return to work too soon. I will demand that you are totally well before you go back to work. And I will insist that you get a job that will protect you. (Definite and sustained positive response.)

She was followed for four months, weekly and then bi-weekly. Her recovery was rapid; she immediately experienced many pain-free days. She felt that she was improving and healing for the first time in eight months. When she overexerted herself physically or emotionally she was reminded in and out of hypnosis about her promise. She was vocationally rehabilitated into another, non-physical occupation.

DISCUSSION

Recent experimental work has focused on the significance of the state-dependent nature of normal regulatory physiology (Rossi & Cheek, 1988). Rossi (1986) has formulated the theory that "... state-dependent memory, learning and behaviour processes encoded in the limbic-hypothalamic and closely related systems are the major information transducers between mind and body." He believes that " . . . all methods of mind-body healing and therapeutic hypnosis operate by accessing and refraining the state-dependent memory systems that encode symptoms and problems." The procedure outlined in this paper describes a system wherein the state or emotion originally associated with the onset of the disease is reframed by considerations, and the suggestion is made that it is within the power of the person, rather than factors outside, to heal the body. When the mind-body accepts these reframings, as evidenced by the ideodynamic signals, healing can occur.

While it is well accepted that the mind can bring about physical disease, it is not always clear how this process can be reversed. The protocol described in this paper offers one way that has proven effective in restoring the body/mind's own healing ability. The essential features are as follows:

- 1. Instructing the patient, in or out of hypnosis, that the body can heal itself;
- 2. Giving a list of suggestions for the patient to consider;
- 3. Incorporating the patient's dynamics into the considerations;
- 4. Persisting with different considerations until there is a definite ideomotor response.

It does not matter if the patient cannot be hypnotised; the appropriate therapeutic suggestion will allow the patient to enter a hypnotic state as evidenced by ideomotor activity. As Cheek (Cheek & LeCron, 1968; Rossi & Cheek, 1988) points out, patients' inability to be hypnotised may be synonymous with their disease. It is actually beneficial if the patient cannot achieve ideomotor responses at first because both the patient and the therapist then trust the validity of the response when it does occur after the appropriate consideration.

The disease process is often linked to the frustration of an emotion (Gentry, 1984; Rossi, 1985; Rossi & Cheek, 1988). Accessing and using state-dependent memory, learning, or behavior is the way that the mind is understood to heal the body (Rossi, 1987; Rossi & Cheek, 1988). This paper demonstrates a procedure for bringing this about; it offers the hypothesis that restoring the appropriate emotion or thought in a hypnotic state can quickly restore the proper functioning of the body.

Because we did not conduct the cases presented here under experimental conditions, it is not possible to state that biochemical changes did occur. In fact, biochemicals may have nothing to do with the remissions seen in our patients, but the metaphor is believable and effective. Furthermore, there is good reason to hypothesise that spontaneous remission may be due, at least in part, to a change in the attitude of the patient, which may be a special form of reframed state-dependent learning that requires further study.

Reprinted from the American Journal of Clinical Hypnosis, 1991, 34(2), 122-128, with permission of the Editor.

REFERENCES

- Cheek, D. & LeCron, L. (1968). Clinical hypnotherapy. New York: Grune and Stratton.
- Erickson, M. (1980). Discussion. Workshop on Hypnosis in Phoenix, March, 1980.
- Gentry, W. (Ed.)(1984). Handbook of behavioral medicine. New York: Guilford Press.
- Grace, W. J., & Graham, D. T. (1952). Relationship of specific attitudes and emotions to certain bodily diseases. Psychosomatic Medicine, 14, 243-251.
- Graham, D. T. (1962). Some research on psychophysiologic specificity and its relation to psychosomatic disease. In R. Roessier & N. S. Greenfield (Eds.). Physiological correlates of psychological disorder. Madison: University of Wisconsin Press.
- Graham, D. T., Stern, J. A., & Winokur, G. (1958). Experimental investigation of the specificity of attitude hypothesis in psychosomatic disease. Psychosomatic Medicine, 20, 446-457.
- Rossi, E. L. (1986). The psychobiology of mind-body healing. New York: W. W. Norton & Co.
- Rossi, E. L. (1987). From mind to molecule: A state-dependent memory, learning, and behavior theory of mind-body healing. Advances, 4, 46-60.
- Rossi, E. L., & Cheek, D. B. (1988). Mind-body therapy: Methods of ideodynamic healing in hypnosis. New York: W. W. Norton & Co.

EFFECTS OF HYPNOSIS ON THE IMMUNE RESPONSE: B-CELLS, T-CELLS, HELPER AND SUPPRESSOR CELLS

Patricia Ruzyla-Smith Gonzaga University

Arreed Barabasz, Marianne Barabasz, & Dennis Warner Washington State University

This study tested the effects of hypnosis on the immune response. High and low hypnotisable subjects were exposed to hypnosis, relaxation or control conditions. Blood samples obtained before treatment and twice thereafter were subjected to flow cytometry analysis. Significant alteration of the immune response as measured by B-cells and helper-cells was shown only for highly hypnotisable subjects exposed to hypnosis.

Currently, there is considerable scientific interest in the potential effects of psychological factors on the immune system. This has stimulated both new research and a reconsideration of previous data on the effects of relaxation, imagery, and hypnosis on immune function.

In a historical review, McMahon and Sheikh (1984) found support for the role of relaxation and imagination in disease and healing processes. Zakowski, Hall and Baum (1992) recently reviewed the literature on stress reduction interventions and increased immune system efficiency. They concluded that relaxation had a beneficial effect on the immune system. In one of the more methodologically sound studies, Zachariae and his associates (1990) employed relaxation and guided imagery with 10 healthy subjects over a 10-day period. There was a significant increase in natural killer cell function but no major changes in the composition of mononuclear leukocyte subsets could be shown.

Almost a decade ago, Hall (1983) reviewed findings related to the effects of hypnosis on the immune system as demonstrated by allergic responses (Clarkson, 1937; Kroger, 1964; Mason & Black, 1964; Perloff & Spiegelman, 1973), dermatological conditions (Kaneko & Takaashi, 1963), congenital ichthyosiform erythrodermia (Mason, 1952), warts (Sinclair-Geiben, & Chalmer, 1959), and mantoux reactions (Black, Humphrey, & Niven, 1963). According to Hall, a commonality among studies which found hypnosis to be a successful intervention was the use of highly hypnotisable subjects. Alternatively, Andrews and Hall (1990) found little support for the role of hypnotisability in a study of the effects of relaxation imagery training. However, this finding is inconclusive because all subjects fell in the moderate range of hypnotisability making it impossible to draw conclusions about the specificity of hypnosis (Barabasz & Barabasz, 1992) or to generalise this observation to people of either high or low hypnotic capacity. Most recently, Hall, Mumma, Longo and Dixon (1992) found an agehypnotisability interaction predicted positive immunomodulation effects. Unfortunately, there was no control group nor any control for relaxation effects.

Other studies by Olness, Culbert, and Uden (1989), Hall, Minnes, Tosi, and Olness (1992), Kiecolt-Glaser, Glaser, and Williger (1985), and Smith, McKenzie, Marmer, and Steele (1985) found hypnosis-like "cyberphysiologic strategies" facilitated voluntary alterations of immune activity. Unfortunately, none of these studies controlled for subjects' hypnotisability.

Zachariae, Bjerring, and Arendt-Nielsen (1989) used hypnotic suggestion and imagery to determine the cutaneous reaction to histamine prick-tests using eight highly hypnotisable subjects. They showed a significant reduction of flare reaction (area of erythema) compared with control histamine skin prick tests. Later, Zachariae and Bjerring (1992) showed that immunoreactivity to dinitrochlorobenzene and diphenylcyclopropenone, as well as "Type IV" delayed-type hypersensitivity responses, could be modulated by direct suggestion and guided imagery in hypnosis. Unfortunately, these investigations did not control for relaxation effects which may have accounted for the findings.

Hilgard's (1977) neo-dissociation theory postulates that hypnosis is an altered state of consciousness and that people differ in their hypnotic capacity or hypnotisability. Hypnosis typically is accompanied by relaxation effects and often employs imagery (Miller, Barabasz, & Barabasz, 1991). Since no research contrasting hypnosis with relaxation while controlling for hypnotic ability had been conducted, the specificity of hypnosis in immunomodulation was unknown.

At Washington State University, we recently undertook research to examine the effects that hypnosis may have on the human immune response and to compare the effects of hypnosis to those of relaxation alone. Barabasz and Barabasz (1992) noted that little can be said about the specificity of hypnosis unless subjects' hypnotic capacities are differentiated and the potential effects of relaxation are controlled. This study addressed the relaxation effects variable, divided subjects into high and low hypnotisability groups using a standardised individually administered test and employed a much larger sample than previous demonstrations. We focused on immune responses related to B-cell, T-cell, helper T-cell and suppressor T-cell counts.

METHOD

Subjects

Subjects were 65 university student volunteers (ages 18-56, median 24.3 years). Subsequent to a pre-screening medical questionnaire, subjects were oriented to hypnosis for a total of two-and-a-half to three hours, maximised in hypnotisability by repeated hypnosis, individually and in groups (Barabasz & Barabasz, 1992), and tested individually using the 12-point Stanford Hypnotic Susceptibility Scale: Form C (Weitzenhoffer & Hilgard, 1962). Highs scored above 7 (M = 9.9) while lows scored below 5 (M = 2.6). Volunteers with mid-range scores were not included in the experiment. Within each hypnotisability level, subjects were randomly assigned to one of three conditions: (a) hypnosis; (b) relaxation; or (c)

waiting list control. Inspection of subject demographics showed that the random assignment procedure produced a comparable distribution for age and gender in each sub-group. Subjects were not included if they reported blood disorders, malignancy, active virus, allergy, autoimmune disorder, immunosuppressant medication, or any other condition that would prohibit blood donation. One subject with abnormal blood chemistry values at the pre-treatment blood draw, was screened out of the study. As requested, subjects reported refraining from vigorous physical exercise, dieting, caffeine, alcohol, or nicotine immediately prior to the treatment period. Subjects also reported complying with the instruction to get adequate sleep (7 to 9) hours within 24 hours prior to their sessions.

Procedure

Before beginning treatments, all subjects were exposed to a brief videotape presentation adapted from the Life Quest Series, entitled The Fighting Edge (Films for the Humanities, Inc., 1989). The tape provided an overview of the major components and functions of the human immune system, including the function of B-cells, T-cells, helper T-cells, and suppressor (CD4+ and CD8+) T-cells. The self-report SCL-90-R symptom checklist (Derogatis, 1977) was administered to measure general stress. Skin conductance response (SCR) was determined for each subject during each venipuncture blood sampling to determine potential psychophysiological stress reactions to the procedures (Olness, 1990). SCR data were obtained using a Lafayette Instruments Barabasz Quantifier, model 76 1 0030. Beckman silver/silver chloride hat electrodes were attached to the distal phalanges, volar surface of each subject's second and third digits of their non-dominant hand. Data were collected in micromhos by the constant voltage method according to standardised procedure (Barabasz, 1977, pp. 130–133; Lykken & Venables, 1971). After the videotape and the SCL-90-R, subjects were oriented to the SCR apparatus immediately prior to the pretreatment blood sample draw.

Treatment Group: Hypnosis

An audio-taped hypnotic induction was played while each subject sat alone in a quiet room. A positive suggestion, adapted from Hall (1983) by the second author, asked subjects to "imagine your white blood cells attacking and destroying germ cells in your body." The entire hypnosis session lasted twenty minutes. Subsequently, subjects were given instructions on rapid alert self-hypnosis (Barabasz, 1985; Barabasz, Baer, Sheehan, & Barabasz, 1986; Crawford & Barabasz, 1993; Barabasz, in press) and instructed to practise twice daily during the week (total of 5-10 minutes per day required). One hour after hypnosis, the second blood sample was obtained. At a one-week follow-up session, the SCL-90R was again administered, prior to a second 25 minute hypnotic induction. The third blood sample was taken one hour after hypnosis. The blood sampling protocol (Pre 1, Post 1, and Post 2) replicates Hall (1983) and

was in compliance with Institutional Review Board requirements. All subjects reported complying with the twice daily self-hypnosis practice sessions as instructed.

Relaxation Group: Restricted Environmental Stimulation Therapy (REST)

In flotation REST subjects float effortlessly in a 20% solution of Epsom salts (MgSO4) and water in a fibreglass tank which resembles an enclosed bathtub. The water is maintained at 34.2 degrees C (+ -.2 degrees) in the light-free soundattenuated environment. Two one-hour flotation REST sessions were chosen to produce relaxation because relaxation effects under those conditions have been shown to be more reliable and profound than standard muscle relaxation training, even when practised daily (Barabasz, Barabasz, Dyer, & Rather, 1993). The relaxation produced by flotation REST has also shown promise of immune enhancement as demonstrated by Turner, Dewerth and Fine's (1993) study showing positive effects on salivary immunoglobulin. Therefore, REST was chosen to provide the most stringent test of hypnosis per se. The elaborate REST equipment was also likely to elicit experimental demand characteristics favouring a significant treatment outcome. Prior to the first session, subjects in the REST group were oriented to the flotation tank using a standardised procedure (Suedfeld, 1980, pp. 365–370), viewed the immune system video, and completed the SCL-90-R. Subjects were oriented to the SCR apparatus when the pretreatment blood samples were drawn. In accordance with the typical exposure period used in clinical settings to induce relaxation, subjects spent one uninterrupted hour in REST after exposure to the same immunomodulation suggestion used for the hypnosis group (Hilgard, 1993; Suedfeld, 1990). The second blood sample was obtained after the REST session. Again, one week later, the SCL-90-R was administered followed by one hour in flotation REST. Then the third blood sample was obtained. The total time in the two REST sessions (2 hours) exceeded the total time involved in hypnosis (about 1.5 hours).

Control Group

Subjects assigned to this group viewed the immune system video, took the computerised SCL-90-R, and had the first blood sample drawn during the same time periods used for treatment groups. The same immunomodulation suggestion used for the hypnosis group was also given. The second blood sample was obtained one hour later and the third sample was taken at a follow-up session one week later. These waiting list controls were offered the hypnosis treatment after completion of the experiment.

Data Collection

Peripheral blood was obtained from each subject in an upright seated position by venipuncture. Each of three samples per subject consisted of 16cc of blood. Assays were performed at the Microbiology Laboratory at Washington State University. The Ficoll-Paque method of in vitro isolation of lymphocytes was used on fresh blood samples. White blood cell counts were performed by standard haematological techniques. Surface antigens present on retrieved peripheral blood lymphocytes were bound and labelled by specific mouse monoclonal antibodies, developed to detect T-cells, B-cells, helper T-cells and suppressor T-cells. Fluorescent dyes, conjugated to the antibodies, were distinguished by flow-cytometry to facilitate the identification and enumeration of specified cells. A Becton-Dickinson FACS 440 Flow Cytometry system was used to detect electronic and optical signals from cells which were illuminated by laser light. Simultaneous multiparameter analyses of surface characteristics, cell volume, and cell size were obtained.

Results

Fixed effects model analyses of variance revealed no significant differences among the groups for levels of psychological stress as measured by the SCL-90-R or psychophysiological stress associated with venipuncture, as measured by SCR. Therefore, these data were not considered in subsequent analyses.

Although no significant differences in levels of immune function were found among groups at pre-test, inspection of pre-treatment data indicated wide variability. Therefore, we decided to use analysis of covariance with pretreatment scores as the covariate (this did not violate the homogeneity of variance assumption). Analyses of covariance with repeated measures (3 groups X 2 hypnotisability levels X 2 time periods) were performed on the indices of B-cells, T-cells, helper T-cells, suppressor T-cells, and helper T-cells/suppressor T-cell (H/S) ratios in order to determine group differences at post-treatment 1 and post-treatment 2. Analyses of variance with repeated measures (3 groups X 2 hypnotisability levels X 3 times of measurement) were performed on the indices of immune response in order to assess within group differences at pretreatment, post-treatment 1, and post-treatment 2.

Analysis of covariance for B-cell counts identified significant main effects for treatment (F = 4.06, p < .02). Tukey's HSD test for pair-wise comparisons of cell means indicated that subjects exposed to the hypnosis treatment (M = 19.80, SD= 4.46) showed significantly greater immune function as measured by B-cell counts than either subjects exposed to REST relaxation (M = 1.68, SD = 3.48) or subjects serving as no treatment controls (M = 12.61, SD = 3.61).

Analysis of covariance for T-cells identified a significant two-way interaction between treatment and hypnotisability (F = 3.22, p < .04). Tukey's HSD tests yielded several significant (p < .05) differences: (a) subjects in the REST lowhypnotisable group (M = 70.72, SD = 8.47) demonstrated a significantly greater number of T-cells than subjects in the REST high hypnotisability group (M =55.70, SD = 9.73) and control group subjects (M = 64.68, SD = 9.47), (b) subjects in the hypnosis high hypnotisability group (M = 67.40, SD = 9.63) demonstrated a significantly greater number of T-cells than subjects in the REST high hypnotisability group (M = 55.70, SD = 9.73) and (c) subjects in the REST high hypnotisability group (M = 55.70, SD = 9.73) demonstrated a significantly lower number of T-cells than subjects in the control high-ability (M = 64.68, SD = 9.47) or low-hypnotisability (M = 64-03, SD = 10.62) groups.

Analysis of variance, using the Greenhouse-Geisser correction, identified a significant two-way interaction for T-cells, within groups based upon hypnotisability and time of measurement (F = 4.02, p < .02). Tukey's HSD tests yielded the following significant differences: (a) subjects high in hypnotisability demonstrated an increase in number of T-cells from pre-treatment (M = 59.95, SD = 10.67) to post-treatment (M = 65.16, SD = 1.2.93), (b) subjects low in hypnotisability demonstrated a decrease in number of T-cells from pre-treatment 1 (M = 69.94, SD = 10.29) to post-treatment 2 (M = 64.90, SD = 10.82).

T-cells can be classified based on functional properties into sub-populations including helper T-cells (T-4 cells) and suppressor T-cells (T-8 cells). The helper T-cells facilitate the functioning of the immune system by their ability to become activated by antigens to produce and release further activating substances toward generating a pool of activated lymphocytes. An analysis of covariance for helper T-4 cell counts identified a significant main effect for treatment (F =4.47, p < .01). Tukey's HSD test showed that subjects exposed to the hypnosis treatment had a significantly (p < .05) greater number of helper T-cells (M =53.93, SD = 11.16) than subjects exposed to the REST relaxation treatment (M =41.44, SD = 7.65) or subjects serving as controls (M = 44-70, SD = 5.56).

A reduction in the ratio between helper T-cells and suppressor T-cells has been associated with immunosuppression. Therefore, the helper T-cell/ suppressor T-cell ratio was calculated by dividing the percentage of helper cells by the number of suppressor cells and multiplying by 100. The results of an analysis of covariance for between subjects for the H/S ratio were not significant (p > .05). A within subjects analysis of variance for the two-way interaction for treatment and time was not significant (F = 2.10, p < .09). These results show no significant changes in H/S ratios from pre-treatment to post-treatment 2 among the subject groups.

DISCUSSION

The results of this study appear to show significant immunomodulation for subjects exposed to hypnosis as measured by B-cells and helper T-cells. Highly hypnotisable subjects exposed to hypnosis showed significantly greater T-cell counts in contrast to highly hypnotisable subjects exposed to REST relaxation only. In general, the results of the study demonstrate that hypnosis was specifically associated with an immune system alteration while a treatment known to produce significant relaxation effects (REST) with potential for immunoenhancement was not associated with similar positive immunomodulation. The finding that hypnosis can modify the production and/or activity of components of the immune system has far reaching implications for researchers and clinicians.

Flotation REST was chosen to induce relaxation to provide the most stringent test of hypnosis effects, per se. Mood state (Barabasz, et al., 1993) and immunological studies (Ruzyla-Smith et al., 1992, 1993; Turner, Dewerth, & Fine, 1993) have shown REST's superiority over the traditional eyes-closed muscle relaxation-tension method of relaxation training (Wolpe & Lazarus, 1966). The later method may also have confounded the results since it is known to evoke hypnotic responding in high hypnotisables as a result of the hypnotic inductionlike instructions (Barabasz & Barabasz, 1992). Future studies using subjects of moderate as well as high and low hypnotisability might benefit from the inclusion of traditional relaxation training as an additional control if a sufficient budget for blood analyses and a sufficient sample size.

This study replicated the blood sampling protocol of Hall (1983, 1984) and complied with human subjects review guidelines for blood draw volumes consistent with the requirements of the blood analyses. As technologies advance, future studies may be able to obtain even clearer results if it becomes possible to obtain additional blood samples immediately prior to each intervention.

Revised for this paper from: Ruzyla-Smith, P., Barabasz, A., Barabasz, M., & Warner, D. (1995). Effects of hypnosis on the immune system: B-cells, T-cells, helper, and suppressor cells. American Journal of Clinical Hypnosis, 38, 71-79, reprinted with permission of the Editor. The paper is based on a doctoral dissertation by the first author.

REFERENCES

- Andrews, V. H., & Hall, H. R. (1990). The effects of relaxation imagery training. Psychosomatic *Medicine*, 52, 526–535.
- Barabasz, A. (in press). Instantaneous neuronal activation procedure (INAP) reduced stimulation and psychophysiological monitoring in the treatment of a phobic pilot. Experimentelle und Klinische Hypnose.
- Barabasz, A. (1985) Enhancement of military pilot reliability by hypnosis and psychophysiological monitoring: Inflight and simulator data. Aviation, Space and Environmental Medicine, pp. 248-250.
- Barabasz, A. (1977). New techniques in behavior therapy and hypnosis (2nd ed). Los Angeles, CA: Borden Press.
- Barabasz, A, Baer, L., Sheehan, D., & Barabasz, M. (1986). A three year follow-up of hypnosis and restricted environmental stimulation therapy for smoking. International Journal of Clinical and Experimental Hypnosis, 24, 169–181.
- Barabasz, A., & Barabasz, M. (1992). Research designs and considerations. In E. Fromm & M. Nash (Eds.). Contemporary hypnosis research (pp. 173–200). New York, NY: Gilford.
- Barabasz, A., Barabasz, M., Dyer, R., & Rather, N. (1993). Effects of chamber REST, flotation REST and relaxation on transient mood state. In A. Barabasz & M. Barabasz (Eds.). Clinical and experimental restricted environmental stimulation: New developments and perspectives (pp. 113-120). New York: Springer-Verlag.
- Black, S., Humphrey, J. H., & Niven, J. S. (1963). Inhibition of mantoux reaction by direct suggestion under hypnosis. British Medical Journal, 6, 1649–1652.
- Clarkson, A. K. (1937). The nervous factor in juvenile asthma. British Medical Journal, 2, 845-850.
- Crawford, H., & Barabasz, A. (1993) Phobias and intense fears: Rationale for the use of hypnosis in their treatment, In J. W. Rhue, S. Lynn, & I. Kirsch (Eds.). Handbook of clinical hypnosis (pp. 245–298). Washington, DC: American Psychological Association.
- Derogatis, L. R. (1977). SCL-90-R. Baltimore, MD: Clinical Psychometric Research.

- Films for the Humanities, Inc. (1989). The fighting edge. Princeton, NJ. (Film).
- Hall, H. R. (1983). Hypnosis and the immune system: A review with implications for cancer and the psychology of healing. American Journal of Clinical Hypnosis, 25, 92–103.
- Hall, H. R., Minnes, L., Tosi, M., & Olness, K. (1992). Voluntary modulation of neutrophil adhesiveness using a cyberphysiological strategy. International Journal of Neuroscience, 63, 287-297.
- Hall, H. R., Mumma, G. H., Longo, A., & Dixon, R. (1992). Voluntary immunomodulation: A preliminary study. International Journal of Neuroscience, 63, 275–285.
- Hilgard, E. R. (1977). Divided consciousness. New York, NY: Wiley.
- Hilgard, E. R. (1993) Introduction. In A. Barabasz, & M. Barabasz (Eds.). Clinical and experimental restricted environmental stimulation: New developments and perspectives (pp. 1-2). New York: Springer Verlag.
- Kaneko, A., & Takaashi, N. (I 963). Psychosomatic studies on chronic urticaria. Folia Psychiatrica Neurologica Japonica, 17, 16-24.
- Kiecolt-Glaser, J. K., Glaser, R., Williger, D., Stout, J., Messick, G., Sheppard, S., Ricker, D., Romisher, S. C., Briner, W., Bonnell, G., & Donnerberg, R. (1985). Psychosocial entrancement of immunocompetence in a geriatric population. Health Psychology, 4, 25-41.
- Kroger, W. S. (1964). Current state of hypnosis in allergy. *Annals of Allergy*, 22, 123–129.
- Lykken, D., & Venables, P. (1971). Direct measurement of skin conductance: A proposal for standardization. Psychophysiology, 8, 656-672.
- Mason, A. A. (1952). A case of congenital ichthyosiform erythrodermia of Brocq treated by hypnosis. British Medical Journal, 2, 422–423.
- Mason, A. A., & Black, S. (1958). Allergic skin responses abolished under treatment of asthma and hay fever by hypnosis. Lancet, 1, 877–880.
- McMahon, C. E., & Sheikh, A. A. (1984). Imagination in disease and healing processes: A historical perspective. In A. A. Sheikh (Ed.). Imagination and healing (pp. 7-34). Amityville, NY: Baywood.
- Miller, M., Barabasz, A., & Barabasz, M. (1991). Effects of active alert and relaxation hypnotic induction on cold pressor pain. Journal of Abnormal Psychology, 100, 223–226.
- Olness, K. (1990) Personal communication, March.
- Olness, K., Culbert, T., & Uden, D. (I 989). Self-regulation of salivary immunoglobulin A by children. Pediatrics, 83, 66-71.
- Perloff, M. M., & Spiegelman, J. (1973). Hypnosis in the treatment of a child's allergy to dogs. American Journal of Clinical Hypnosis, 15, 269-272.
- Ruzyla-Smith, P., Barabasz, A., Barabasz, M., & Warner, D. (1992) Effects of hypnosis and restricted environmental stimulation relaxation therapy on the immune response. Presented at the 43rd Annual Scientific Meeting of the Society for Clinical and Experimental Hypnosis, Washington, D.C. October 20–25.
- Ruzyla-Smith, P., Barabasz, A., Barabasz, M., & Warner, D. (1993) Hypnosis enhances the immune response: B-cells, T-cells, helper and suppressor cells. Presented at the 101st Annual Convention of the American Psychological Association, Toronto, August 20–24.
- Sinclair-Geiben, A. H., & Chalmers, D. (1959). Evaluation of treatment of warts by hypnosis. Lancet, 2, 480-482.
- Smith, G. R., McKenzie, J. M., Marmer, D. J., & Steele, R. W. (1985). Psychologic modulation of the human immune response to varicella zoster. Archives of Internal Medicine, 145, 2110-2112.

- Suedfeld, P. (1990) Distress, no stress, anti-stress, eustress: Where does REST fit in? In P. Suedfeld, J. Turner, & T. Fine (Eds.). Restricted environmental stimulation: Theoretical and empirical developments in flotation REST (pp. 22-31). New York: Springer-Verlag.
- Turner, J., Dewerth, M., & Fine, T. (1993). Effects of flotation REST on salivary IGA. Presented at the Fifth International Conference on REST Investigation, Seattle, Washington, February.
- Wolpe, J., & Lazarus, A. (1966). Behavior therapy techniques (pp. 177–180). New York: Pergamon.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1962). Stanford Hypnotic Susceptibility Scale: Form C. Palo Alto, CA: Consulting Psychologists Press.
- Zachariae, R., & Bjerring, P. (1992). Increase and decrease of delayed cutaneous reactions obtained by hypnotic suggestions during sensitization. Allergy, 10, 1-6.
- Zachariae, R., Bjerring, P., & Arendt-Nielsen, L. (1989). Modulation of Type I immediate and Type IV delayed immunoreactivity using direct suggestion and guided imagery during hypnosis. Allergy, 44, 537-542.
- Zachariae, R., Kristensen, J. S., Hokland, P., Ellgaard, J., Metze, E., & Hokland, M. (1990). Effect of psychological intervention in the form of relaxation and guided imagery on cellular immune function in normal healthy subjects. Psychotherapy and Psychosomatics, 54, 32–39.
- Zakowski, S., Hall, M. H., & Baum, A. (1992). Stress, stress management, and the immune system. Applied and Preventive Psychology, 1, 1–13.

INTRODUCTION TO HYPNOSIS AND HABIT DISORDERS

Barry J. Evans Department of Psychiatry, University of Melbourne

A habit is a settled tendency to behave in a particular way — any regularly repeated behaviour that requires little or no thought and which is learned rather than innate. The cognitions, emotions, and behaviour entailed in the habit develop through reinforcement and repetition. Reinforcement encourages the repetition of the behavioural response, each time the stimulus which provokes the behaviour occurs. The behaviour becomes more automatic with every repetition. In situations where the behaviour is associated with an emotional state, the habitualisation can occur quickly, even after a specific incident (Carson, Butcher, & Coleman, 1988). Habits are useful as a means of conserving higher mental processes for more demanding tasks, but, at the same time, they promote behavioural inflexibility, resulting in emotional upset and possibly a debilitating negative impact when the habit becomes "disordered."

Habits can take many forms and are found in every area of human activity. Generally, we talk about eating, drinking, and smoking habits. Many other behaviours may also fit the category. Without defining the term per se, Dally and Watkins (1986) discussed a series of what they termed "childhood habits:" thumb-sucking, night terrors, head-banging, and hair-pulling (trichotillomania). In what they termed the hypnobehavioural treatment of habit and behavioural disorders, Brown and Fromm (1987) described hypnosis applications for such habits as smoking, eating and obesity, substance abuse, alcoholism, sexual dysfunctions, and sleep disturbances.

Habits can involve the individual in cognitions, emotions, and behaviours which are similar to compulsive, addictive, and/or obsessional thoughts and behaviours. It is in these situations, where the thoughts and behaviours "take on a life of their own," and over which the person may have little or no control, that the person seeks treatment to regain control.

The categorisations in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, APA, 1994) reflect the diverse nature and aetiology of habit disorders. DSM-IV classifies Pathological Gambling and Trichotillomania as forms of "Impulse Control Disorders." Eating disorders are now categorised as separate disorders, unlike DSM-IIIR, where they were categorised under the odd title of "Disorders Usually First Evident in Infancy, Childhood or Adolescence." Alcohol usage is categorised under "Substance Related Disorders" and, of course, smoking is not included at all.

Some Obsessive-Compulsive Disorder (OCD) characteristic behaviours are also habitual, with compulsive thoughts and behaviours that form part of habit disorders. The issue here is not to detail the components of habitualised behaviour and the varying input of obsessive, compulsive, and addictive elements, nor the role of physical, psychological, and behavioural factors in predisposition, precipitation, and perpetuation of the behaviour, but to simply

make the point that careful evaluation of the "habit" and its motivations, antecedents, and consequences is vital in therapy. The papers in this section make this point strongly.

Hypnosis has been used successfully to treat a variety of habit disorders, with many reports being published in the *Australian Journal of Clinical and Experimental Hypnosis* and elsewhere over the last decade. These include thumb-sucking and nail-biting (Hammond, 1990), trichotillomania (Hammond, 1990; Hynes, 1982), bruxism (Wardlaw, 1994) and the more habitualised responses and behaviours associated with many of the anxiety disorders (e.g., Wild, 1994; Laidlaw, 1994), where hypnosis has been used very effectively with cognitive-behavioural strategies (Golden, 1994). More recently, there has been some considerable literature describing hypnotherapeutic approaches in weight management (e.g., Brown & Fromm, 1987; chapters by Hook, McGreal, and Jacka in Evans, Coman, & Burrows, 1997), eating disorders (e.g., chapters by Griffiths in Evans et al., 1997; Yapko, 1997), and problem gambling (Coman, Evans, & Burrows, 1996).

Equally, there have been many reports of hypnosis in treatment for sexual difficulties (e.g., Fuchs & Peretz, 1990; Hammond, 1990; Stanton, 1990); and smoking cessation programmes, typically as an adjunct to behavioural and cognitive-behavioural treatments (see Green, 1997), although the efficacy of hypnosis for smoking control is still disputed (Hammond, 1990). Less often, there have been reports of hypnotherapeutic strategies for alcohol and substance abuse (e.g., Brown & Fromm, 1987; Stanton, 1987).

The papers in this section provide a select view of three "habit disorders" which display many of the "compulsive," "impulsive," and/or "addictive" qualities of what we understand to be habitualised behaviours. In the cases discussed, the behaviours and accompanying cognitions and emotions have become problematic and, for this reason, the client seeks treatment.

Before describing the specific chapters in this section, I wish to note two concerns raised by Soskis (1986) in relation to the use of hypnosis with habit disorder clients. First, he argues there is little evidence to suggest that hypnosis per se is effective with habit disorders. This occurs, he suggests, because hypnosis works most directly on the client's experience rather than on behaviour. He cites the then-current lack of research studies which had failed to show any consistent association between hypnotic responsivity and clinical outcomes. This comment is difficult to understand, as few therapists would argue that "hypnosis per se" is effective for anything — rather the point is whether it facilitates treatment approaches, to the extent that the use of hypnosis in the context of a particular therapeutic process produces significantly greater improvement when compared to the use of the therapeutic process alone (Boughton, personal communication, 1998). Boughton also argues that it is probably not true that hypnosis works most directly on experience. In her clinical work with needle phobia for example, hypnosis plus systematic desensitisation arguably effects behaviour more rapidly than does systematic desensitisation alone.

Whatever the reality, Soskis does raise the issue of hypnotic responsivity and

clinical outcomes. Recent research has, of course, established that at least some categories of habit disorder clients have higher hypnotisability compared with normal controls, including bulimia nervosa sufferers (see the following paper by Rosalyn Griffiths). In their paper, Greg Coman and Graham Burrows suggest that gamblers who have problematic poker machine playing may also exhibit higher hypnotisability, although this has not been proven and the relationship between potentially high hypnotisability and clinical outcomes has not been tested.

Studies have found some support for a relationship between hypnotisability and success in smoking cessation, although this has not been universally found. with factors such as availability of social supports and duration of treatment often being relevant factors (see the following paper by Barbara Newton). Rosalyn Griffiths cites her earlier research which suggested hypnotisability is not related to therapeutic outcomes for bulimia nervosa sufferers (Griffiths, Channon-Little, & Hadzi-Pavlovic, 1995), but she comments that treatment must be tailored to the individual client's needs and that degree of hypnotic responsiveness may be a factor when treatment is specifically matched to the client. While the issue of hypnotisability and therapeutic outcomes is not clear, many researchers and clinicians, including the authors of all the papers which follow, have clearly articulated the need for careful assessment of the client across all relevant characteristics and variables, including motivations, prior experiences with hypnosis and treatment, personal and social history, hypnotisability, goals to treatment, etc., (Crasilneck, 1980; De L. Horne & Powlett, 1980) as factors in successful treatment outcomes, irrespective of presenting issue.

The second point Soskis (1986) makes regarding the use of hypnosis in treatment of habit disorders is that clients can seek treatment with the belief they will be able to sit back and absorb a technique, rather than actively work to change their problem habit. The expectation is that hypnosis involves a passive, instantaneous process in which the individual's desire for, or tendency to enact, a harmful behaviour is eliminated from their mind by the therapist. This arises from either their previous unsuccessful attempts to change their problem behaviour, or their belief about the nature of hypnosis, or both. This, he argues, necessitates informing the client that the very elements of loss of consciousness and control to the therapist which are *negative* expectations in most applications of hypnosis, are positive expectations for habit control. Again, the issue of client motivations and beliefs about hypnosis should always be addressed in all therapy, not just that associated with treatment for habit disorders.

In the first paper in this section, adapted and expanded from their paper published in the European Eating Disorders Review (1995), Rosalyn Griffiths and Lorna Channon-Little detail the relationship between disordered eating habits, hypnosis, and hypnotisability. Having established a relationship, the paper then explores the use of hypnosis in treatment of dieting disorders in general, with specific sections on anorexia nervosa and bulimia nervosa. In the short paper which follows the first review chapter, Rosalyn Griffiths updates the research studies cited in the first paper, making the data current to 1998.

In the third paper, adapted and expanded from that published in Evans, Coman, and Burrows (1997), Rosalyn Griffiths describes the value of hypnosis as an adjunct to the treatment of bulimia nervosa. She reviews the literature exploring the specific uses of hypnosis as part of a multi-faceted treatment programme and presents the theoretical models underpinning this approach. The paper concludes with a detailed description of her hypnobehavioural model (HBT) for treatment of the disorder. This paper provides the reader with a full description of the programme which has immediate application in the reader's clinical setting.

In their paper, Greg Coman and Graham Burrows review the developing area of treatment for problem gambling and present a hypnotherapeutic treatment model. As they point out, the nature and aetiology of problem gambling is not well described or categorised in the literature and there are no references in the hypnosis literature to treatment for this problem at all. The model for treatment using hypnosis described in the paper is based, therefore, on the writers' own clinical experiences. As such, while the success or failure of the treatment approach has not been empirically tested, the paper provides an excellent description of client assessment and treatment, making it immediately useful to therapists working in this area.

In the final paper for this symposium, Barbara Newton reviews the literature which examines why people smoke and factors which contribute to successful smoking cessation. It is clear from her review that client hypnotic responsiveness is one important factor in treatment success, together with previous attempts at cessation and availability of social supports. The paper concludes with a detailed description of two treatment approaches, together with specific hypnotic techniques and scripts. Again, whether or not one attends the symposium, this paper, together with each in this section, provides the practitioner with detailed techniques and strategies for use in clinical practice.

REFERENCES

- American Psychiatric Association, (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychiatric Association.
- Brown, D. P., & Fromm, E. (1987). *Hypnosis and behavioral medicine*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Carson, R. C., Butcher, J. N., & Coleman, J. C. (1988). *Abnormal psychology and modern life* (8th ed.). New York: Harper and Collins.
- Coman, G. J., Evans, B. J., & Burrows, G. D. (1996). Problem gambling: Treatment strategies and rationale for the use of hypnosis as a treatment adjunct. *Australian Journal of Clinical and Experimental Hypnosis*, 24, 73–91.
- Crasilneck, H. B. (1980). Clinical assessment and preparation of the patient. In G.D. Burrows & L. Dennerstein (Eds.). *Handbook of hypnosis and psychosomatic medicine* (pp. 105–118). Amsterdam: Elsevier.
- Dally, P., & Watkins, M. J. (1986). *Psychology and psychiatry: An integrated approach* (6th ed.). London: Hodder and Stoughton.
- De L. Horne, D., & Powlett, V. (1980). Hypnotizability and rating scales. In G. D. Burrows & L.

- Dennerstein (Eds.). Handbook of hypnosis and psychosomatic medicine (pp. 119–132). Amsterdam: Elsevier.
- Evans, B. J., Coman, G. J., & Burrows, G. D. (Eds.)(1997). Hypnosis for weight management and eating disorders. Heidelberg: Australian Journal of Clinical and Experimental Hypnosis.
- Fuchs, K., & Peretz, B. (1990). Therapy of vaginismus by hypnotic desensitisation. Hypnos, 17, 190-197.
- Golden, W. L. (1994). Cognitive-behavioral hypnotherapy for anxiety disorders. Journal of Cognitive Psychotherapy: An International Quarterly, 8, 265–274.
- Green, J. P. (1997). Smoking cessation: Hypnotic strategies complement behavioral treatments. Psychological Hypnosis, 6, 14-15.
- Griffiths, R. A. (1997). Hypnosis as an adjunct in the treatment of bulimia nervosa. In B. J. Evans, G. J. Coman, & G. D. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 164-178). Heidelberg: Australian Journal of Clinical and Experimental Hypnosis.
- Hammond, D. C. (Ed.)(1990). Handbook of hypnotic suggestions and metaphors. New York: W.W. Norton.
- Hynes, J. V. (1982). Hypnotic treatment of five adult cases of trichotillomania. Australian Journal of Clinical and Experimental Hypnosis, 10, 109–116.
- Laidlaw, T. M. (1994). Hypnosis and breathing training in the treatment of anxiety: Three cases. Australian Journal of Clinical and Experimental Hypnosis, 22, 137–145.
- Soskis, D. A. (1986). Teaching self-hypnosis: An introductory guide for clinicians. New York: W.W. Norton.
- Stanton, H. E. (1987). Alcoholism and hypnosis: Three case studies. Australian Journal of Clinical and Experimental Hypnosis, 15, 39-46.
- Stanton, H. E. (1987). Impotence: A short-term treatment. Australian Journal of Clinical and Experimental Hypnosis, 18, 107-118.
- Wardlaw, F. (1994). Hypnosis in the treatment of bruxism. Australian Journal of Clinical and Experimental Hypnosis, 22, 97–107.
- Wild, A. (1994). Hypnosis as an adjunct in the treatment of panic disorder. Australian Journal of Clinical and Experimental Hypnosis, 22, 109–117.
- Yapko, M. (1997). Hypnotic and strategic interventions in the treatment of anorexia nervosa. In B. J. Evans, G. J. Coman, & G. D. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 306-318). Heidelberg: Australian Journal of Clinical and Experimental Hypnosis.

DISSOCIATION, DIETING DISORDERS, AND HYPNOSIS: A REVIEW

Rosalyn A. Griffiths

Department of Psychology, University of Sydney

Lorna D. Channon-Little Psychologist in Private Practice

This paper gives an account of the relationship between hypnosis, hypnotisability, dissociation and disordered eating. A detailed update of the outcome of studies employing hypnotic techniques in the treatment of the two dieting disorders anorexia nervosa and bulimia nervosa is provided. The role of dissociation and the contribution of hypnosis is evaluated.

INTRODUCTION

The two major forms of eating disorders, anorexia nervosa and bulimia nervosa have been more correctly termed "dieting disorders" since dieting plays a significant role in their development (Touyz & Beumont, 1989) and this term will be adopted throughout the paper. Although various types of interventions have been described, there is no consensus for the optimal treatment of either disorder. Until recently, the treatment literature focused very little on hypnotic techniques for dieting disorders. This has changed since dissociation was more commonly acknowledged as a psychopathological feature of bulimia nervosa.

Currently the use of hypnotic techniques provides a promising alternative to more traditional types of treatment. This paper reviews: (a) evidence of the link between hypnosis, hypnotisability, dissociation and disordered eating and (b) studies employing hypnotic techniques in the treatment of dieting disorders.

HYPNOSIS, HYPNOTISABILITY, DISSOCIATION, AND DISORDERED EATING

It is recognised that a complete theory of hypnosis has not emerged or gained general acceptance (Kroger, 1977; Lynn & Rhue, 1991; Yapko, 1984). Accounts of the earlier theories of hypnosis have been summarised by Kroger (1977), and reviews of contemporary theories of hypnosis have been conducted by Sheehan and Perry (1976) and Lynn and Rhue (1991). Unfortunately, many theoretical viewpoints have lacked detail and specificity, and could be regarded as models, approaches or perspectives rather than formal theories (Lynn & Rhue, 1991). Arguably, the two positions most frequently debated are, first, whether a special hypnotic state exists and, second, whether hypnotic responses are a result of simulating or role playing or merely compliance with instructions. The polarisation of these views has been referred to as the *credulous* and *sceptical*

positions (Sutcliffe, 1960) and these two positions are still held firmly more than 30 years after Sutcliffe's observations.

Searching for the constructs underlying hypnotisability in normal populations has been long and frustrating, although some findings have been encouraging (Evans, 1988). For example, hypnotisability has been related to such variables as: absorption or total and self-altering attention (Aas, 1963; Shor, 1960; Tellegen & Atkinson, 1974); heightened responsiveness to instructions (Orne, 1959); dissociation (Hilgard, 1977); imaginative involvement (Hilgard, 1979); "fantasy proneness" (Wilson & Barber, 1981, 1983) and "daydreaming style" (Hoyt, Nadon, Register, Chorny, Fleeson, et al., 1989).

There are now several studies investigating the hypnotisability of dieting disordered individuals. The earlier studies by Pettinati and her colleagues (Pettinati, Horne, & Staats, 1985; Pettinati, Kogan, Margolis, Shrier, & Wade, 1989) found that hospitalised bulimic patients were highly hypnotisable and significantly more hypnotisable than patients with anorexia nervosa and normal age-matched controls. There was also a trend for purging anorexics to have higher hypnotic capacity than restricting anorexics. Groth-Marnat and Schumaker (1990) found high levels of hypnotisability in female college students with extreme concerns about body weight and shape. Barabasz (1991) found a volunteer sample of university bulimic women more hypnotisable than nonbulimic women. Kranhold, Baumann, and Fichter (1992) found that bulimic inpatients were more hypnotisable than normal age and education-matched controls. Vanderlinden, Van Dyck, Vandereycken, and Vertommen (1992) found that bulimic and atypical eating disordered patients were more hypnotisable than restricting anorexic patients. Furthermore, Griffiths and Channon-Little (1993) found a high level of hypnotisability for bulimia nervosa and partial syndromes compared with normal populations. Thus, the evidence for high hypnotisability for bulimic women is now well sustained.

Of the constructs associated with hypnotisability, dissociation is the only one that has attracted the attention of researchers and clinicians working with dieting disordered individuals. Initially dissociation was considered an aetiological factor in anorexia nervosa (Janet, 1907 cited in Vanderlinden & Vandereycken, 1988) but, recently, the bingeing and purging behaviours characteristic of bulimia nervosa patients have been said to resemble a dissociative experience (e.g., Beumont & Abraham, 1983). Thus, it has been concluded that a well-developed capacity to dissociate explains their high hypnotisability (Pettinati et al., 1985, 1989).

Support for these observations has come from a number of studies. Sanders (1986) demonstrated that bingeing college students reported a higher degree of dissociative phenomena compared to normal controls on the Perceptual Alteration Scale (PAS). Demitrack, Putnam, Brewerton, Brandt, and Gold (1990) found that dieting disordered patients had significantly higher levels of dissociative capacity than normal age-matched controls on the Dissociative Experiences Scale (DES)(Bernstein & Putman, 1986) and the Dissociative Questionnaire (DIS-Q) (Vanderlinden, Vandererecyken, Van Dyck, & Vertommen,

1993). Torem (1990) used three measures of dissociation to show that patients with bulimia nervosa and partial syndromes scored significantly higher than patients with anorexia nervosa and a control group. Rosen and Petty (1994) used the PAS and DES which demonstrated that dissociation of feeling underlay the eating problems of American college women.

Some findings on the linkage between dissociative disorder and disordered eating have been less conclusive. For example, Valdiserri and Kihlstrom (1995) found only a modest relationship between abnormal eating and dissociative experiences in a college population. Similarly, Barabasz (1991) found no significant differences between bulimic and non-bulimic university women on dissociative items of the Stanford Hypnotic Susceptibility Scale: Form C (Weitzenhoffer & Hilgard, 1962). Thus, if dissociation is not strongly correlated with hypnotisability then the question remains as to what cognitive abilities dieting disordered individuals possess which make them more hypnotisable than the normal population. Therefore, an investigation of the relationship between disordered eating and other hypnotisability constructs such as imaginative involvement, daydreaming style, and absorption is needed.

HYPNOSIS IN THE TREATMENT OF DIETING DISORDERS

Hypnosis clearly has a lot to offer the treatment of dieting disorders, since high levels of dissociative capacity have been linked to the ability to respond to treatments incorporating hypnotic techniques. Griffiths, Touyz, Mitchell, and Bacon (1987) were the first to mention hypnotic techniques in their review of treatments for bulimia nervosa. About the same time Vanderlinden and Vandereycken (1988) comprehensively reviewed the use of hypnotherapy in the treatment of anorexia and bulimia nervosa. Later a descriptive review of assessment and hypnotherapeutic techniques for the dieting disorders was provided by Torem (1992).

The following sections of this paper encompass an update on hypnotic techniques in the treatment of the dieting disorders.

HYPNOSIS IN THE TREATMENT OF ANOREXIA NERVOSA

The use of hypnotic techniques in the treatment of anorexia nervosa was a precursor to their use in the treatment of bulimia nervosa. Pierre Janet (1907, 1917, cited in Vanderlinden & Vandereycken, 1988) was the first to use hypnosis to treat anorexia nervosa. He believed that the concept of dissociated or fixed ideas was important in the aetiology of anorexia nervosa, and used hypnosis to manipulate the fixed ideas and to promote mental synthesis. Later, both Birnie (1936) and Brenman (Brenman & Gill, 1947; Brenman & Knight, 1945) used therapeutic suggestions delivered in indirect ways to treat two cases of anorexia nervosa. Also, about this time, narcoanalysis was used to produce a hypnotic-like state which would assist in psychoanalysis (Delay, 1949; Meignant, 1948, both cited in Vanderlinden & Vandereycken, 1988). Davis (1961) used electroconvulsive therapy in conjunction with hypnosis sessions.

Most reports of hypnosis in the treatment of anorexia nervosa occurred after 1975. Convincing use has been made of direct suggestions (Ambrose & Newbold, 1980; Crasilneck & Hall, 1975; Gross, 1982, 1983, 1984, 1986; Thakur, 1980, 1984), indirect suggestions (Erickson, 1985; Erickson & Rossi, 1979), a combination of direct and indirect suggestions (Baker & Nash, 1987; Yapko, 1986), and repetitive egosyntonic suggestions in hypnosis (Kaffman, 1981). The suggestions aim to alter symptomatology, enhance self-control, and decrease some of the psychological by-products of the disorder. Other psychological techniques together with hetero-hypnosis have also been included in the treatment of anorexia nervosa such as self-hypnosis and hypnoanalytic techniques (Baker & Nash, 1987; Crasilneck & Hall, 1975) and behaviour therapy and hypnosis (Kroger, 1977; Kroger & Fezler, 1976; Yapko, 1986). Spiegel and Spiegel (1978) stressed that hypnosis is useful, both for diagnostic as well as therapeutic purposes, in anorexia nervosa.

In summary, caution is required when making definitive statements as to the value of hypnosis in the treatment of anorexia nervosa. Critical evaluation is limited to descriptions of techniques used in hypnosis with single cases or small samples of subjects. Many positive findings have been based on such reports and apart from two (Baker & Nash, 1987; Gross, 1984), there has generally been no indication of progress at follow-up. Therefore, it is hoped that a recent description of innovative hypnosuggestive techniques for anorexia nervosa (Lynn, Rhue, Kvaal, & Maré, 1993) may stimulate interest in evaluating the effectiveness of hypnotic techniques for this disorder.

HYPNOSIS IN THE TREATMENT OF BULIMIA NERVOSA

Channon (1981) reported the first use of hypnosis in the treatment of bulimia nervosa. She used the affect-bridge technique in hypnosis with two obese bulimics. Since 1983, pioneering efforts of a series of single case studies have demonstrated how hypnosis can be used in several ways to achieve symptom reduction (Calof, 1986; Hall & McGill, 1986; Holgate, 1984; Lankton & Lankton, 1983; Thiessen, 1983; Túry & Szabó, 1990). Because bulimic patients are highly hypnotisable, it has been suggested that this should influence the strategies chosen for use in hypnosis with these patients (Vanderlinden & Vandereycken, 1988). Therefore, it is appropriate to tailor the hypnotic technique to the patient.

Torem (1986a, 1986b) found that, out of 30 eating disordered patients, 12 had dissociated ego-states that were in disharmony with one another. He suggested that hypnosis and hypnoanalytic exploratory techniques be used as part of a diagnostic assessment of eating disorders. Later he described the use of ego-state therapy for two bulimics (Torem, 1987). More recently Torem (1990) suggested that this special subgroup of dissociative dieting disorders "... do not respond to traditional treatment modalities in eating disorders programmes [and] the underlying dissociation, multiplicity, and unresolved traumas must be addressed" (pp. 365–366). Similarly, Barabasz (1990) reported the use of hypnosis

alone to break the dissociative binge response in three cases. She noted that the two cases responding to hypnosis had experienced sub-clinical levels of posttraumatic stress associated with the onset of bulimic symptoms.

Pettinati et al. (1989) used hypnosis to address underlying psychodynamics, problematic cognitions, and behaviours in two bulimic cases. A combination of treatment strategies was effective in symptom reduction and maintaining abstinence at follow-up.

Vanderlinden and Vandereycken (1990) described several hypnotherapeutic techniques to be used with psychodynamic and cognitive behavioural strategies to treat bulimic patients. From their clinical experience with more than 50 patients, the authors illustrated how and when these strategies could be used effectively throughout treatment. The treatment started with intensive inpatient treatment and was followed by weekly outpatient therapy. Two uncontrolled studies (Griffiths, 1989, 1995a) evaluating the effects of hypnobehavioural treatment (i.e., behavioural techniques and direct positive suggestions in hypnosis) have indicated that hypnobehavioural treatment (HBT) is effective in reducing symptoms of bulimia nervosa in the short term and the longer term respectively. Both these pilot studies addressed the shortcomings of previous investigations which used hypnosis in the treatment of the disorder. A step-bystep HBT manual for the clinician and researcher has been published (Griffiths, 1995b).

Griffiths, Hadzi-Pavlovic and Channon-Little (1994, 1996) conducted a controlled comparison of the immediate outcome and short-term follow-up effects of HBT with the widely used cognitive behavioural treatment (CBT) for bulimia nervosa. The study demonstrated significant pre-post changes between the waiting list control group and the treatment groups; the pre-post effects of both treatments on bulimic behaviour being similar or equal. There were no differences between the two treatments on measures of eating pathology, bulimic behaviour or general psychopathology at nine-months follow-up.

In summary, early reports of hypnosis in the treatment of bulimia nervosa reflected methodological flaws similar to those in the anorexia nervosa literature. Measures of treatment outcome to evaluate the effectiveness of hypnotic techniques in treatment of bulimia nervosa were not reported. The need for thorough assessment of the disorder so that outcome can be effectively evaluated and to enable comparisons with other treatment modalities has been emphasised (Torem, 1992). Two uncontrolled pilot studies of HBT (Griffiths, 1989, 1995a) have attempted to rectify some of these deficiencies. However, a controlled evaluation of HBT (Griffiths et al., 1994, 1996) confirmed that hypnotic techniques clearly had an impact on bulimic behaviour and accompanying psychopathology. The impact was equivalent to other psychological treatments such as CBT.

CONCLUSIONS

Recent research has investigated the role of dissociation and its relationship to

hypnotisability and disordered eating. Interest in the treatment of dieting disorders with hypnotic techniques has increased with the recognition of the high dissociative and hypnotic capacities of bulimic patients. A wide range of hypnotic techniques have been used in the treatment of anorexia nervosa but their effect has not been evaluated. However, it has been demonstrated that hypnotic techniques in bulimia nervosa treatment can effectively reduce bulimic behaviours and that HBT compares favourably with other psychological treatments. To date, the literature suggests that a dissociative mechanism is the most likely explanation for the effectiveness of hypnotic techniques in the treatment of dieting disorders.

Adapted and extended from: Griffiths R. A., & Channon-Little. L. D. (1995). Dissociation, dieting disorder and hypnosis: A review. European Eating Disorders Review, 3, 148-159. Copyright John Wiley & Sons Limited. Reproduced with permission.

REFERENCES

- Aas, A. (1963). Hypnotisability as a function of non hypnotic experiences. Journal of Abnormal and Social Psychology, 66, 142–150.
- Ambrose, G., & Newbold, G. (1980). A handbook of medical hypnosis. London: Bailliere Tindall.
- Baker, E. L., & Nash, M. R. (1987). Applications of hypnosis in the treatment of anorexia nervosa. American Journal of Clinical Hypnosis, 29, 185-193.
- Barabasz, M. (1990). Treatment of bulimia with hypnosis involving awareness and control in clients with high dissociative capacity. International Journal of Eating Disorders, 37, 53-56.
- Barabasz, M. (1991). Hypnotisability in bulimia. International Journal of Eating Disorders, 10, 117-120.
- Bernstein, F. M., & Putman, F. W. (1986). Development, reliability, and validity of a dissociation scale. Journal of Nervous and Mental Disease, 174, 727–735.
- Birnie, C. R. (1936). Anorexia nervosa treated by hypnosis in out-patient practice. Lancet, ii, 1331.
- Brenman, M., & Gill L. M.. (1947). Hypnotherapy. New York: Universities Press.
- Brenman, M., & Knight, P. (1945). Self-starvation and compulsive shopping with paradoxical reaction to hypnosis. American Journal of Orthopsychiatry, 15, 65.
- Beumont, P. J. V., & Abraham, S. F. (1983). How patients describe bulimia or binge eating. Psychological Medicine, 12, 625–635.
- Calof, D. L. (1986) Brief hypnotherapy in a case of bulimia nervosa. In E. T. Dowd, & J. M. Healy (Eds.). Case studies in hypnotherapy (pp. 147-165). New York: Guilford Press.
- Channon, L. D. (1981). Modification of the affect-bridge technique in weight control. Australian Journal of Clinical and Experimental Hypnosis, 32, 356–361.
- Crasilneck, H. B., & Hall, J. A. (1975). Clinical hypnosis: Principles and applications (2nd ed.). New York: Grune and Stratton.
- Davis, H. K. (1961). Anorexia nervosa treatment with hypnosis and ECT. Diseases of the Nervous System, 22, 627-631.
- Demitrack, M. A., Putnam, F. M., Brewerton, T. D., Brandt, H. A., & Gold, P. W. (1990). Relation of clinical variables to dissociative phenomena in eating disorders. American Journal of Psychiatry, 147, 1184-1188.
- Erickson, M. (1985). The case of Barbie: An Ericksonian approach to the treatment of anorexia nervosa. Transactional Analysis Journal, 15, 85-92 (Originally published In a teaching seminar

- with Milton H. Erickson (Ed. J. K. Zeig). New York: Brunner/Mazel, 1980).
- Erickson, M., & Rossi, E. (1979). Hypnotherapy: An exploratory casebook. New York: Irvington.
- Evans, F. J. (1988). *Hypnosis as a predictor of treatment outcome*. Paper presented at the 11th International Congress of Hypnosis and Psychosomatic Medicine, The Hague, Netherlands.
- Griffiths, R. A. (1989). Hypnobehavioural treatment for bulimia nervosa: Preliminary findings. *Australian Journal of Clinical and Experimental Hypnosis*, 17, 79–87.
- Griffiths, R. A. (1995a). Two-year follow-up findings of a hypnobehavioural treatment programme for bulimia nervosa. *Australian Journal of Clinical and Experimental Hypnosis*, 23, 135–144.
- Griffiths, R. A. (1995b). Hypnobehavioural treatment for bulimia nervosa: A treatment manual. *Australian Journal of Clinical and Experimental Hypnosis*, 23, 25–40.
- Griffiths, R. A., & Channon-Little, L. (1993). The hypnotisability of patients with bulimia nervosa and partial syndromes participating in a controlled treatment outcome study. *Contemporary Hypnosis*, 10, 81–87.
- Griffiths, R. A., Hadzi-Pavlovic, D., & Channon-Little, L. (1994). A controlled evaluation of hypnobehavioural treatment of bulimia nervosa: Immediate pre-post effects. *European Eating Disorders Review*, 2, 202–220.
- Griffiths, R. A., Hadzi-Pavlovic, D., Channon-Little, L. (1996). Short-term follow-up effects of hypnobehavioural and cognitive behavioural treatment for bulimia nervosa. *European Eating Disorders Review*, 4, 12–31.
- Griffiths, R. A., Touyz, S. W., Mitchell, P. B., & Bacon, W. (1987). The treatment of bulimia nervosa. *Australian and New Zealand Journal of Psychiatry*, 21, 5–15.
- Gross, M. (1982). Hypnosis in the treatment of anorexia nervosa (abstract). *International Journal of Clinical Hypnosis*, 30, 332.
- Gross, M. (1983). Correcting perceptual abnormalities, anorexia nervosa and obesity by use of hypnosis. Journal of the American Society of Psychosomatic Dentistry and Medicine, 30, 142– 150.
- Gross, M. (1984). Hypnosis in the therapy of anorexia nervosa. *American Journal of Clinical Hypnosis*, 26, 175–181.
- Gross, M.(1986). Use of hypnosis in eating disorders. In F. E. Larocca (Ed.). *Eating disorders* (pp. 109–118). San Francisco: Jossey-Bass.
- Groth-Marnat, G., & Schumaker, J. F. (1990). Hypnotisability, attitudes toward eating, and concern with body size in a female college population. *American Journal of Clinical Hypnosis*, 32, 194–200.
- Hall, J. R., & McGill, J. C. (1986). Hypnobehavioural treatment of self-destructive behaviour. Trichotillomania and bulimia in the same patient. *American Journal of Clinical Hypnosis*, 29, 39–46.
- Hilgard, J. R. (1977). Divided consciousness: Multiple control in human thought and action. New York: Wiley.
- Hilgard, J. R. (1979) Personality and hypnosis: A study of imaginative involvement. Chicago: University of Chicago Press.
- Holgate, R. A. (1984). Hypnosis in the treatment of bulimia nervosa: A case study. Australian Journal of Clinical and Experimental Hypnosis, 12, 105–112.
- Hoyt, H. P., Nadon, R., Register, P. A., Chorny, J., Fleeson, W., Grigorian, E. M., & Otto, L. (1989). Daydreaming, absorption and hypnotisability. *International Journal of Clinical and Experimental Hypnosis*, 37, 332–342.
- Kaffman, M. (1981). Monoideism in psychiatry: Theoretical and clinical implications. American

- *Journal of Psychotherapy*, 35, 235–243.
- Kranhold, C., Baumann, U., & Fichter, M. (1992). Hypnotisability in bulimic patients and controls. A control study. European Archives of Psychiatry, 43, 129–133.
- Kroger, W. S. (1977). Clinical and experimental hypnosis. Philadelphia: J. B. Lippincott.
- Kroger, W. S., & Fezler, W. D. (1976). Hypnosis and behaviour modification: Imagery conditioning. Philadelphia: J. B. Lippincott.
- Lankton, S. R., & Lankton, C. H. (1983). The answer within: A clinical framework of Ericksonian hypnotherapy. New York: Brunner/Mazel.
- Lynn, S. J., & Rhue, J. W. (Eds.)(1991). Theories of hypnosis: Current models and perspectives. New York: Guilford Press.
- Lynn, S. J., Rhue, J. W., Kvaal, S., & Maré, C. (1993). The treatment of anorexia nervosa: A hypnosuggestive framework. Contemporary Hypnosis, 10, 73-80.
- Orne, M. T. (1959). The nature of hypnosis: Artefact and essence. Journal of Abnormal Social Psychology, 58, 227-299.
- Pettinati, H. M., Horne, R. J., & Staats, J. M. (1985). Hypnotisability in patients with anorexia nervosa and bulimia. Archives of General Psychiatry, 42, 1014-1016.
- Pettinati, H. M., Kogan, L. G., Margolis, C., Shrier, L., & Wade, J. H. (1989). Hypnosis, hypnotisability, and the bulimic patient. In L. M. Hornyak & E. K. Baker (Eds.). Experimental therapies for eating disorders (pp. 34-59). New York: Guildford Press.
- Rosen, E. F., & Petty, L. C. (1994). Dissociative states and disordered eating. American Journal of Clinical Hypnosis, 34, 266-275.
- Sanders, S. (1986). The Perceptual Alteration Scale: A scale for measuring dissociation. American Journal of Clinical Hypnosis, 29, 95-102.
- Sheehan, P. W., & Perry, C. W. (1976). Methodologies of hypnosis: A critical appraisal of contemporary paradigms of hypnosis. Hillsdale, N. J.: Lawrence Erlbaum Associates.
- Shor, R. E. (1960). The frequency of naturally occurring "hypnotic-like" experiences in the normal college population. International Journal of Clinical and Experimental Hypnosis, 8, 151-163.
- Spiegel, H., & Spiegel, D. (1978). Trance and treatment: Clinical uses of hypnosis. New York: Basic
- Sutcliffe, J. P. (1960). Credulous and sceptical views of hypnotic phenomena: A review of certain evidence and methodology. International Journal of Clinical and Experimental Hypnosis, 8, 73–100.
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing self-altering experiences (absorption), a trait related to hypnotic susceptibility. Journal of Abnormal Psychology, 83, 268-277.
- Thakur, K. S. (1980). Treatment of anorexia nervosa with hypnotherapy. In H. T. Wain (Ed.). Clinical hypnosis in medicine (pp. 147–163). Chicago: Year Book Medical Publications.
- Thakur, K. S. (1984). Hypnotherapy for anorexia nervosa and accompanying somatic disorders. In W. C. Wester, & A. J. Smith (Eds.). Clinical hypnosis: A multidisciplinary approach (pp. 476–493). Philadelphia: J. B. Lippincott.
- Thiessen, I. (1983). Using fairy tales during hypnotherapy in bulimarexia and other psychological problems. Medical Hypnoanalysis, 4, 139–144.
- Torem, M. S. (1986a). Eating disorders and dissociative states. In F. E. Larocca (Ed.). Eating disorders: Effective care and treatment (pp. 141–150). Saint Louis: Ishiyaky Euro America.
- Torem, M. S. (1986b). Dissociative states presenting as an eating disorder. American Journal of Clinical Hypnosis, 29, 137–142.
- Torem, M. S. (1987). Ego-state therapy for eating disorders. American Journal of Clinical Hypnosis, 30, 94-103.

- Torem, M. S. (1990). Covert multiple personality underlying eating disorders. *American Journal of Psychotherapy*, 44, 357–368.
- Torem, M. S. (1992). The use of hypnosis with eating disorders. *Psychiatric Medicine*, 10, 105–118
- Touyz, S. W., & Beumont, P. J. V. (1989). Anorexia and bulimia nervosa, the dieting disorders. In P. J. V. Beumont & R. Hampshire (Eds.). *Textbook of psychiatry* (pp. 119–128). Melbourne: Blackwells
- Túry, F., & Szabó, P. (1990). Hypnotherapy in a special dissociative state: Nocturnal bulimia. A case study. Hypnos, 17, 155–161.
- Valdiserri, S., & Kihlstrom, J. F. (1995). Abnormal eating and dissociative experience. Journal of Abnormal Psychology, 17, 373–388.
- Vanderlinden, J., & Vandereycken, W. (1988). The use of hypnotherapy in the treatment of eating disorders. *International Journal of Eating Disorders*, 7, 673–679.
- Vanderlinden, J., & Vandereycken, W. (1990). The use of hypnosis in the treatment of bulimia nervosa. *International Journal of Clinical and Experimental Hypnosis*, 38, 101–111.
- Vanderlinden, J., Van Dyck, R., Vandereycken. W., & Vertommen, W. (1992). Hypnotisability and dissociation in a group of fifty eating disorder patients: Preliminary findings. In W. Bongartz (Ed.). *Hypnosis:* 175 years after Mesmer (pp. 291–294). Konstanz: Universitats Verlag.
- Vanderlinden, J., Vandereycken, W., Van Dyck, R., & Vertommen, H. (1993). Dissociation experiences and trauma in eating disorders. *International Journal of Eating Disorders*, 13, 187–193.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1962). Stanford hypnotic susceptibility scale, Form C. Palo Alto, CA: Consulting Psychologists Press.
- Wilson, S. C., & Barber, T. X. (1981). Vivid fantasy and hallucinatory abilities in the life histories of excellent hypnotic subjects ("somnambules"): Preliminary report with female subjects. In E. Klinger (Ed.). *Imagery* Vol 2: *Concepts, results and applications* (pp. 341–387). New York: Plenum Press.
- Wilson, S. C., & Barber, T. X. (1983). The fantasy-prone personality: Implications for understanding imagery, hypnosis, and parapsychological phenomena. In A. S. Shiekh (Ed.). *Imagery: Current theory, research, and application* (pp. 340–390). New York: Wiley.
- Yapko, M. D. (1984). *Trancework: An introduction to clinical hypnosis*. New York: Irvington Publishing Inc.
- Yapko, M. D.(1986). Hypnotic and strategic interventions in the treatment of anorexia nervosa. *American Journal of Clinical Hypnosis*, 28, 224–232.

HYPNOSIS FOR ANOREXIA NERVOSA AND BULIMIA NERVOSA: AN UPDATE

Rosalyn Griffiths Department of Psychology, University of Sydney

There is much to be done in the controlled outcome research for hypnobehavioural treatment of eating disordered clients. This brief update of more recent clinical reports and techniques suggests scientific evaluation is long overdue.

There have been no scientific studies of outcome of hypnosis in the treatment of anorexia and bulimia nervosa since our previous review (Griffiths & Channon-Little, 1995) reprinted in this book. Without further evaluation of hypnotic techniques in the treatment of eating disorders, the scientific community will not accept and use hypnosis without scepticism. In contrast, cognitive behavioural treatment (CBT) has been subjected to rigorous evaluation, particularly in the treatment of bulimia nervosa and is now considered the treatment gold standard for this disorder. Further, there is an urgent need for replication studies of our controlled evaluation of CBT and hypnobehavioural treatment (HBT) for bulimia nervosa (Griffiths, Hadzi-Pavlovic, & Channon-Little, 1994, 1996) which showed equivocal results for the two treatments. Until such studies are conducted, hypnosis in the treatment of eating disorders will not be taken seriously.

However, it is more difficult to make such claims about anorexia nervosa where there have been no controlled outcome studies for any form of treatment. Little has been published on hypnosis and eating disorders even at a descriptive level in recent years. This paper updates reports of techniques and studies not previously reviewed.

ANOREXIA NERVOSA

In the treatment of hospitalised anorexia nervosa patients, it is generally recommended that hypnotic techniques be used only after the person has reached, or is nearing, a minimum acceptable weight and after the therapeutic alliance has been obtained. This allows for any re-feeding cognitive complications to be taken into account and addresses the treatment resistance typical of underweight anorexics.

Lynn, Rhue, Kvall, and Maré (1993) outlined a number of useful suggestions which they recommended should be presented in a graded series ranging from "low to high in difficulty, personal/interpersonal focus, complexity, degree of structure imposed by the therapist, affectivity, conflict-evoking potential, and imaginative versus behavioural rehearsal" (p. 75). They also recommended that suggestions be used in a framework for reducing resistance in treatment. The suggestions they have successfully implemented are:

1. To relax and feel happy and content.

- 2. To have a daydream or fantasy accompanied by feelings of relaxation and well-being.
- 3. To go in fantasy to a favourite place where the patient feels relaxed and happy.
- 4. To daydream or fantasise about a specific area of conflict or a specific problem that is interpersonal in nature.
- 5. To view a problem, or a conflict-related situation from multiple perspectives.
- 6. To imagine possible outcomes of decisions or solutions/resolutions to problems and their consequences.
- 7. To enact, in fantasy, an interpersonal problem or conflict which involves interaction or confrontation with an antagonist or disavowed aspect of the self.
- 8. To role-play an interpersonal conflict or confrontation in the session.

Sanders (1991) in her book entitled "Clinical self-hypnosis: The power of words and images" uses self-hypnosis exercises so that the anorexic client develops self-suggestion, reduces tension through relaxation, and learns to focus on personal power rather than weight and shape. The techniques she describes are:

- 1. A physical metaphor, for example, the "stomach thermostat."
- 2. Description of self-suggestion where the client learns to give herself positive suggestions in hypnosis.
- 3. Metaphor of food as energy.
- 4. Mirroring.
- 5. Reframing weight gain.

Georgiou (1995) described treatment for a case of anorexia tardive (delayed-onset nervosa). Hypnosis was used throughout all phases of treatment and the client was highly hypnotisable and very responsive to hypnosis. Methods used included education; behavioural techniques; direct and indirect hetero- and self-hypnosis for relaxation, stress reduction, ego-enhancement and desensitisation of anxiety towards food and weight; and cognitive restructuring techniques.

BULIMIA NERVOSA

As we have reported previously bulimic subjects have been found to be more responsive to hypnotic suggestions than those with anorexia nervosa (e.g., Griffiths & Channon-Little, 1993) although it is interesting that in our recent study (Griffiths, Bryant, Giannakpoulos, Beumont, Touyz, et al., 1998a) we found that this may not necessarily be the case. Indeed, contrary to our predictions we found hypnotisability was not significantly different between bulimic, anorexic, Eating Disorder Not Otherwise Specified (EDNOS) and control groups. We raise the question about the contribution to these results by the type of assessment used to measure hypnotisability and the motivation of various clinical samples participating in the research.

Sanders (1991) also described techniques such as self-hypnosis, problem solving, self-hypnotic imagery, ego-building exercises and self-initiated dreams

which were effective with bulimic subjects. Many of these techniques have been used in our research and in earlier reports of others (e.g., Calof, 1986, Thiesson, 1983).

Vanderlinden (1993) described hypnotic techniques in the treatment of trauma and dissociative experiences in eating disorders, advocating that hypnotic techniques contribute to a much more efficient and effective treatment. The type of therapy applied mainly to bulimia nervosa patients. He suggested that therapy involve three phases:

- 1. Stabilisation and symptom reduction hypnosis is combined with behavioural and cognitive therapy adopted from techniques described by Vanderlinden and Vandereycken (1990). All clients are taught self-hypnosis for relaxation, and self-control is reinforced in hypnosis and followed by ego-enhancing suggestions.
- 2. Exploration, identification and modification of traumatic memories hypnosis is applied to explore ambivalence with regard to change with the use of indirect techniques outlined by Cheek and Le Cron (1968) and Wright and Wright (1987). Then, the dissociative state is explored following the egostate therapy principles outlined by Watkins and Watkins (1982). This is followed by the exploring and assimilating traumatic memories making use of the affect-bridge technique of Watkins (1971) and other behavioural techniques.
- Reintegration and rehabilitation use is made of future oriented exercises, ego-strengthening suggestions, and metaphors to promote independence in this phase.

Bányai, Zseni, and Túry (1993) described the successful use of the active-alert hypnosis procedure for a series of cases including one of bulimia nervosa. Active-alert hypnosis was developed by Bányai and Hilgard (1976) on a nonclinical sample. It is a method in which the hypnotic subject rides a bicycle with an ergometer set to a resistance, with eyes open throughout the session. During the induction, suggestions are administered to enhance alertness, attentiveness, and feelings of freshness. No suggestions are made for relaxation or of a passive nature. As with traditional hypnosis, Bányai and Hilgard (1976) found activealert hypnosis to be an altered state of consciousness with non-clinical samples. The authors maintain the procedure could be used therapeutically with groups as well as individuals.

The eating disorder case described by Bányai et al. (1993) appeared to have features of both anorexia and bulimia nervosa (since she was considerably underweight) and probably should be regarded as a case of EDNOS. Therapy included elements of behaviour therapy (e.g., exposure and response prevention), ego-strengthening, and psychodynamic therapy (e.g., age progression), integrated into active-alert hypnosis.

Degun-Mather (1995) described the first application of group therapy and hypnosis in the treatment of bulimia nervosa. Groups consisted of only five clients and the group was conducted weekly for 12 weeks by two therapists. Hypnosis was used for cognitive rehearsal and imagery of coping with difficult situations. Age progression was used so that clients can project themselves into the future, achieving goals and make positive self-suggestions. Tapes and self-hypnosis were provided to encourage independence and for relapse prevention. The author provided no objective measure of outcome and the drop-out rate was high (30-40%), however, it was claimed that of those who completed therapy, a 60% success rate was achieved.

HYPNOTISABILITY, UNDERLYING CONSTRUCTS AND EATING DISORDERS

In our earlier paper (Griffiths & Channon-Little, 1995) (see previous chapter) we suggest that the relationship between disordered eating and hypnotisability constructs, apart from dissociation, is in need of investigation. We have recently completed such a study (Griffiths, Bryant, Giannakpoulos, Beumont, Touyz, et al., 1998b) and found no significant differences between anorexic, bulimic, EDNOS, and control groups in their levels of fantasy proneness, absorption, and daydreaming style. Further, there was also only partial support for the thesis that bingeing may be connected with dissociative tendencies, leading us to conclude from the study that the relationship between eating disorders and dissociation is complex.

CONCLUSIONS

From this update it is hoped clinicians and researchers will take up the challenge to conduct more research in this area. Several clinical questions still remain unanswered. For example, exactly how hypnotisable are eating disordered groups compared to other clinical samples? When should hypnosis be introduced into therapy for eating disordered clients and what hypnotic techniques are the most effective? How effective is hypnobehavioural therapy compared to other forms of treatment? Answers to these questions are long overdue.

REFERENCES

- Bányai, É. I., & Hilgard, E. R. (1976). Comparison of active-alert hypnotic induction with traditional relaxation. *Journal of Abnormal Psychology*, 85, 218–224.
- Bányai, É. I., Zseni, A., & Túry, F. (1993). Active-alert hypnosis in psychotherapy. In J. W. Rhue, S. J. Lynn, I. Kirsch (Eds.). *Handbook of clinical hypnosis* (pp. 271–290). Washington, DC: American Psychological Association.
- Calof, D. L. (1983). Brief hypnotherapy in a case of bulimia nervosa. In E. T. Dowd, & J. M. Healy (Eds.). *Case studies in hypnotherapy* (pp. 147–165). New York: Guilford Press.
- Cheek, D. D., & Le Cron, L. (1968). Clinical hypnotherapy. New York: Grune and Stratton.
- Degun-Mather, M. (1995). Group therapy and hypnosis for the treatment of bulimia nervosa. *Contemporary Hypnosis*, 12, 69–73.
- Georgiou, E. H. (1995). Hypnotherapy in the treatment of anorexia tardive. *Australian Journal of Clinical and Experimental Hypnosis*, 23, 14–24.

- Griffiths, R. A., Bryant, R., Giannakpoulos, Beumont, P. J. V., Touyz, S. W., Russell, J., & Varano, P. (1998a). Hypnotisability and eating disorders revisited. Submitted for publication.
- Griffiths, R. A., Bryant, R., Giannakpoulos, Beumont, P. J. V., Touyz, S. W., Russell, J., & Varano, P. (1998b). The role of dissociation and related constructs in eating disorders. Submitted for publication.
- Griffiths, R. A., & Channon-Little, L. D. (1993). The hypnotisability of patients with bulimia nervosa and partial syndromes participating in a controlled treatment outcome study. Contemporary Hypnosis, 10, 81-87.
- Griffiths, R. A., & Channon-Little, L. D. (1995). Dissociation, dieting disorders and hypnosis: A review. European Eating Disorders Review, 3, 148-159.
- Griffiths, R. A., Hadzi-Pavlovic, D., & Channon-Little, L. D. (1994). A controlled evaluation of hypnobehavioural treatment for bulimia nervosa. European Eating Disorders Review, 2, 202– 220.
- Griffiths, R. A., Hadzi-Pavlovic, D., & Channon-Little, L. D. (1996). Short-term follow-up effects of hypnobehavioural and cognitive behavioural treatment for bulimia nervosa. European Eating Disorders Review, 4, 12–31.
- Lynn, S. J., Rue, J. W., Kvall, S., & Maré, C. (1993). The treatment of anorexia nervosa: A hypnosuggestive framework. *Contemporary Hypnosis*, 10, 73–80.
- Sanders, S. (1991). Clinical self-hypnosis: The power of words and images. New York: The Guilford Press.
- Thiessen, I. (1983). Using fairy tales during hypnotherapy in bulimarexia and other psychological problems. Medical Hypnoanalysis, 4, 139–144.
- Vanderlinden, J., & Vandereycken, W. (1990). The use of hypnosis in the treatment of bulimia nervosa. International Journal of Clinical and Experimental Hypnosis, 38, 101–111.
- Vanderlinden. J. (1993). Dissociative experiences, trauma and hypnosis. Den Haag: Cip-Gegevens Koninklijke Biblitheek.
- Watkins, J. G. (1971). The affect-bridge: A hypno-analytic technique. International Journal of Clinical and Experimental Hypnosis, 19, 22–27.
- Watkins, J. G., & Watkins, H. H. (1982). Ego-state therapy. In L. E. Abt & L. R. Stuart (Eds.). The newer therapies: A source book. (pp.136–155). New York: Van Nostrand Reinhold.
- Wright, M. E., & Wright, B. A. (1987). Clinical practice of hypnotherapy. New York: Guilford.

HYPNOSIS AS AN ADJUNCT TO THE TREATMENT OF BULIMIA NERVOSA

Rosalyn A. Griffiths Department of Psychology, University of Sydney

Bulimia nervosa is a complex dieting disorder, with its aetiology and development involving a number of factors which often combine to produce considerable physical and psychological morbidity. While the clinical characteristics can be easily assessed by a thorough and astute therapist, choosing the type of treatment may present a dilemma. This is because there have been several types of multifaceted treatment approaches, with different goals and outcomes. The choice of treatment may depend on the therapist's experience with different techniques. In this paper, I focus on a specific management approach, examining how hypnosis can be combined with other techniques to form a comprehensive treatment targeting bulimic behaviours and psychopathology.

I will begin this paper with a brief description of the value of hypnosis in treatment of bulimia, a topic addressed fully by Greg Coman in the clinical handbook on weight management and eating disorders published by the Australian Journal of Clinical and Experimental Hypnosis (1997). I will discuss the effectiveness of hypnotic techniques and their combination with other techniques. Assessment of eating behaviours, general psychopathology and hypnotisability to determine treatment effectiveness will be discussed and followed by current explanations of the models underlying hypnotic intervention. Since my interest has been in the application of hypnobehavioural treatment (HBT) to bulimia nervosa, I will illustrate HBT with a case study. I hope more therapists and researchers will use HBT in the future, since hypnotic techniques have been under-utilised in the treatment of bulimia.

WHY HYPNOSIS FOR BULIMIA NERVOSA?

I first began using hypnosis for bulimia nervosa in the early eighties. I was primarily interested in the treatment of general medical problems and had been using hypnotic techniques as an adjunct in their treatment. At the time, I was also receiving a number of referrals for the treatment of bulimia but few people knew how to treat it. There had been descriptions of cognitive behavioural treatment (CBT) for bulimia nervosa (Fairburn, 1981) but studies to indicate effective treatments were unavailable. It occurred to me that hypnosis may have a role to play, so I combined a number of hypnotic techniques with behavioural strategies taken from the obesity literature, together with cognitive strategies and nutritional education. The results of this intervention were positive (Griffiths, 1997a).

At the same time, research was being conducted which indicated that bulimic clients were more hypnotisable than other dieting disordered individuals (Pettinati, Horne, & Staats, 1985) which confirmed my clinical impression that

hypnotic techniques had a place in the management of the disorder and provided a good reason to choose hypnotic techniques instead of other techniques in the absence of any formal evaluation of outcome. We have since replicated the high hypnotisability of bulimic clients (Griffiths & Channon-Little, 1993) as have several other people (Kranhold, Baumann, & Fichter, 1992; Vanderlinden, 1993). Our group of 113 bulimic and partial syndrome subjects had a far higher mean susceptibility score, compared with the Australian student population, using the Harvard Group Scale of Hypnotic Susceptibility: Form A (HGSHS:A) (Shor & Orne, 1962) (M = 7.03, compared with M = 5.45). Significantly more bulimic and partial syndrome subjects, compared to the student population, responded to seven of the 12 suggestions in the HGSHS:A. The suggestions included taste hallucination, arm rigidity, dream, age regression, arm immobilisation, and the hallucinated voice. These findings were similar to the later findings by Pettinati, Kogan, Margolis, Shrier, and Wade (1989) that significantly more bulimic subjects than American college students responded to six out of 12 suggestions.

Our investigations into the role of hypnosis in treatment have suggested that hypnotisability is not related to outcome (defined as abstinence from bingeing and purging), using either HBT or CBT (Griffiths, Channon-Little, & Hadzi-Pavlovic, 1995). We suggested that the treatment, which included hypnosis, that is, HBT, was not tailored to the individual's hypnotic talents. It is desirable to consider the individual's hypnotic capacity before using hypnosis in the treatment of bulimia, to ensure maximum impact. While this may not always be easy when conducting comparative treatment outcome research, it can be easily be done by a therapist. Another reason for the findings was that individualised assessment of hypnotisability such as the Stanford Hypnotic Susceptibility Scale: Form C (SHSS:C) (Weitzenhoffer & Hilgard, 1962) was not used and this may have resulted in a more definitive measure of hypnotic responsiveness. This issue is addressed below.

There are other reasons for including hypnosis in the treatment of bulimia nervosa. These relate to the client's psychopathology and to the creative inclinations of the therapist.

Hypnotic Techniques are enjoyed by Bulimic Clients

Most bulimic clients are desperate for help and may have tried several treatments in the past which have not worked and hypnosis offers an attractive alternative. In my experience, few clients are disappointed by the results of hypnotic intervention and I have found that clients rate HBT as suitable as CBT for their disorder. Their ratings of suitability and expectations of improvement do not change with exposure to treatment and throughout follow-up (Griffiths, 1993).

Interestingly, few clients find hypnotic techniques unpleasant. With adequate preparation, which should include clarification of myths and misconceptions about hypnosis, even the most reluctant bulimic client is willing to try hypnosis. Those likely to be threatened by hypnosis are generally clients with severe personality disorders, in which case the therapist must review whether it is appropriate to use hypnosis at all. Issues of being controlled by the therapist or losing control while in hypnosis can be problematic for many bulimia sufferers and requires discussion before hypnosis commences.

Hypnotic Techniques provide Self-control over Bingeing, Vomiting, and Purging Episodes

One of the core features of bulimia nervosa is the client feeling "out of control" when bingeing and when caught in the diet/binge/purge cycle. Clients feel reassured by the self-control which hypnotic techniques provide and become eager for hypnotic suggestions for symptom control to be repeated from session to session. Structured, direct, positive suggestions are the best means of providing the client with self-control over these behaviours. The suggestions should be altered according to changes or reductions in symptomatology. Progression to self-hypnosis is a natural step to give the client autonomy and confidence.

Hypnotic Techniques can be used to reinforce Changes in Eating Habits and to enhance Normal Patterns of Eating

Behavioural techniques such as self-monitoring in a food and behaviour diary and nutritional counselling are necessary before hypnotic techniques are introduced. Hypnotic techniques, in the form of direct suggestions or visual imagery, are used as reinforcers to behavioural techniques. If the behavioural phase of treatment is not adequately conducted, hypnotic techniques will be ineffective or seen by the client to be irrelevant. An important question is how long should a client self-monitor? My rule of thumb is that it should continue until a normal pattern of eating is established. A combination of hypnotic suggestions and self-monitoring can also bring about lasting changes in symptoms.

Hypnotic Techniques help to increase Control over Problem Situations which precipitate Bingeing and Purging

Hypnosis should be presented in the form of direct, positive suggestions or visual imagery via hypnotic behavioural rehearsal, to increase control over bingeing precipitants. First, it is necessary to determine the problems which cause the bulimic behaviours. Second, it is necessary to provide training in problem solving which can be presented in and out of hypnosis.

Hypnotic Techniques can be used to enhance Self-Esteem

I use ego-enhancing suggestions for a range of clinical problems. They are particularly useful in the treatment of bulimia nervosa because the disorder is characterised by low self-esteem and secondary depression. Ego-enhancing suggestions can be intertwined with direct suggestions for symptom control or they can be used on their own. These types of suggestions promote growth and recovery. During the course of treatment the client may become disappointed with her faltering progress. At this point, the therapist can boost morale with

suggestions to encourage mastery and motivation to persist.

Hypnotic Techniques can be used to enhance Relaxation

Prior to using hypnosis it is often useful to teach the client meditation, which enhances the individual's focus in preparation for hypnosis and increases level of relaxation and, hence, receptiveness to hypnosis. Hypnotic induction and deepening techniques plus relaxing visual imagery can be useful relaxation techniques which should be reinforced with self-hypnosis. Inability to cope with stress is a common feature of the disorder and meditation and hypnotic relaxation are both useful stress management techniques. These should be introduced later in treatment after regular eating patterns are established, the frequency of bingeing and purging has been significantly reduced, and selfcontrol over the precipitants of bingeing has been secured.

Hypnotic Techniques can encourage increasing participation in Social Situations which may have been avoided

Some bulimia sufferers develop anxiety reactions to social situations in which they feel pressured to eat. Techniques appropriate to treat this aspect to the disorder are direct hypnotic suggestions and hypnotic behavioural rehearsal, resembling systematic desensitisation. Additionally, the client should be encouraged to practise eating normally in a variety of places and also to socialise with different groups of people in a wide range of social and leisure activities. The social recovery of bulimic clients is often neglected in treatment. Social avoidance developing from bulimia can be just as incapacitating as the bulimic behaviours themselves. It is often undetected, under-emphasised, and, as a consequence, remains untreated and contributes to relapse.

Hypnosis can be used in ways which allow the Therapist to be both Versatile and Innovative

So far I have mentioned only a few hypnotic techniques, namely direct positive suggestions, ego-enhancing suggestions and hypnotic behavioural rehearsal which I use frequently and have found to be effective. These are described in more detail in the HBT manual presented in Griffiths (1997b). Adjunctive techniques proposed by others include indirect suggestions, hypnotic age regression and age progression, hypnotic dreams, affect-bridging, "back to the future" technique, metaphorical prescriptions, and ego-state therapy (Pettinati, et al., 1989; Torem, 1991, 1992; Vanderlinden, Norré, & Vandereycken, 1992).

Hypnosis can be effectively combined with other Techniques

Hypnosis combines favourably with behavioural techniques such as selfmonitoring, stimulus control techniques, positive reinforcement, relaxation training, and meditation. Cognitive techniques, such as cognitive restructuring and reframing with the aims of reinforcing a healthy self-image and changing maladaptive attitudes to eating, weight, and shape also combine satisfactorily with hypnotic techniques. Similarly, hypnosis has been combined with psychoanalytic techniques such as age regression, age progression, abreactions and catharsis with the aims of exploring underlying dynamics. Most behavioural, cognitive and dynamic techniques can be presented in hypnosis to reinforce the learning process. For recalcitrant clients, it is necessary to include combinations of techniques and to increase the number of sessions.

WHAT INDUCTION AND DEEPENING TECHNIQUES SHOULD BE USED?

The choice of induction and deepening techniques used clinically is often dictated by their acceptability to the client. It has been my experience that bulimic individuals prefer a structured approach to hypnosis, so my preference has been to use eye closure with progressive relaxation for the induction technique. The deepening procedure I use is counting from one to 20. Both induction and deepening techniques are described in the SHCS: Form A (Morgan & Hilgard, 1975). These are less threatening for the impulsive bulimic client concerned with control issues. I have experimented with non-verbal deepening techniques, such as music, but find that bulimic individuals feel less disengaged with these techniques.

THEORETICAL MODELS UNDERPINNING THE USE OF HYPNOSIS IN TREATMENT OF BULIMIA NERVOSA

Although many hypnotic techniques have been described for bulimia nervosa, a theoretical rationale for their inclusion in treatment programmes has often been lacking. Only two models have been clearly described in the hypnosis literature and these are the dissociation and hypnobehavioural models.

Dissociation Model

This model has attracted the most attention in the dieting disorders literature, mainly because of its long and controversial history. Dissociation was considered to be an aetiological factor in anorexia nervosa (Janet, 1907) and is currently thought to be part of the psychopathology of bulimia nervosa, accounting for bingeing and purging as well as high hypnotisability. The evidence for the latter has been supported by findings that the bulimic population produce large numbers of dissociative responses on scales measuring dissociation (Bernstein & Putnam, 1986; Vanderlinden, 1993).

The model forms the basis for ego-state therapy (Watkins & Watkins, 1981) and adopted for use in the treatment of dieting disorders (Torem, 1986, 1987). According to ego-state therapy it is possible to activate, investigate and communicate with various ego states, which reduces the tendency to dissociate. Torem used both non-hypnotic methods combined with hypnotic methods, such as self-hypnosis and hypnoanalysis to change the maladaptive dissociated ego

states which are in conflict in some bulimic clients. Torem (1990) suggested that this special sub-group of dissociative dieting disorders "... do not respond to traditional treatment modalities in eating disorders programmes . . . [and] . . . the underlying dissociation, multiplicity, and unresolved traumas must be addressed" (pp. 356, 366).

Hypnobehavioural Model

This is the model I have previously described to explain HBT for bulimia nervosa (see Table 1) (Griffiths, 1997). It is a simple model based on a functional analysis of bulimic behaviour. The model proposes that there are both binge and purging antecedents and consequences. The binge antecedents include dieting; weight and food preoccupation; sociocultural pressures to pursue thinness, fitness and exercise; socialising difficulties influenced by lack of assertiveness and low self-esteem; and stress resulting in tension, anxiety, depression, and mood changes. The binge antecedents, dieting, weight, and food preoccupation result in consequences such as physical and psychological side-effects; and excessive weighing or avoidance of weighing. Other binge consequences, namely, pursuit of thinness, fitness or excessive exercise; avoidance of social situations; and tension, anxiety, depression, and mood changes can also be binge antecedents. The main purge antecedents are a morbid fear of weight gain and guilt about overeating. The consequences after purging are further guilt and self-loathing and increased resolve to diet.

Antecedent and consequent control in HBT is achieved by using behaviour modification with self-monitoring as the prime behavioural technique. This extends for a period of four weeks. To establish further control during this phase it is also necessary to provide education about bulimia nervosa, to disrupt the diet/binge/purge cycle, to establish a regular eating pattern, and to devise alternative strategies for bingeing and purging problem times. There are four sessions of hypnosis over the following four weeks. Positive suggestions in hypnosis are used to enhance behavioural changes and the client is instructed in self-hypnosis so that relapse is prevented. A distinct advantage of HBT is that it can be used for clients with all levels of hypnotisability and psychopathology. The 8-week HBT programme is short compared to other treatments and therefore cost effective. Other advantages are the therapist does not need undergo special training as with ego-state therapy and the techniques can be followed step-bystep from a treatment manual (Griffiths, 1997).

WHAT SHOULD BE ASSESSED PRIOR TO TREATMENT?

Assessment of the client prior to beginning hypnosis must be thorough. Although it may not be possible for the therapist to administer a range of measures it is important to include at least one measure from each of the following areas:

Table 1. Hypnobehavioural model for Bulimia Nervosa

Binge Antecedents		Binge Consequences	Antecedent & Consequence Control		
Dieting	\rightarrow	Physical and psychological side-effects.	Behaviour modification with self- monitoring as the prime behavious technique.		
Weight and food preoccupation	\rightarrow	Excessive weighing or avoidance of weighing.	• Education about the disorder – causes, development and consequences.		
Sociocultural pressure: pursuit of thinness, fitness & exercise.	\leftrightarrow	Pursuit of thinness, fitness or excessive exercise.	Disrupting the diet/binge/purge cycle.Establishing a regular eating pattern.		
Socialising difficulties: lack of assertiveness low self-esteem, avoidance of social situations.	\leftrightarrow	Avoidance of social situations.	• Devising alternative strategies to increase self-control at problem times when tempted to binge or purge.		
Stress – tension, anxiety, depression, mood changes.	\leftrightarrow	Tension, anxiety, depression, and mood changes.	Positive suggestions in hypnosis to enhance behavioural control.		
			Practice of self-hypnosis to reinforce changes in behaviour.		
Purge Antecedents		Purge Consequences			
Morbid fear of weight gain.	\rightarrow	Guilt and self-loathing, increased resolve to diet.			
Guilt about overeating.	→	Guilt and self-loathing, increased resolve to diet.			

Note (↔) Some consequences of bingeing are also antecedents

Eating pathology

There are a number of measures of eating pathology, structured interviews and self-report forms, which can be used to establish a diagnosis and to give some indication of the effectiveness of hypnotic techniques. The therapist should expect to see significant changes on these measures as a result of treatment. The following measures are recommended:

- (1) Eating Disorder Examination (EDE) (Fairburn & Cooper, 1993).
- (2) Bulimic Investigatory Test (BITE) (Henderson & Freeman, 1987).
- (3) Eating Attitudes Test (EAT-40; EAT-26) (Garner & Garfinkel, 1979; Garner, Olmstead, Bohr, & Garfinkel, 1982).
- (4) Eating Disorder Inventory 2 (EDI-2) (Garner, 1991).
- (5) Body Shape Questionnaire (BSQ) (Cooper, Taylor, Cooper, & Fairburn, 1987).

General Psychopathology

To gain an understanding of additional psychopathology, which can also

provide further information of the effectiveness of treatment, I suggest the following aspects be investigated. There are several self-report measures available to assess each and I have listed some of the more popular ones:

- (1) Depression: Beck Depression Inventory (BDI) (Beck, 1993); Zung Self-Rating Depression Scale (Zung, 1965).
- (2) Self-concept or self-esteem: Self Concept Questionnaire (SCQ) (Robson, 1989); Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965).
- (3) Anxiety: State-Trait Anxiety Inventory (STAI-Y) (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983).
- (4) Dissociation: Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986); Dissociation Questionnaire (DIS-Q) (Vanderlinden, 1993).

Hypnotisability

Measuring hypnotisability should be regarded as mandatory before commencing treatment of bulimia nervosa. Only this way can the therapist tailor hypnotic techniques to the individual's capacity. A choice can be made from three hypnotic measures and I will briefly discuss their advantages and disadvantages.

- (1) Stanford Hypnotic Clinical Scale: Adult (SHCS: Adult) (Morgan & Hilgard, 1975). This 5-item standardised measure is useful for the therapist because of its short administration time but the scoring of responses to the items can be unclear. In an earlier research study of bulimic clients (Griffiths, 1989), I found that the mean scores of hypnotic susceptibility for the majority were in the medium range, which was probably an underestimate of their actual responsiveness. It should not be used as the sole measure of responsiveness when researching hypnotisability.
- (2) Harvard Group Scale of Hypnotic Susceptibility: Form A (HGSHS:A) (Shor & Orne, 1962). This 12-item scale is useful for measuring the hypnotic responsiveness of groups of individuals for research purposes. I have found it useful to administer to individual clients since it taps a range of hypnotic responses from which hypnotic treatment techniques can be tailored but the lengthy administration time may be disconcerting for some therapists. As mentioned earlier, the HGSHS:A has so far not been able to detect a relationship between treatment outcome in bulimia and hypnotic responsiveness.
- (3) Stanford Hypnotic Susceptibility Scale: Form C (SHSS:C) (Weitzenhoffer & Hilgard, 1962). This 12-item scale designed for individual administration gives a reliable estimate of hypnotic responsiveness and although it takes an hour to administer it is recommended for use in both clinical and research settings.

HYPNOBEHAVIOURAL TREATMENT – CASE ILLUSTRATION

Mrs A was a 33-year-old married woman who had bulimia nervosa, purging subtype (DSM-IV, American Psychiatric Association [APA], 1994) at presentation. She had a previous history of anorexia nervosa and her sister had received treatment for the same condition. Mrs A remembered being preoccupied with weight during her adolescence and losing weight after an episode of glandular fever at the age of 18 years, and subsequently dieted to lose more weight by age 19. She started to have subjective binge episodes at 22 years and began self-induced vomiting at 25 years. She lost her periods for several months and during this time her BMI dropped to 15. She was then treated for anorexia nervosa, receiving inpatient and outpatient treatment for a total of nine months. She made a fairly good recovery from her anorexia nervosa by regaining her weight to a healthy level and decided a have a child. Unfortunately she had a miscarriage but, one year later, managed to conceive and, at the time of presentation, had a daughter who was two years old. She had been relatively asymptomatic during her pregnancy.

At presentation, Mrs A was at normal weight (BMI = 20.5) but had begun to have objective binge episodes at least twice a week and subjective binges everyday. She was self-inducing vomiting after binges and sometimes after normal meals. She was restricting between binge episodes but denied excessively exercising, purging, or diet tablet abuse. The current symptoms emerged shortly after the birth of her child. She was particularly concerned about her bulimia because she wanted to have another child. The physical side-effects she experienced as a result of her disorder were lethargy, peripheral paraesthesia, swollen parotids, sore throat, dehydration, and palpitations. The psychological side-effects were tension, depression, anxiety, depression, mood changes, irritability, and low self-esteem.

Mrs A was assessed on a number of measures prior to treatment to give an indication of treatment outcome. These included the EAT-40, EAT-26 subscales, EDI, General Health Questionnaire (GHQ) (Goldberg, 1972), Zung Self-Rating Depression Scale, and Rosenberg Self-Esteem Scale (RSE). Table 2 shows a summary of scores on each of these measures from pre-treatment to post-treatment, and throughout follow-up to nine months.

Treatment included the outpatient 8-week HBT programme described in detail in Griffiths (1997). In the first session, I addressed treatment structure; content and outcome; and the need for commitment to the programme. Educational material on bulimia nervosa, programmes for recovery, food and nutrition was then provided. I gave Mrs A information on the cause of bulimia nervosa; dieting and the physical and psychological effects of starvation; and the development of the diet/binge/purge cycle. Advice and handouts were given on obtaining a regular eating pattern or normalising eating habits; body weight; the prevention of compensatory behaviours; dealing with social situations; changes in mood and on the use of stress management techniques. She was instructed in the use of self-monitoring (keeping a food and behaviour diary) and asked to keep the daily diary for the next four weeks. At the end of the session an appointment was made for her to be seen by the dietitian.

The next session (an interview conducted by the dietitian) focused on the prescription of a meal plan. Special attention was also given to Mrs A's tendency to eliminate dairy foods and red meat because she regarded them as "fattening"

Measures	Pre	Post	6 weeks	6 months	9 months
EAT-40	65	10	10	8	6
EAT-26 subscales					
EAT-Dieting	28	3	0	2	2
EAT-Bulimia	15	0	2	0	0
EAT-Oral Control	11	0	0	0	0
EDI Subscales					
EDI-DT:Drive for Thinness	9	1	0	0	0
EDI-B:Bulimia	15	0	0	0	0
EDI-BD:Body Dissatisfaction	2	0	0	0	0
EDI-I:Ineffectiveness	19	1	0	0	0
EDI-P:Perfectionism	15	14	12	11	8
EDI-ID:Interpersonal Distrust	11	7	6	5	2
EDI-IA:Interoceptive Awareness	17	10	0	3	0
EDI-MF:Maturity Fears	2	3	0	0	0

Table 2. Case illustration – Scores throughout HBT and follow-up for Mrs A

or unhealthy.

GHQ Zung SDS

RSE

In the third session, Mrs A's self-monitoring efforts were reviewed. She had satisfactorily completed the records and had two bingeing and vomiting episodes in the previous week which she felt were due to stresses at home with her family. She had begun to plan her meals, was no longer restricting her intake and was re-introducing dairy foods and consuming greater quantities of red meat, although she did not find this easy. Strategies for dealing with problems affecting bingeing were discussed. She decided to use a relaxation tape she had bought, to assist her to cope with stress. She was asked to post back her self-monitoring sheets on a weekly basis in the stamped addressed envelopes provided for next three weeks.

Mrs A returned three weeks later to commence the next phase of treatment which included hypnosis (Sessions Four to Seven with me). She had recorded only one episode of bingeing and vomiting in the previous three weeks. She was able to identify the reason for it and said that despite the episode, she was feeling much better and was more confident in her ability to control her bulimia. She was highly hypnotisable (scoring on 11 out of the 12 items of the HGSHS: Form A) and responded well to positive suggestions to enhance self-control given in hypnosis in each of the next four sessions. She continued to reduce the frequency of binge/vomit episodes in the subsequent weeks and kept a list of strategies to deal with problem times. Mrs A had made fundamental changes to her eating habits, was beginning to enjoy eating again and was less afraid to eat previously avoided foods. She reported more interest and participation in social activities. Her response to self-hypnosis and her compliance with it between

sessions was excellent. A tape of hypnotic positive suggestions was made in the last session (Session Seven) before follow-up at her request. She was asymptomatic in the last two weeks of treatment.

At six weeks follow-up she reported being abstinent from bingeing and vomiting since completing treatment and that she was exactly six weeks pregnant. She felt she had mastered her bulimia. At six months follow-up, her pregnancy was progressing well and she did not have any shape or weight concerns. She was followed-up shortly after the birth of her healthy baby at nine months and had fully recovered from her bulimia nervosa. As well as reducing her binge/vomit frequency there were significant reductions in her bulimic behaviours and aspects of other psychopathology throughout treatment and follow-up. Notably, her level of self-esteem continued to increase throughout follow-up and, three years later, she remained symptom free.

Adapted and expanded from "Hypnosis as an adjunct to the treatment of Bulimia Nervosa, Chapter Ten in B. J. Evans, G. J. Coman, and G. D. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 164-178). Heidelberg: Australian Journal of Clinical and Experimental Hypnosis, 1997.

REFERENCES

- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th Ed). Washington, DC: American Psychiatric Association.
- Beck, A. T. (1993). Beck Depression Inventory (BDI). New York: The Psychological Corporation.
- Bernstein, E. M., & Putnam, F. W. (1986). Development, reliability, and validity of a dissociation scale. Journal of Nervous and Mental Disease, 174, 727–735.
- Coman, G. J. (1997). Hypnosis in the treatment of bulimia nervosa: A review of the literature. In B. J. Evans, G. J. Coman, & G. D. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 179-197). Melbourne: Australian Journal of Clinical and Experimental Hypnosis.
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the Body Shape Questionnaire. International Journal of Eating Disorders, 6, 485-494.
- Fairburn, C. G. (1981). A cognitive behavioural approach to the treatment of bulimia. Psychological Medicine, 11, 707–711.
- Fairburn, C. G., & Cooper, Z. (1993). The Eating Disorder Examination (12th edition). In C. G. Fairburn, & G. T. Wilson (Eds.). Binge eating: Nature, assessment and treatment (pp. 332–360). New York: Guilford Press.
- Garner, D. M. (1991). Eating Disorder Inventory-2. Professional manual. Florida: Psychological Assessment Resources, Inc.
- Garner, D. M., & Garfinkel, P. E. (1979). Eating Attitudes Test: An index of the symptoms of bulimia nervosa. Psychological Medicine, 9, 273–279.
- Garner, D. M., Olmstead, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The Eating Attitudes Test: Psychometric features and clinical correlates. Psychological Medicine, 12, 871–878.
- Goldberg, D. M. (1972). The direction of psychiatric illness by questionnaire. London: Oxford University Press.
- Griffiths, R. A. (1989). Hypnobehavioural treatment for bulimia nervosa: Preliminary findings. Australian Journal of Clinical and Experimental Hypnosis, 17, 79–87.
- Griffiths, R. A. (1993). An evaluation of hypnobehavioural treatment for bulimia nervosa. Doctoral thesis, University of Sydney.
- Griffiths, R. A. (1997a). Hypnosis in the treatment of bulimia nervosa: A case study. In B. J.

- Evans, G. J. Coman, & G. D. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 203–211). Heidelberg: Australian Society of Hypnosis.
- Griffiths, R. A. (1997b). Hypnobehavioural treatment for bulimia nervosa: A treatment manual. In B. J. Evans, G. J. Coman, & G. D. Burrows (Eds.). Hypnosis for weight management and eating disorders (pp. 212–228). Heidelberg: Australian Society of Hypnosis.
- Griffiths, R. A., & Channon-Little, L. (1993). The hypnotizability of patients with bulimia nervosa and partial syndromes participating in a controlled treatment outcome study. Contemporary Hypnosis, 10, 81-87.
- Griffiths, R. A., Channon-Little, L. D., & Hadzi-Pavlovic, D. (1995). Hypnotizability and outcome in the treatment of bulimia nervosa. Contemporary Hypnosis, 12, 165–172.
- Henderson, M., & Freeman, C. P. L. (1987). A self-rating scale for bulimia: The "BITE." British Journal of Psychiatry, 150, 18-24.
- Kranhold, C., Baumann, U., & Fichter, M. (1992). Hypnotizability in bulimic patients and controls. A pilot study. European Archives of Psychiatry, 43, 129-133.
- Janet, P. (1907). The major symptoms of hysteria. London: Macmillan.
- Morgan, A. H., & Hilgard, J. R. (1975). The Stanford Hypnotic Clinical Scale. Appendix In E. R. Hilgard & J. R. Hilgard (Eds.). Hypnosis in the relief of pain (pp.212-221). Los Altos, CA: William Kauffman.
- Pettinati, H. M., Horne, R. J., & Staats, J. M. (1985). Hypnotizability in patients with anorexia nervosa and bulimia. Archives of General Psychiatry, 42, 1014–1016.
- Pettinati, H. M., Kogan, L. G., Margolis, C., Shrier, L., & Wade, J. H. (1989). Hypnosis, hypnotisability, and the bulimic patient. In L. M. Hornyak & E. K. Baker (Eds.). Experiential therapies for eating disorders (pp. 34-59). New York: Guilford Press.
- Robson, P. J. (1989). Development of a new self-report questionnaire to measure self-esteem. Psychological Medicine, 19, 513-518.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). Manual for the State-Trait Anxiety Inventory (STAI-Y). Palo Alto, CA: Consulting Psychologists Press.
- Shor, R. E., & Orne, E. C. (1962). The Harvard Group Scale of Hypnotic Susceptibility, Form A. Palo Alto, CA: Consulting Psychologists Press.
- Torem, M. S. (1986). Dissociative states presenting as an eating disorder. American Journal of *Clinical Hypnosis*, 29, 137–142.
- Torem, M. S. (1987). Ego-state therapy for eating disorders. American Journal of Clinical Hypnosis, 30, 94–103.
- Torem, M. S. (1990). Covert multiple personality underlying eating disorders. American Journal of Psychotherapy, 44, 357–368.
- Torem, M. S. (1991). Eating disorders. In D. J. O'Grady (Ed.). Clinical hypnosis with children (pp. 230–260). New York: Brunner/Mazel.
- Torem, M. S. (1992). The use of hypnosis with eating disorders. Psychiatric Medicine, 10, 105– 118.
- Vanderlinden, J. (1993). Dissociative experiences, trauma and hypnosis: Research findings and clinical applications in eating disorders. Den Haag: Cip-Gegevens Koninklijke Bibliotheek.
- Vanderlinden, J., Norré, J., & Vandereycken, W. (1992). A practical guide to the treatment of bulimia nervosa. New York: Brunner/Mazel.
- Watkins, J. G., & Watkins, H. H. (1981). Ego-state therapy. In R. J. Corsini (Ed.). Handbook of innovative psychotherapies (pp. 252–270). New York: Wiley.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1962). Stanford Hypnotic Clinical Scale, Form C. Palo Alto,

HYPNOSIS FOR PROBLEM GAMBLING

Greg J. Coman

Department of Psychiatry, University of Melbourne

Graham D. Burrows AO KSJ
Department of Psychiatry, University of Melbourne
Austin & Repatriation Medical Centre

Over the last decade, the types of gambling available in Australia have been significantly extended and access to such activities increased. This increasing gambling activity has been accompanied by increasing community awareness of gambling, its forms, and associated problems, both to the individual gambler, the family and work associates, and the community in general. Notwithstanding the increase in research into gambling, little, if any, work has been done examining the relationship between the hypnotic phenomena of dissociation, absorption, and suggestibility and gambling behaviours, nor the potential role of hypnosis in treatment modalities for problem and pathological gambling. This paper reviews the nature and extent of problem gambling, and explores the use of hypnosis as an adjunct to treatment.

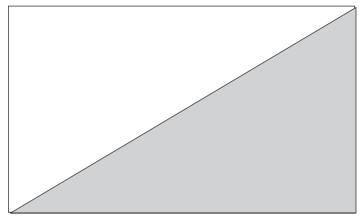
Opportunities to gamble have increased significantly in recent years. This has been due mainly to the increasing accessibility of gambling activities and venues but has also been contributed to by advances in electronic technology, so that individuals are now able to gamble from home via telephone betting accounts, on the internet and in aircraft. This increased range and accessibility of gambling activities has been accompanied by increasing community awareness of gambling, including different types of gambling and the effects of gambling on individuals, local communities and the broader population.

A number of theories have been advanced to explain gambling and problem gambling behaviour, including why some individuals experience gambling difficulties while others do not. A full explanation of these is beyond the scope of this paper. Suffice to say, there is no commonly accepted explanation for problem gambling. Our approach, based upon our clinical experiences, is not to develop a general theory of aetiology, but, rather, to focus on the motivations for gambling shown by individual clients and the associated cognitions, attitudes, life experiences, gambling thoughts, and gambling behaviours they report. Using this framework, increased gambling thoughts, behaviours, and associated characteristics denote increasing likelihood of problematic gambling. Figure 1 shows this framework.

This approach enables us to work with clients whose gambling behaviours and involvements have increased from initial normal gambling patterns and have now become problematic. In the majority of these cases, the switch from normal to problem gambling can often be associated with some significant life event the person has experienced. The approach in Figure 1 also enables us to work with clients who very quickly develop problem gambling behaviours —

Figure 1. Continuum of gambling behaviours

Recreational gambling $\rightarrow \rightarrow \rightarrow$ Problem gambling



Symptomatic Characteristics

- Illegal acts to obtain money
- Chases Losses
- Lies to obtain money
- Affected family and social relationships
- · Gambles more
- Tries to stop but cannot
- · Restless and irritable when unable to gamble
- · Preoccupied with gambling

those who are seen as having some predisposition to gambling excessively, without the precipitant life event reported by most other clients.

The term "normal" is used to describe gambling behaviour typified by intermittent but regular or irregular participation in chance games, which is within the control of the individual. It may occur while alone but more typically occurs with friends or colleagues and lasts for a limited period of time, with predetermined acceptable losses. The recreational or normal gambler wagers a limited amount, considered to be within acceptable loss limits and the gambling in general does not cause personal or familial distress. When recreational gamblers lose an amount that was not anticipated or planned, they respond by stopping or limiting their gambling for some period.

Recreational gambling is distinguished from professional gambling. Professional gamblers may be likened to recreational gamblers in that they also limit their financial and other risks and operate with firm control over their behaviour. Important differences between recreational and professional gamblers are that professionals do not participate in games that involve significant chance or probability but rather, choose games where skill and knowledge are operative. Professionals typically choose sporting events as their preferred betting option. They carefully study the form of the participants in the event, whether football, basketball or other team sports, or horse or other types of racing. They carefully consider the participants' performance in previous events, their handicap if applicable, the venue of the event and many other variables. On the basis of careful calculations, they make a calculated decision and make a confident wager. Professionals can delay making a bet for weeks or even months, waiting for the right circumstances. When those circumstances are present, they generally make large wagers, maximising their opportunity to make money at this favourable time.

This behaviour is in marked contrast to problematic gambling where, typically, the individual does not limit their risk, not knowing when to stop, often believing that the next bet or wager will be the winning one. "Problem gambling" describes any gambling-related behaviour that is outside the control of the individual, and which contributes to personal, economic, and social problems for the individual and family (Coman, Evans, & Burrows, 1996a), — a definition consistent with that recommended by the Victorian Casino and Gaming Authority (VCGA, 1997), which defines problem gambling as "gambling activity which gives rise to harm to the individual player, and/or his or her family, and may extend into the community."

The word "problem" is used to distinguish between gambling behaviour that does cause personal, familial, and social concern, compared with recreational or normal gambling, which, by definition, does not cause these negative outcomes. Researchers use different terms to describe this form of behaviour including "pathological," "addictive," "compulsive," and "excessive" gambling. Without wishing to minimise the importance of correct labelling of gambling activity, the issue is establishing with the client whether they feel they have a gambling problem, when they present for therapy.

The term "pathological gambling" describes seriously disruptive gambling activity and is taken from the Diagnostic and Statistical Manual (4th ed.) of the American Psychiatric Association [DSM-IV](APA, 1994). This term is used widely in the United States, Europe and increasingly in Australia. Under these criteria, the individual must meet five or more of the following diagnostic criteria:

- 1. Preoccupation with gambling (reliving past gambling experiences; planning the next venture; thinking of ways to obtain money to gamble).
- 2. Needs to gamble with increasing amounts to achieve the desired excitement.
- 3. Repeated unsuccessful attempts to control, cut back or stop gambling.
- 4. Restlessness and irritability when attempting to cut down or stop gambling.
- 5. Gambles as a way to escape from problems or relieve depressed mood.
- 6. Gambles to recover losses from previous gambling episodes.
- 7. Lies to family members or others to conceal gambling extent.
- 8. Committed illegal acts, such as forgery, fraud, embezzlement, or income tax evasion to obtain money for gambling.
- 9. Jeopardised or lost significant relationship, job, educational, or career opportunity due to gambling.
- 10. Relies on others to provide money to relieve a desperate financial situation (DSM-IV, 1994, p. 618).

The term "pathological gambler" is applied to the individual who engages in these chronic gambling behaviour patterns. Some individuals can experience problems associated with their gambling behaviour, such as short-term attempts to regain lost expenditure (called short-term behaviour by DSM-IV (APA, 1994), or loss of control when in a gambling situation. These individuals do not meet

the criteria for Pathological Gambling under DSM-IV but may well be considered "problem" gamblers.

The DSM-IV definition of, and criteria for, pathological gambling have been the only explicitly articulated definition for problematic gambling. However, there are problems when using these criteria in the clinical setting, at least within Australia. The DSM-IV diagnostic criteria do not discriminate between those who gamble regularly with high levels of interest and pleasure attached to gambling activity, and those individuals whose gambling is causing problems. The most recent research conducted for the VCGA makes the point that an individual who regularly wagers on horse racing or card games may feel excited and finds this behaviour alleviates frustration or stress — in so doing the individual may be categorised as meeting criteria 2 and 5 of DSM-IV Pathological Gambling. Thus, DSM-IV may be over-inclusive in the Australian setting.

From a clinical perspective, the concern should not be whether any particular individual meets formal DSM-IV criteria for Pathological Gambling, but whether that person's gambling may be serious enough to warrant treatment for problem gambling or whether the person feels their behaviour is problematic. For treatment purposes, gambling behaviour should be conceptualised as a continuum from controlled "normal" to "problem" gambling.

CLINICAL ASSESSMENT

Before asking why some people gamble to excess, it may be useful to ask why people gamble at all.

It has been argued that gambling is a form of escapism from society's work ethic and capitalism. The winning gambler achieves money and goods without working for them, a motivation for gambling not lost in media promotion of different forms of gambling. Gambling activity can be very satisfying emotionally. The daily challenges of home life or work may not provide the individual with the risks or challenges that can stimulate as much as gambling. Obviously, people may indulge in competitive sports or dangerous activities to get this emotional stimulation but, for many, their physical status and approach to life may not engender participation in such activities. Seeking relief from boredom, stress, anxiety, and the frustrations of daily life may be best and most easily achieved by going to the local racecourse or gambling centre.

Some gambling activities provide people with opportunities for social interaction. Betting on horse races or playing cards at a casino provide a chance for the gambler to discuss and compare betting strategies and tips. Many other gambling activities do not provide such social outlets. Perhaps the real question is why a particular individual engages in a particular gambling activity at a particular time.

The factors which may play a part in determining who plays what forms of gambling are varied. A person's way of life, including work hours, availability of transport, and availability of gambling outlets, may limit access to particular forms of gambling. The individual may have certain beliefs and theories about gambling, the likelihood of winning, and the importance of perceived expertise

versus chance may all impact on the chosen gambling format.

Studies suggest that people take up gambling because of some precipitant emotional factors. For example, the birth of a child, marital problems, even positive life experiences can result in gambling pursuits.

Paul is a 38-year-old accountant. His wife has recently left him because of marital difficulties, compounded by the family home facing a mortgagee's auction. He is finishing work soon as he has advised his employer that he had borrowed \$30,000 from the company's takings to recoup losses to put him back in the black. He has voluntarily gone to the police and faces significant charges of theft.

Stress, anxiety, and depression are also strongly implicated in the onset of problem gambling.

Phil is a 56-year-old technical services officer, who has been unemployed since 1988 and on a pension/Workcover benefit for a stress-related disorder. He also suffers from arthritis of the back. His wife died of breast cancer eight months ago, after an illness of three years. He is still distressed. Since her death, he has used gambling more, mainly on the weekend. He plays the horses, "but currently the pokies bring me undone." Looking for company, he goes out socially and has a few drinks. When friends go home, he stays on gambling and can spend up to \$300 or \$400 on occasions. He feels there is a compulsive component. "It is not the money. Even when I have a win I put it back, I don't actually think about it, but I have a need to continue gambling, and I keep on going until the money is exhausted. I feel terrible and guilty because I cannot afford it. I feel like I have let myself and everyone down. I can't just go and have a drink and watch everyone else, I have to gamble. I also feel somewhat happy while I am doing it, so it gives me some pleasure on the occasion, it is not until the next day that I feel I have been silly."

Evidence suggests that, when people are stressed and anxious, they tend to play low skill games, such as poker machines, to help take away the feeling of stress or pain. This behaviour is then reinforced as the stress and anxiety lessen. Depressed individuals, on the other hand, tend to play more skilled games, to help lift their mood. Daydreams of winning and any inherent interest in the gambling activity have the effect of arousal and mood upswing.

Many problem gamblers have associated symptoms of anxiety and/or depression. Studies show that up to 75% of gamblers seeking help suffer from depression and 61% report suicidal ideation (Blaszczynski, 1995; Blaszczynski & McConaghy, 1989). Over 22% have made actual suicide attempts (Blaszczynski, 1995).

Further evidence for the presence of stress and anxiety as concomitants of gambling-related behaviours comes from our research (Coman, Burrows, & Evans, 1997), in which most callers to Melbourne's G-Line problem gambling counselling service nominated financial reasons for gambling (32%), but also important are: dealing with boredom (29.4%); stress reduction (25%); loneliness (23.5%); excitement (23%); pleasure (21%); and dealing with depression (16.2%). Males were more likely to gamble for financial reasons (42% compared with 21.7% of females); excitement (29.5%); pleasure (22.6%); and stress reduction (18.4%). Females gamble to deal with boredom (36.5%); stress reduction (24.6%); loneliness (31.3%); and anxiety (12%). Callers were able to nominate more than one motivating factor for their gambling behaviour (Coman et al., 1997).

Gambling abuse may also be associated with alcohol and drug usage, which can act as a trigger for relapse. For example, an individual stops drinking, then goes to a club, gambles, becomes depressed, then relapses into drinking. Conversely, the reformed gambler may drink, the alcohol acts as a dis-inhibitor, so that the person then relapses into gambling.

Together with substance abuse, problem gambling is also frequently associated with criminal behaviour and personality disorders. Studies have found that, up to 68% of problem gamblers admit to gambling and non-gambling related criminal activity (Blaszczynski & McConaghy, 1992). Fifteen percent of these samples met the criteria for antisocial personality disorder. DSM-IV (APA, 1994) reported similar associated features and disorders and also makes the point that loss of judgment and excessive gambling may characterise a manic episode. A diagnosis of mania would only apply if these manic-like significant mood elevation features apply away from the gambling situation.

The presence of alcohol abuse, personality disorder and criminal behaviours in other impulse disorders such as sexual addiction and paraphilias are predictors of poor response to treatment and their presence need to be carefully assessed when considering treatment strategies, especially hypnotherapy, for problem gambling (Blaszczynski, 1993).

From a diagnostic point of view, it may be most appropriate to ask: "What is it about gambling that the individual enjoys and why does the person prefer this type of gambling at this time? Why has social gambling suddenly become problematic?" Some individuals appear to develop dysfunctional gambling behaviours very quickly, while others may gamble in a controlled manner for any length of time, before some emotional factor or life change precipitates a gambling crisis. It is not appropriate here to explore the diagnostic formulations for problem gambling, such as addictive, compulsive, and behavioural approaches. Useful reference may be made to Dickerson (1984), Horodecki (1992), McConaghy (1980), Murray (1993), Shaffer (1989), and Walker (1989).

TREATMENT FOR PROBLEMATIC GAMBLING

A range of treatment approaches have been used in the treatment of pathological and problem gambling, often reflecting the aetiological approach of the therapist. Earlier this century, psychodynamic formulations dominated treatment interventions, but since that time, behavioural, cognitive-behavioural, psychopharmacological, and multi-faceted approaches have also been developed. Unfortunately, the treatment literature consists mainly of case study analyses and there have been few, if any, controlled studies reported in the literature. Thus, there is no clear or commonly agreed treatment programme available.

Treatment Approach

It is important to begin with an understanding of the client's motivation for gambling, why social gambling changed to problem gambling, and why the person has presented at this time. Establish their form(s) of gambling. Check if it is consistently the same form of gambling activity, or if the client utilises several different forms of gambling. Pay particular attention to the description of any emotional or stressful events that were experienced immediately prior to the emergence of problem gambling. Most clients will be unable to clearly separate their transition from controlled to uncontrolled gambling, because they exhibit denial of the problem in its early stages and the problem behaviour may well have had a gradual onset.

Assess if the client's gambling problem is related to psychiatric disturbance, criminal activity, personality disorder, or substance abuse. If there are no contraindications to its use, there may be a need to assess the individual's susceptibility to hypnosis. This is best achieved with one of several tests of hypnotisability, the most common being the Stanford Hypnotic Clinical Scale [SHCS](Morgan & Hilgard, 1973) or the Hypnotic Induction Profile [HIP] (Spiegel & Spiegel, 1978).

As part of their self-reported life history, ask the client to write a word picture of themself as would be described by the client's spouse/partner/girl-boyfriend; best friend; worst enemy; and self to establish how the individual perceives themself and their problem.

In the second session, extend the client's personal and family history, focusing on the gambling habits of both the person's parents and grandparents. Explore the individual's alcohol consumption, smoking habit and use of legal and illicit drugs. If any of these are also problems for the client, they need to be treated concurrently with the gambling problem. If the client has entered therapy to offset criminal prosecution, this secondary motivation will interfere with treatment and will reduce motivation to remain in treatment once the threat of criminal prosecution has passed. Treatment for the gambling behaviour should, if practical, not commence until legal action has been completed.

Assessment may also entail the use of several currently available pencil-andpaper tests of gambling activity and gambling motivations. These are the South Oaks Gambling Screen (Lesieur & Blume, 1987), and the Maroondah Assessment Profile for Problem Gambling [G-MAP] (Loughnan, Pierce, & Sagris, 1996).

The South Oaks Gambling Screen (SOGS) is a twenty-item pencil and paper questionnaire. It first asks respondents to indicate the types and frequency of gambling undertaken over their lifetime and, for each, to indicate "Not at all;" "Less than once a week;" or "Once a week or more." Remaining questions explore the largest amount of money lost in any one day; history of gambling in the immediate family; gambling behaviours; and sources of funds for gambling. Some questions also make reference to DSM-IV criteria, including predisposition for chasing losses, hiding gambling behaviour from others and taking time off from work to gamble.

The SOGS appears to be a valid and reliable instrument for the detection of problem gambling. It provides the therapist with a quick way of identifying some of the major issues surrounding a client's gambling problem, even if the higher score required for the diagnosis of problem gambling is not reached. Thus, it serves as a useful way of taking the client's gambling history. At the same time, the SOGS has been criticised for its lack of application to women and the fact that its cut-off scores do not accurately distinguish between regular gamblers and those experiencing problems. We suggest that, if used, it is used for reference and discussion purposes.

The Maroondah Assessment Profile for Problem Gambling [G-MAP] is a selfreport questionnaire comprising 85 items that assess 17 dimensions which may be associated with problem gambling. The instrument is quite different from the SOGS in that no attempt is made to assess degree of gambling behaviour. Instead, the focus of this questionnaire is on the individual's psychological processing, mood states and behaviours which may affect, and be affected by, gambling behaviour.

The dimensions of the G-Map are grouped into five broad categories, labelled: Beliefs about Winning; Feelings; Situations; Attitudes to Self; and Social. The "Beliefs about Winning" dimensions explore the beliefs, myths and misconceptions the individual has about gambling and his/her attitude to winning and losing money. The "Feelings" dimensions explore the individual's emotional states, for example boredom, depression, and anxiety, which may influence gambling behaviour. The "Situations" dimensions explore situational states which may influence gambling behaviour, for example: to relax; to escape from an unpleasant relationship; or to escape financial difficulties. "Attitudes to Self" dimensions explore such aspects as desire to improve self or one's way of life through gambling; and desire for self-harm. The final dimensions, "Social" explore an individual's gambling behaviour as an opportunity to overcome shyness and interact with others in a non-threatening way or in response to social pressure.

As yet, there is very limited validity and reliability data on the G-Map. The authors emphasise that G-Map is not designed to replace a general clinical assessment; does not identify clients with dual diagnosis; nor problem gambling. While validity and reliability data are being collected, the G-Map remains a useful tool for use in clinical practice to identify important affected life features in those clients who self report as having gambling difficulties.

The therapist may also consider measurement of the individual's depression (Beck, 1993), anxiety (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), general health status (Derogatis, 1977), and general sensation-seeking focus (Zuckerman, 1978) to determine co-morbidity with gambling activities.

Treatment Types and Progress

Emphasise to the client that improvement will be slow, but gradual. Research suggests that it may take up to ten sessions for any demonstrable improvement in emotional control over gambling impulsivity (Coman et al., 1996a). The therapist and client need to establish the aim of therapy: whether abstinence or controlled gambling is the desired outcome to treatment. Some clinicians argue strongly that it is important to cut off the gambler's access to all sources of money and to discourage all forms of gambling. As suggested earlier, the abstinence approach has developed from the impact of the Gamblers Anonymous approach to treatment, espousing the philosophy that gambling is a disease and that participation in any form of gambling would invariably lead to loss of control and resumption of the individual's pathological habits (Blaszczynski, 1993). The argument that abstinence should be the only appropriate treatment outcome comes also from the view of pathological gambling as a form of addictive behaviour. While pathological gambling does share features in common with addictive disorders, its classification as an impulse-control disorder in DSM-IV (1994) does suggest that abstinence as a sine qua non for success in therapy may not be warranted.

It is also arguable that abstinence as a treatment goal may fail to take into account significant improvement in gambling behaviour and other areas of functioning for the individual receiving treatment. These include:

- The client stops problem or pathological gambling in its primary form, but continues to participate in other benign gambling behaviours (Blaszczynski, 1993).
- 2. The client may continue to gamble in a reduced manner in the primary gambling form, but may show significant improvement in other areas. These may include improved social and interpersonal functioning, reduced urge to gamble and consequent reduced frequency of gambling behaviour, and ability to control gambling urges when indulging in gambling activity (Blackman, Simone, & Thoms, 1989; Blaszczynski, 1985; Taber, McCormick, Russo, Adkins, & Ramirez, 1987).

For many problem gamblers seeking therapy, the possibility of a relapse when the treatment outcome is abstinence, may constitute failure of treatment. This may reduce willingness and motivation to engage in therapy in the first place and will certainly reduce motivation to continue in therapy should a relapse occur. On the other hand, setting controlled gambling as the preferred treatment outcome means that clients may continue to regard themselves as having successfully undertaken treatment, despite lapses. The prospect of controlled gambling brings people to therapy much sooner than they might otherwise contemplate, with its desirable goal of helping the individual to control an otherwise unpleasant and intrusive preoccupation. As Blaszczynski (1993) noted, the option of controlled gambling as a treatment outcome of choice also lowers treatment rejection and attrition for gamblers who find complete cessation difficult or unacceptable.

At the commencement of therapy, therefore, it is important to discuss with the person their preferred treatment outcome and to formulate a mutually agreeable objective to treatment before proceeding.

Use of Cognitive Strategies

Treatment interventions for problem gambling frequently utilise cognitive strategies, to help clients understand their thoughts in relation to gambling and in re-structuring cognitions. A number of specific cognitive techniques can be used with or without hypnotherapy.

Cognitive Restructuring

Many problem gamblers exhibit irrational beliefs and superstitions about gambling activity. These may relate to the probability of winning, causal relationships between certain behaviours and winning, and other self-talk (for further examples, see Coman, Burrows, Singer, & Singer, 1996b). An important focus for any treatment programme should be an analysis of the beliefs and ritualistic behaviours, self-talk and talk to the gambling tool in which the client engages.

In therapy, it is necessary to thoroughly examine the gambler's thoughts immediately prior to, during, and after a gambling session. Once the range of irrational or superstitious beliefs and behaviours have been identified, then cognitive restructuring can occur. This may involve challenging the client to recognise the relationship between their beliefs and behaviours, and to identify which underlying beliefs may be irrational. These are then replaced with more realistic and reasonable beliefs about gambling. The most common cognitive distortions gamblers share are that gambling is financially viable; that one can extract oneself when one wants to; and that the money lost is rightfully theirs, so that gambling should continue until it has been reclaimed. Ask the client to indicate their biggest win when gambling and to estimate their overall loss. Not only will the person have to challenge some of their beliefs, but will also have to accept their losses and other negative outcomes from gambling.

A suggestion therapists find useful is that gambling subsidises the club, other people, and the community, and is there as entertainment. Few gamblers like the idea that they are subsidising other people and that, as a form of entertainment for which they pay, they are unlikely to get their money back. Suggest that, the next time they think of gambling, the client should think of benefits going to other people. Another cognitive strategy is to ask the client to calculate the amount of money they invest per day, week, month, and year on gambling. Many clients claim their financial problems are the result of daily living costs, not their gambling behaviour.

Thought Stopping

Thought stopping is a common technique used by therapists to help clients change their obsessive behaviour and one which may be used to good effect with problem gamblers. Many gamblers report feeling irresistible urges to gamble and describe gambling venues as magnets which draw them in. In therapy, the client is instructed to monitor impulses to gamble. When a thought regarding gambling is generated, one or more of a variety of thought stopping techniques or thought replacement techniques can be instigated. A common thought stopping technique is to flick an elastic band worn around the wrist to stop the gambling thought and then replace the thought with a previously rehearsed alternative — "Stop, Relax, Pleasant alternative."

Imaginal Desensitisation

Imaginal desensitisation has been very successful in the treatment of problem gambling (Coman et al., 1996a; McConaghy, Armstrong, Blaszczynski, & Alcock, 1983; McConaghy, Blaszczynski, & Frankova, 1991). The client relaxes quietly, and is then given a series of imagery scenarios, in which they are stimulated to gamble, asked to visualise themselves performing the behaviour described in the scene, but not completing the gambling activity. At each step of the process, (imagining going to the gambling venue, entering the venue, seeing the gambling tool, etc., then not completing gambling behaviour), the client relaxes until ready to visualise the next scene in the sequence. Two of many possible scenes are:

- 1. You are going home from work and know your wife is away. You decide to go to the club and put a few dollars through the slot machines. You are about to put a coin in, but you feel bored. You leave without gambling.
- 2. You have had a trying day where nothing has gone right for you. You feel tense and angry. On the way home, you decide to drive to the betting shop to place a few bets. As you are walking toward the entrance you start to feel bored with the idea of spending your time gambling. You decide not to enter, but return home to your spouse.

The rationale behind this technique lies in the fact that gambling behaviour is associated with high levels of excitement and arousal, causing higher and more aversive levels of tension if not completed when stimulated. Using imaginal desensitisation, the client trains themself to feel relaxed rather than aroused in response to cues for the compulsive feelings that would normally cause them to engage in gambling behaviour. This rationale is reinforced by the finding that, unlike uncontrolled gamblers, successfully treated gamblers who reported they could now control, or cease gambling when they wanted to, showed normal levels of trait anxiety and "neuroticism." They had learnt control over their gambling compulsion and the aversive tension normally felt with their previously uncontrolled gambling response (Blaszczynski, McConaghy, & Frankova, 1991).

Begin utilising imaginal desensitisation with the client early in treatment. Guided imagery scenes, such as those above, can be varied to suit the particular client. To do this, get the client to outline in detail the steps involved in their gambling behaviour. Break these up into their components. Teach the client progressive muscle relaxation or self-hypnosis. While relaxed or in trance, describe the gambling scenes to the client — asking them to visualise the sensory, cognitive, and emotional states associated with each, while, at the same time, remaining relaxed. Then ask them to change the cognition by, for example,

visualising the horse (wheel, cards, etc.) losing, visualising oneself not wanting to bet, throwing the betting slip away, and walking away with money in pocket still fully relaxed.

It may be useful to audiotape the imaginal desensitisation sessions and to ask the client to listen to the tape at least twice a day, five days a week. The aim of this re-exposure is to help the client visualise the controlled scenes without the tape, a process which can take up to four weeks. At this point in treatment, it is useful to commence cognitive therapy, to challenge the client's beliefs about gambling and to eliminate cognitive distortions that are reinforcing the gambling behaviour, as discussed above.

Behavioural Strategies — In Vivo Desensitisation

When the client has been in therapy for some time and has begun to understand and deal with their gambling behaviour, in vivo exposure may be introduced. This entails the client (and sometimes the therapist) going to gambling venues and resisting the urge to gamble, using the behavioural and cognitive techniques learned in earlier phases of therapy.

When using in vivo desensitisation for the treatment of problem gambling, the client actually goes to the gambling venue. They experience all the normal stimuli associated with gambling but not allowed to place a bet (response prevention). The aim is to ensure the client becomes desensitised to the stimuli and learn that they can experience them without gambling. In vivo desensitisation is usually tried after the client has practised relaxation and imagined themselves in the gambling venue, feeling in control of their gambling impulses.

On its own, in vivo desensitisation is not very effective, with between 10% and 30% of participants reporting abstinence or controlled gambling at followup of nine months (Walker, 1993). This low success rate may apply because full extinction of the gambling behaviour and associated excitement is unlikely to occur within such a short period of treatment. An over-learned behaviour such as gambling may take months or years of such trials to completely decondition some clients. On the other hand, in vivo desensitisation works very well in conjunction with cognitive-behavioural strategies and hypnosis.

Self-Help Organisations

Gamblers Anonymous is the only self-help group which specifically provides a therapeutic regime for pathological and problem gamblers. Established in California in 1957, their treatment is based on the philosophy that pathological gambling is a progressive illness, which can only be arrested not cured, by total abstinence. The programme utilises a twelve-step recovery process, similar to that of Alcoholics Anonymous and relies heavily on sharing of common experiences in a supportive group environment.

Given that the organisation is not involved in systematic data collection determining programme evaluation and success, it is hard to establish the efficacy of the process. In a longitudinal study of Gamblers Anonymous in Britain, Brown (1985, 1987) conducted a retrospective analysis of meeting attendances from a number of GA meetings over a five year period. Of 232 new members who attended during the period, 22% attended one meeting only and 69% had dropped out after attending less than 10 meetings. It is not known how many of these returned to gambling or how many began gambling again at a problem level. Eighteen percent of new members during the period were still active with GA after two years. While this figure is not high, it should not be surprising, given that continued membership is dependent on total abstinence from gambling and the programme has a high spiritual orientation.

Little is known about which individuals are more likely to benefit from this programme, compared with other treatment modalities. The very limited studies of individuals most likely to gain from contact with Alcoholics Anonymous have suggested AA works most effectively for those individuals with a certain pattern of personal characteristics, including lower educational level and high need for authoritarianism, dependency, and sociability (Feist & Brannon, 1988). Notwithstanding, the limited available data suggest that people who do participate in the GA programme can benefit from the experience (Brown, 1985; Taber et al., 1987). Anecdotal evidence from callers to G-Line suggests that many meetings are dominated by men who have long histories of gambling on horse and dog racing. Women report feeling highly uncomfortable attending such meetings and have discontinued attendance after only one session. Gamblers Anonymous will not run separate sessions for men and women, given their charter to provide help to all problem gamblers regardless of personal characteristics. The organisation is a dynamic one and groups close when memberships decline in one area and form when demand is generated in other geographic areas. Women callers to G-Line report feeling welcomed and helped by groups in which there is equal representation for men and women, or groups with a majority of women (Coman et al., 1996a).

Minimal Intervention Programmes

The term "minimal intervention programme" was used by Dickerson, Hinchy, and Legg England (1990) to describe specially written self-help manuals for gamblers. These were designed in the absence of adequate community resources to help pathological and problem gamblers, and were based on the success of such manuals for a variety of problem areas. The manual included training in self-monitoring, analyses of gambling behaviour, goal and limit setting, selfreinforcement, and how to maintain long-term gains. A brief study of the effectiveness of such an intervention (Dickerson et al., 1990) reported that most users maintained subjectively acceptable reductions in gambling behaviour at six-month follow-up. Coman et al. (1996b) have produced a similar manual, which have been found to work most effectively with those individuals who acknowledge their problematic gambling behaviour and who have good selfawareness and motivation to change.

Pharmacological Treatment

Several single and small case studies have reported the use of medication, primarily to block the reinforcing affective component of gambling behaviour.

Lithium carbonate was used by Moskowitz (1980) to treat a small group of three pathological gamblers but the study did not record success or failure over the unspecified follow-up. As indicated earlier, pathological gambling episodes can be symptomatic of a manic episode (DSM-IV, 1994), so it is not clear if the medication is operative for the pathology of gambling or cyclic affective disturbance.

Clomipramine, fluoxetine, and other serotonin re-uptake blockers have been used by several researchers, based on the belief that pathological gambling is related to the impulsivity dimension of obsessive-compulsive disorders, rather than being an addiction (Haller & Hinterhuber, 1994; Hollander, Frenkel, Decaria, Trungold, & Stein, 1992). Results suggested a reduction in gambling behaviour over one-month follow-up, but, clearly much more research needs to be done to clarify this data and to determine if long-term reductions also apply. These medications have been used successfully in the treatment of other impulse-control disorders, including sexual paraphilic behaviours (Emmanuel, Lydiard, & Ballenger, 1991), compulsive non-paraphilic sexual addiction (Stein, Hollander, Anthony, Schneier, Fallon, et al., 1992), trichotillomania (Winchel, Jones, Stanley, Molcho, & Stanley, 1992), kleptomania (McElroy, Keck, Pope, & Hudson, 1989), and bulimia (McElroy et al., 1989).

These results do suggest that, among the impulse-control disorders, pathological gambling may have a compulsive dimension comparable to that of obsessive-compulsive disorders.

A HYPNOTHERAPEUTIC APPROACH

There is evidence to suggest the hypnotic phenomena of absorption, dissociation and imaginative involvement may play a part in the persistence of gambling behaviour, for both social and problem gamblers. For this reason, hypnotic techniques should always be considered as a possible part of the treatment approach.

We have reported above that some gamblers indulge to meet social needs (as in card playing), while others play poker machines and other lower skill games to relieve stress and anxiety. Many poker machine players report becoming absorbed in what they are doing, using the activity to screen out feelings of isolation, stress, anxiety, or depression. Absorption is one of the components of non-pathological dissociation (Waller, Putnam, & Carlson, 1996), a characteristic of many highly hypnotisable subjects (Norton, Ross, & Novotny, 1990; Putnam, 1989, Tellegen & Atkinson, 1974). Of course, highly hypnotisable subjects are not necessarily high dissociators, but there is moderate correlations between the two constructs (Norton et al., 1990). It may be that their absorption and imaginative involvement in poker machine playing facilitate players' intense focus on playing the machine for longer and longer periods, with little awareness of peripheral and external factors.

The client's capacity for absorption and imaginative involvement, which may have been a factor in the onset of problem gambling, may well be used in effective treatment, using hypnosis. Hypnosis should be considered as a part of therapy, based on its proven efficacy in the treatment of compulsive and habit disorders, anxiety disorders, and addictive disorders (Burrows & Dennerstein, 1988; Evans, 1995; Hammond, 1990). There are also many clinical and experimental reports of the use of hypnosis in heightening the efficacy of desensitisation, imagery, cognitive-behavioural, and cognitive therapies (Burrows & Stanley, 1995; Hammond, 1990). Hypnotherapeutic techniques are also useful for egostrengthening and increasing self-esteem (Stanton, 1993).

Early in therapy, it is appropriate to begin utilising imaginal desensitisation with the client, with or without hypnosis. Earlier, two of the guided imagery scenes used by McConaghy et al. (1991) were reported, but these can be varied to suit the particular individual. To do this, get the client to outline in detail the steps involved in their gambling behaviour. Break these up into their components. Teach the person progressive muscle relaxation or self-hypnosis. While relaxed or in trance, describe the gambling scenes to the client — asking them to visualise the sensory, cognitive, and emotional states associated with each, while, at the same time, remaining relaxed. Then ask them to change the cognition by, for example, visualising the horse (wheel, cards, etc) losing, visualising oneself not wanting to bet, throwing the betting slip away, and walking away with money in pocket — still fully relaxed.

The hypnotic trance can be used to help clients to educate and provide information to clients, as well as challenge and change their beliefs about gambling, helping the therapist to suggest new, more appropriate beliefs and cognitions. The suggestions reported earlier, used by therapists to change cognitions about gambling subsidising the gaming venue or organisation and other participants and the community can be used with hypnosis.

Progress

As the client develops control over their gambling behaviour, it is necessary to begin helping them substitute new behaviours to replace the gambling. These alternate behaviours should be comparable in excitement to gambling for the individual, accessible, and able to be carried out at any time of the day, without anyone else being needed. If the client is married, it may also be appropriate to discuss putting time into relationships with spouse and children.

For those who report gambling to relieve boredom, help them to develop new strategies to fill in their time in different ways.

It will also be useful to discuss with the client the likelihood of relapses, depending upon what was set as the goal of therapy earlier in treatment. The therapist should have discussed with the client the fact that improvement may occur in many areas of the client's life, without full abstinence from gambling and that, even if relapses do occur, we know that this does not lead invariably to a resumption in problem or pathological gambling habits (Blaszczynski et al.,

1991b). It may also be possible the person has switched from a previous problem gambling behaviour to other more benign forms of gambling, which will constitute success from treatment.

Treatment programmes have to be tailored to the individual needs of each person. It may also be necessary to develop strategies for other specific factors which have contributed to the gambling problem. These strategies may include:

- 1. Stimulus control techniques, to help the client effectively avoid or deal with exposure to gambling cues or contact with other gamblers.
- 2. Stress management techniques, coping skills training, relaxation training, and/or self-hypnosis, to help the person deal with life stresses and their resultant anxiety.
- 3. Hypnosis to help the client build up their self-esteem, sense of self-worth, and ego-strength. Many have a negative self-worth as a result of feeling out of control when gambling.
- 4. Marital therapy to help the gambler and spouse deal with the loss of trust and increased suspicion that may have occurred as a result of the gambling behaviour. There may be anger and resentment on the part of the spouse for the financial strain that gambling may have imposed on the relationship. Many cases of pathological gambling have been associated with physical and emotional abuse of spouse and family, which will also have to be addressed in therapy.
- 5. It may be useful to discuss pharmacological adjuncts to treatment. Antidepressants can be useful when the individual exhibits dysphoric mood. Seratonin re-uptake inhibitors may also be of assistance in reducing compulsive urges to engage in gambling behaviour.
- 6. The gambler may be usefully referred to Gamblers Anonymous, as an on-going support after therapy has been concluded. As indicated earlier, the research data suggests that GA can be of assistance to help gamblers resist relapses. The person's spouse may usefully be referred to Gam-Anon, to help deal not only with the gambler's behaviour, but to understand and deal with their own emotional difficulties.

Treatment of pathological gambling is known to be a long-term process, with some gamblers relapsing well after 18 months of gambling-free behaviour. Given the current lack of controlled research, we do not know if problem gamblers exhibit similar long-term relapse problems, but the possibility of longterm relapses need to be discussed as part of treatment.

Of the clients referred to us for gambling problems in the past year, 60% have been found to be hypnotisable, with 20% highly hypnotisable. Hypnosis was utilised as an adjunctive therapy in all cases, including the two case examples provided below. The following case examples also highlight the complexity of the problems and the fact that problem gamblers are a clinically heterogeneous group.

Susan is a 33-year-old mother with two children. She suspects her husband has a gambling problem but is not sure. They went through a period of marriage

counselling following her husband's excessive gambling at that time. During relationship counselling, he admitted he had a gambling problem and went to a few meetings of Gamblers Anonymous. According to Susan, the marriage improved in the short term, but things have slowly but progressively worsened. She recently found out, quite by accident, that her husband had taken up gambling again.

Henry, a 52-year-old solicitor, presented following referral from G-line. He had gambled approximately \$1,000,000 in the last two years and was still going to the pokies several times daily. He was involved in a family business and his partners were aware of his gambling. He had become anxious and depressed, and was drinking more alcohol, and was now having trouble completing legal work and was becoming irritable and aggressive towards colleagues, and clients. He had a drink driving offence two weeks prior to presentation for therapy.

Emma is aged 43. She has a long history of epilepsy and recurrent depression. She was hospitalised in 1989 for eight weeks, and has had subsequent hospitalisations for depressive disorder annually over the past six years. Her gambling commenced when she was 14, gambling mostly on cards and horses. She operated an SP betting office from 1974-1976, but did not bet herself during that time and made money. She has been betting since, mainly on horses, but in recent times has been using the poker machines. She was not been a heavy gambler until approximately six months ago. Her current gambling is daily if she has the money at any place where there are poker machines, but mainly local places, such as hotels. Over the last four or five months she has lost \$4000. It is affecting her budget, house payments, etc. She has borrowed money from friends. Emma is currently unemployed and ceased attending for medical treatment approximately nine months ago.

REFERENCES

- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: American Psychiatric Association.
- Beck, A. T. (1993). Beck Depression Inventory (BDI). New York: The Psychological Corporation.
- Blackman, S., Simone, R. V., & Thoms, D. R. (1989). The gamblers' treatment clinic of St Vincent's North Richmond Community Mental Health Clinic: Characteristics of the clients and outcome of treatment. The International Journal of Addictions, 24, 29-37.
- Blaszczynski, A. P. (1985). A winning bet: Treatment for compulsive gambling. Psychology Today, 38-46.
- Blaszczynski, A. P. (1993). Pathological gambling: A treatment review. Psicologia Conductual, 1, 409-440.
- Blaszczynski. A. P. (1995). Workshop on the assessment and treatment of pathological gambling. Australian and New Zealand Association of Psychiatry, Psychology and the Law Conference, Melbourne, May, 1995.
- Blaszczynski, A. P., & McConaghy, N. (1989). Anxiety and/or depression in the pathogenesis of addictive gambling. The International Journal of Addictions, 24, 337-350.
- Blaszczynski, A. P., & McConaghy, N. (1992). Pathological gambling and criminal behaviour: Report to the Criminology Research Council. Canberra: Australian Institute of Criminology.
- Blaszczynski, A. P., McConaghy, N., & Frankova, A. (1991a). A comparison of relapsed and non-relapsed abstinent pathological gamblers following behavioural treatment. British

- *Journal of Addiction*, 86, 1485–1489.
- Blaszczynski, A. P., McConaghy, N., & Frankova, A. (1991b). Control versus abstinence in the treatment of pathological gambling: A two- to nine-year follow-up. British Journal of Addiction, 86, 299-306.
- Brown, R. I. (1985). The effectiveness of Gamblers Anonymous. Proceedings of the Sixth National Conference on Gambling and Risk Taking. Reno, NA: Bureau of Business and Economic Administration, University of Nevada.
- Brown, R. I. (1987). Drop outs and continuers in Gamblers Anonymous: Part 2. Analysis of free-style accounts of experiences with GA. Journal of Gambling Behavior, 3, 68–79.
- Burrows, G. D., & Dennerstein, L. (1988). Handbook of hypnosis and psychosomatic medicine. Amsterdam: Elsevier Science Publishers.
- Burrows, G. D., & Stanley, R. O. (1995). Contemporary international hypnosis. Chichester: Wiley.
- Coman, G. J., Burrows, G. D., & Evans, B. J. (1997). Stress and anxiety as factors in the onset of problem gambling: Implications for treatment. Stress Medicine, 13, 235–244.
- Coman, G. J., Burrows, G. D., Singer, G., & Singer, L. (1996b). A self help guide for problem gamblers. Melbourne: Addiction Research Institute.
- Coman, G. J., Evans, B. J., & Burrows, G. D. (1996a). Problem gambling: Treatment strategies and rationale for the use of hypnosis. Australian Journal of Clinical and Experimental Hypnosis, 24, 73-91.
- Derogatis, L. R. (1977). SCL-90: Administration, scoring and procedure manual-I. Baltimore, MD: Johns Hopkins University Press.
- Dickerson, M. G. (1984). Compulsive gamblers. London: Longman.
- Dickerson, M. G., Hinchy, J., & Legg England, S. (1990). Minimal treatments and problem gamblers: A preliminary investigation. *Journal of Gambling Studies*, 6, 87–102.
- Emmanuel, N. P., Lydiard, R. B., & Ballenger, J. C. (1991). Fluoxetine treatment of voyeurism. American Journal of Psychiatry, 148, 950.
- Evans, B. J. (Ed.)(1995). Hypnosis in the treatment of anxiety disorders. Heidelberg: Australian Journal of Clinical and Experimental Hypnosis.
- Feist, J., & Brannon, L. (1988). Health psychology: An introduction to behavior and health. Belmont, CA: Wadsworth Publishing Company.
- Golden, W. L. (1990). Cognitive-behavioral hypnotherapy for anxiety disorders. Journal of Cognitive Psychotherapy, 8, 265–274.
- Haller, R., & Hinterhuber, H. (1994). Treatment of pathological gambling with carbamezepine. Pharmapsychiatry, 27, 129.
- Hammond, D. C. (1990). Handbook of hypnotic suggestions and metaphors. New York: Norton.
- Hollander, E., Frenkel, M., Decaria, C., Trungold, S., & Stein, D. J. (1992). Treatment of pathological gambling with clomipramine. American Journal of Psychiatry, 149, 710–711.
- Horodecki, I. (1992). The treatment model of the guidance center for gamblers and their relatives in Vienna, Austria. Journal of Gambling Studies, 8, 115–130.
- Lesieur, H. R. & Blume, S. B. (1987). The South Oaks Gambling Screen: A new instrument for the identification of pathological gamblers. American Journal of Psychiatry, 144, 1184–1188.
- Loughnan, T, Pierce, M., & Sagris, A. (1996). G-Map Administrator's manual: Research edition. Melbourne: Maroondah Social and Community Health Centre.
- McConaghy, N. (1980). Behaviour completion mechanisms rather than primary drives maintain behavioural patterns. Activitas Nervosa Superior (Praha), 22, 138–151.
- McConaghy, N., Armstrong, M. S., Blaszczynski, A. P., & Allcock, C. (1983). Controlled comparison of aversive therapy and imaginal desensitisation in compulsive gambling.

- British Journal of Psychiatry, 142, 366-372.
- McConaghy, N., Blaszczynski, A. P., & Frankova, A. (1991). Comparison of imaginal desensitisation with other behavioural treatments of pathological gambling: A two- to nine-year follow-up. *British Journal of Psychiatry*, 159, 390–393.
- McElroy, S. L., Keck, P. E., Pope, H. G., & Hudson, J. I. (1989). Pharmacological treatment of kleptomania and bulimia nervosa. *Journal of Clinical Psychopharmacology*, 9, 358–360.
- Morgan, A. H., & Hilgard, J. R. (1973). Age differences in susceptibility to hypnosis. *International Journal of Clinical and Experimental Hypnosis*, 21, 78–85.
- Moskowitz, J. A. (1980). Lithium and lady luck: Use of lithium carbonate in compulsive gambling. *New York State Journal of Medicine, April*, 785–788.
- Murray, J. B. (1993). Review of research on pathological gambling. *Psychological Reports*, 72, 791–810.
- Norton, G. R., Ross, C. A., & Novotny, M. F. (1990). Factors that predict scores on the Dissociative Experiences Scale. *Journal of Clinical Psychology*, 46, 273–277.
- Putnam, F. W. (1989). Pierre Janet and modern views of dissociation. *Journal of Traumatic Stress*, 2, 413–429.
- Shaffer, H. J. (1989). Conceptual crises in the addictions: The role of models in the field of compulsive gambling. In H. J. Shaffer, S. A. Stein, B. Gambino, & T. N. Cummings (Eds.). Compulsive gambling: Theory, research, and practice (pp. 127–134). Lexington, MA: Lexington Books.
- Spiegel, H., & Spiegel, D. (1978). *Trance and treatment: Clinical uses of hypnosis*. New York: Basic Books.
- Spielberger, D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists' Press.
- Stanton, H. E. (1993). Ego-enhancement for positive change. *Australian Journal of Clinical and Experimental Hypnosis*, 21, 59–64.
- Stein, D. J., Hollander, E., Anthony, D. T., Schneier, F. R., Fallon, B. A., Liebowitz, M. R., & Klein, D. F. (1992). Seratonergic medications for sexual obsessions, sexual addictions and paraphilias. *Journal of Clinical Psychiatry*, 53, 267–271.
- Taber, J. I., McCormick, R. A., Russo, A. M., Adkins, B. J., & Ramirez, L. F. (1987). Follow-up of pathological gamblers after treatment. *American Journal of Psychiatry*, 144, 757–761.
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83, 268–277.
- Victorian Casino and Gaming Authority, (1997). Definition and incidence of problem gambling, including the socio-economic distribution of gamblers. Melbourne: Author.
- Walker, M. B. (1989). Some problems with the concept of "gambling addiction": Should theories of addiction be generalized to include excessive gambling? *Journal of Gambling Behavior*, 5, 179–200.
- Walker, M. B. (1993). Treatment strategies for problem gambling: A review of effectiveness. In W. R. Eadington & J. A. Cornelius (Eds.). *Gambling behavior and problem gambling* (pp.533–566). Reno: Institute for the Study of Gambling and Commercial Gaming.
- Waller, N. G., Putnam, F. W., & Carlson, E. B. (1996). Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences. *Psychological Methods*, 1, 300–321.
- Winchel, R. M., Jones, J. S., Stanley, B., Molcho, A., & Stanley, M. (1992). Clinical characteristics of trichotillomania and its response to fluoxetine. *Journal of Clinical Psychiatry*, 53, 304–308.
- Zuckerman, M. (1978). The search for high sensation. Psychology Today, 11, 30–46.

HYPNOSIS AND SMOKING CESSATION

Barbara Newton Psychologist in Private Practice

This paper reviews several approaches to smoking cessation using hypnosis, developed by the author. The paper commences with a brief review of motivations for commencing and continuing smoking, together with the difficulties reported by smokers when trying to give up. Two hypnosis approaches to smoking cessation are then described in detail, the two varying in both their long-term goals and therapeutic techniques.

Smoking is one of the most serious social and medical problems in society today. As we all know, and as has been well documented, smoking is responsible for a range of health problems, contributing to a reduced life span for smokers compared with non-smokers. It is extremely addictive, comparable in this respect to heroin and cocaine.

The dangers of smoking are much more recognised than they were years ago when smoking was actually very popular. If you are a fan of old films, as I am, you will know that it was almost an essential part of being sophisticated to be a smoker. We only have to look at movies which starred Humphrey Bogart and Bette Davis to see smoking associated with romance, excitement, and adventure. Unfortunately, the trend to romanticise smoking may be re-emerging, as illustrated by the lengthy smoking sequence in the movie "Titanic."

Why do people begin smoking, and why do they not give it up easily once they realise it is harming them? There are a number of theoretical models which offer explanations as to why people take up smoking and, equally, why they continue to smoke. Individual smokers say they start for three general reasons: (a) rebelliousness; (b) social pressure; and/or (c) tension control (Blainey, 1985). Once smoking, motivations to continue smoking may also vary: (a) a genetic disposition; (b) nicotine addiction; (c) social learning pressures. Research evidence suggests that social learning may be the most important factor, together with social pressures exerted by the media (Blainey, 1985; Taylor, 1984).

Most people commence smoking in adolescence, even though surveys show that up to 94% believe that smoking is dangerous (Owen, Halford, & Gilbert, 1986). Even 90% of adolescents believe smoking is hazardous to health. The paradox that, given the incidence of smoking among young people, especially young women, is, at best, stable, yet they believe smoking to be a health concern, is explained by the fact that young smokers believe they will not be smoking in five years time, so that the hazards of smoking will never affect them. Teenagers especially, are cognitively present-oriented, so that long-term threats and warnings about health hazards are not an effective way to help teenagers stop smoking. The same cognitive separation may impede adults from giving up a habit many accept as bad for their health (Owen et al., 1986).

Given that smoking is potentially life-threatening, ample motivation should exist for people to both refrain from, or give up smoking, when they acquire

information about the health aspects of the habit. However, for many smokers there is what is termed an optimistic bias between individuals' beliefs and behaviours — the negative consequences of smoking will never affect me but always someone else. Additionally, there are still positive rewards associated wth smoking, either social or personal. The former may include social acceptance by one's peers, while the latter include the tension-reduction effect of nicotine addiction. Therapy needs to take into account the particular motivations given by individual smokers, where smoking occurs, and what satisfactions the smoker gets from the habit.

Australian surveys have shown that up to 84% of smokers who "kick the habit" do so unaided (Owen et al., 1986). However, the American Psychiatric Association (1994) estimated that less than 5% of those trying to quit smoking will be successful without professional assistance. Those who do seek help have typically tried many methods already: nicotine patches, which are very popular at the moment; nicotine chewing gum; or tried quitting "cold turkey," or have embraced other "quit smoking" programmes. They often have subsequently relapsed and may even have tried hypnosis before. Many are now motivated and willing to try hypnosis to help them quit smoking.

It is useful to bear in mind the range of difficulties smokers report when trying to cease smoking:

- 1. Over 70% of smokers who attend intensive cessation programmes resume regular smoking within twelve months.
- 2. Most of these resume smoking within the first three months following cessation.
- 3. Most smokers who succeed in quitting smoking in the long-term will have made a number of unsuccessful attempts at cessation.
- 4. Smokers who relapse following cessation often report that negative emotional states or social pressures are what precipitate their relapse.
- 5. Smokers who have a small number of cigarettes after stopping may experience an "abstinence violation effect" a guilt reaction, believing they have violated an absolute standard of personal behaviour (Owen et al., 1986).

HYPNOSIS AND SMOKING CESSATION

Studies have shown that hypnosis can be an effective method for achieving smoking cessation, when used as part of a cognitive-behavioural approach (Crasilneck, 1990; Green, 1996, 1997; Hajek, 1994; Neufeld, & Lynn, 1988; Spanos, Mondoux, & Burgess, 1995). Although the effectiveness of hypnosis over other treatment modalities in ensuring long-term abstinence is not proven (Lynn, Neufeld, Rhue, & Matorin, 1994), it seems that hypnosis is at least as effective as non-hypnotic treatments (Green, 1997).

Some studies have suggested that level of hypnotisability may correlate with success at smoking cessation, with higher hypnotisability leading to greater success (Baer, Carey, & Meminger, 1986; Barabasz, Baer, Sheehan, & Barabasz,

1986). The relationship is not fully linear, as indicated by the weak correlation between hypnotisability scores and number of months abstinent in these studies. In their study of smoking cessation and hypnotisability, Spiegel and his colleagues found that hypnotisability and having been previously able to quit smoking for at least one month significantly predicted abstinence (Spiegel, Frischholtz, Fleiss, & Spiegel, 1993).

The literature shows that treatment programmes for smoking cessation need to be tailored to the individual needs of each client (Sperry & Carlson, 1990), taking into account the particular motivations, level of hypnotisability, and previous attempts at cessation (Marcovitch, Gelfand, & Perry, 1980). The treatment approach should also consider a range of strategies, including pharmacological interventions such as nicotine patches and gum, used in conjunction with behavioural and cognitive-behavioural techniques, with hypnosis as an adjunct (Agee, 1983; Frischholtz & Spiegel, 1986; Haxby, 1995; Lando, 1996; Law & Tang, 1995; Moses, 1987).

Green (1997) highlights some excellent suggestions for smoking cessation that can be utilised very effectively in hypnosis. While hypnotised, clients are asked to imagine themselves as non-smokers and to visualise themselves successfully resisting the urge to smoke.

Clients can also be told in trance that their bodies are growing stronger, that their physical stamina is increasing, and that their sense of smell and taste are rejuvenating as their smoking decreases. The desire to smoke can be portrayed as black clouds in the sky, which the client symbolically blows away, leaving the sky clear and bright. Suggestions in trance can also usefully include the idea that the client can call upon outside support (e.g., friends or family) when fighting the urge to smoke (Green, 1997). Studies have found that social support is a predictor of successful smoking cessation (Cohen, 1984; Spiegel et al., 1993).

In general, I offer two methods for dealing with smoking. The first is "cold turkey," requiring immediate cessation of smoking by the client. The second method is cutting down slowly before totally cutting out.

In designing the hypnosis sessions, I have attempted to incorporate strategies to maximise the effectiveness of suggestions given in trance. The induction I use is one of progressive relaxation and is approximately ten minutes long. Ten minutes is about the optimum time in which to produce a trance state if the client is able to be hypnotised (Allum, 1976). I like using music to enhance the trance state. Not only is music effective as a deepening technique (see her earlier paper), it is also very pleasant for both the client and hypnotist.

In order to determine whether hypnosis has any effect in helping the quit smoking session, I try to incorporate a test in the form of a challenge item and I also like to enquire after the session to determine whether the client was hypnotised or not. Sometimes time constraints do not allow this but my clinical impression is that those clients who have experienced what I call hypnosis, i.e., who have responded to the challenge item and who experience a fair degree of spontaneous amnesia are more likely to cut down or succeed in quitting smoking.

THE "COLD TURKEY" METHOD

Most clients opt for the "cold turkey" method first. With this method, I use an adapted version of Pam Young's script on quitting smoking, covering many possible reasons for giving up smoking (Young, 1986). It covers: the health aspect; smoking as being socially unacceptable; the expense; and broadens into suggestions about not putting on weight after giving up smoking. The suggestions are documented in Appendix 1. I also include in my suggestions the specific motivations the client has given me for giving up smoking, if they are not covered in the standard script. I tell clients that if this method does not work they may then try the "rationing" or "cutting down before cutting out" approach.

During the hypnosis session I usually include an ideomotor suggestibility "heavy hand" challenge item. Using this strategy, the therapist suggests the client's hand is getting heavier and heavier and then challenges the client to raise the hand, noting the height to which it lifts. The therapist then takes away the suggestion of heaviness and asks the client to check that the heaviness is gone by lifting his/her arm and hand again and noting the height of the lift. This is scored by the therapist's observation of actually how high the arm is lifted and whether there is a difference between the first and second lift. The client is later asked what he/she actually experienced. Using this test, I gain some impression of how deeply hypnotised the client was at the time. My observation that hypnosis works better with people who can be and are hypnotised at the time is in line, of course, with the current literature of the success of "giving up smoking" and its correlation with hypnotic ability.

Some clients give up smoking after one hypnosis session. Others may cut down dramatically, still smoke a few cigarettes, then come back for a couple of sessions and then cut out. I would count that as a success too.

With clients who persist with hypnotherapy, but who find it difficult to give up smoking, I often use an Ericksonian technique in the third or fourth session. This is an adaptation of Havens and Walters (1989) script for stopping smoking. It is based on the idea of using colours of clothing which the client is wearing as colours of a house which has been poisoned and is, therefore, poisoning the inhabitant. Some clients enjoy this approach while others can be somewhat bewildered. It may be quite demanding on the therapist's creativity to keep the sessions effective, as well as interesting.

Some people cut out smoking for a short time, then relapse and realise they have "failed." If they return to therapy, I suggest they should try the "cutting down" method while they establish greater control over their smoking habit, and move towards cutting out. This seems to be quite an effective approach for those clients who tried the "cold turkey" method but who failed.

Some clients, realising they have failed many times in giving up smoking, choose the "cutting down" method as their re-approach technique.

THE CUTTING DOWN METHOD

This method was developed originally for a particular client and has been adapted successfully by me for current clients. The client (Jenny) was a very glamorous woman, about 30 years old. She had been a journalist and a lot of the excitement in her life had been associated with smoking. Such pleasurable feelings occurred especially at work where she would be smoking while writing articles to meet deadlines, and smoking while sitting around chatting with colleagues. However, Jenny was keen to have a baby in the near future and was aware she was endangering her health by smoking. Also, one of her close relatives had very bad emphysema. The relative had been a long-term smoker and was now struggling with her breathing and this disturbed Jenny quite a lot as she visualised herself headed down the same track. Jenny was motivated to reduce the possibility of emphysema and to be as healthy as possible before becoming pregnant.

However, she did not want to cut out smoking completely but rather to cut down on this habit. She believed that if she could smoke five or six cigarettes a day, that would be sufficient to maintain her health.

At the initial interview Jenny was smoking 20 to 30 cigarettes per day. Part of her identity was that of a smoker. She thought people who did not smoke were quite boring and dull so she did not want to become one of these — she wanted to keep her identity as a smoker but wanted to control and limit her smoking.

At the time, I was studying addictions, and knew of the approach used with problem drinkers to get them to promise themselves that they would not drink alcohol just for that day. I felt this approach could be adapted to smoking addiction. The method I developed was for Jenny to set a target number of cigarettes that she would allow herself to smoke for that day without suffering the unpleasant consequences that hypnotic suggestions could induce. Once she exceeded this self-set target number, Jenny would suffer a sick and nauseated reaction and an uncontrollable desire (i.e., a compulsion) to squash the cigarette out. When she extinguished the cigarette, she would feel calm and relaxed and pleased with herself that she had exercised such control.

The sessions consisted of a ten-minute induction of progressive relaxation. Then I used suggestions adapted from Hartland (1971) to help the client develop control over her life, feeling physically fitter, and getting more enjoyment out of her life. Being a smoker who was keeping her identity as a smoker but, at the same time, being able to control the number of cigarettes she smoked each day was positively reinforced. I further suggested that, when she woke up each morning, she would set a target number of cigarettes she would allow herself to smoke that day without experiencing unpleasant consequences. I then spelled out the consequences and likely impact if she exceeded the target number and gave her a post-hypnotic suggestion to enable her to go more deeply into a trance the next time we met when I would touch her on the shoulder and say "Relax, relax Jenny" — then I brought her out of hypnosis by counting backwards from 20 to one.

In all, I had about six sessions with Jenny. She had cut down from 20 to 30 cigarettes on average to about six per day. She began by setting the target at about 15 per day and gradually cut down to about six.

Subsequently Jenny and her husband moved away from Sydney. I met her about 18 months later in an airport and she reported she had given up smoking completely about six months previously. She knew that if she could control herself and smoke only six a day, then she had the power to cut out completely, which she eventually decided to do. Jenny said it helped knowing she had taken control of her smoking and limited herself to six per day. Once she could achieve that, she felt she could cut it out on her own, and so she did.

The final version of the cutting down method is documented in Appendix 2.

REFERENCES

- Agee, L. L. (1983). Treatment procedures using hypnosis in smoking cessation programs: A review of the literature. *Journal of the American Society of Psychosomatic Dentistry and Medicine*, 30, 111–126.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychiatric Association.
- Allum, S. (1976). *The effects of differential induction time on degree of hypnotisedness*. Unpublished thesis, Macquarie University.
- Baer L., Carey, R. J., & Meminger, S. R. (1986). Hypnosis for smoking cessation: A clinical follow-up. *International Journal of Psychosomatics*, 33, 13–16.
- Barabasz, A. F., Baer, L., Sheehan, D. V., & Barabasz, M. (1986). A three year follow-up of hypnosis and restricted environmental stimulation therapy for smoking. *International Journal of Clinical and Experimental Hypnosis*, 34, 169–181.
- Blainey, N. T. (1985). Smoking: Psychophysiological causes and treatments. In N. Schneiderman, & J. T. Tapp (Eds.). *Behavioral Medicine: The biopsychosocial approach* (pp. 347–378). Hillsdale, NJ: Lawrence Erlbaum Publishers.
- Cohen, B. B. (1984). A combined approach using meditation-hypnosis and behavioral techniques in the treatment of smoking behaviour: Case studies of five stressed patients. *International Journal of Psychosomatics*, 31, 33–39.
- Crasilneck, H. B. (1990). Hypnotic techniques for smoking control and psychogenic impotence. *American Journal of Clinical Hypnosis*, 32, 147–153.
- Frischholtz, E. J., & Spiegel, D. (1986). Adjunctive uses of hypnosis in the treatment of smoking. *Psychiatric Annals*, 16, 87–90.
- Green, J. P. (1996). Cognitive behavioral hypnotherapy for smoking cessation: A case study in a group setting. In Lynn, S. J., Kirsch, I., & Rhue, J. W. (Eds.). Casebook of clinical hypnosis (pp. 223–248). Washington, DC: American Psychological Association Press.
- Green, J. P. (1997). Smoking cessation: Hypnotic strategies complement behavioral treatments. Psychological Hypnosis, 6, 14–15.
- Hajek, P. (1994). Treatments for smokers. Addiction, 89, 1543–1549.
- Havens, R. A., & Walters, C. (1989). *Hypnotherapy scripts: A neo-Ericksonian approach to persuasive healing*. New York: Brunner/Mazel.
- Haxby, D. G. (1995). Treatment of nicotine dependence. American Journal of Health System Pharmacy, 52, 265–281.
- Hartland, J. (1971). Medical and dental hypnosis. Baltimore: William & Wilkins Company.

- Lando, H. A. (1996). Smoking cessation products and programs. *Alaska Medicine*, 38, 65–68.
- Law, M., & Tang, J. L. (1995). An analysis of the effectiveness of interventions intended to help people stop smoking. Archives of Internal Medicine, 155, 1933–1941.
- Lynn, S. J., Neufeld, V., Rhue, J. W., & Matorin, A. (1994). Hypnosis and smoking cessation: A cognitive behavioural treatment. In S. J. Lynn, J. W. Rhue, & I. Kirsch (Eds.). Handbook of clinical hypnosis (pp. 555-585). Washington, DC: American Psychological Association.
- Marcovitch, P., Gelfand, R., & Perry, C. (1980). Hypnotisability and client motivation as variables influencing therapeutic outcome in the treatment of cigarette smoking. Australian Journal of Clinical and Experimental Hypnosis, 8, 71-81.
- Moses, F. (1987). Treating smoking behavior by discussion and hypnosis: Destroying the myth of habit, addiction, and willpower. Psychology: A Quarterly Journal of Human Behavior, 24, 1-9.
- Neufeld, V., & Lynn, S. J. (1988). A single-session group self-hypnosis cessation treatment: A brief communication. International Journal of Clinical and Experimental Hypnosis, 36, 75-79.
- Owen, N., Halford, K., & Gilbert, A. (1986). Smoking. In N. King, & A. Remenyi (Eds.). Health care: A behavioural approach (pp. 41–50). Sydney: Grune and Stratton.
- Spanos, N. P., Mondoux, T. J., & Burgess, C. A. (1995). Comparison of multicomponent hypnotic and non-hypnotic treatments for smoking. Contemporary Hypnosis, 12, 12–19.
- Sperry, L., & Carlson, J. (1990). Hypnosis, tailoring, and multi-modal treatment. Individual Psychology: Journal of Adlerian Theory, Research, and Practice, 46, 459–465.
- Spiegel, D., Frischholz, E. J., Fleiss, J. L., & Spiegel, H. (1993). Predictors of smoking abstinence following a single-session restructuring intervention with self-hypnosis. American Journal of Psychiatry, 150, 1090-1097.
- Taylor, P. (1984). The smoke ring: Politics of tobacco. London: The Bodley Head.
- Williams, J. M., & Hall, D. W. (1988). Use of single session hypnosis for smoking cessation. Addictive Behaviours, 13, 205-208.
- Young, P. (1986). Personal change through self-hypnosis. Sydney: Angus & Robertson.

APPENDIX 1

QUIT SMOKING COMPLETELY THROUGH HYPNOSIS

COMPLETE SESSION

Induction (about 10 minutes duration)

Let your eyes close now and let yourself listen to my words and the music in the background. Just let your breathing slow down and as you do, you will begin to feel very relaxed and very comfortable. All the tension is draining away from your muscles as you sink into a deep, deep state of peace and calm and relaxation.

Signal to the Hypnotist

If at any stage you wish to signal me to bring you out of the session, you can do so by raising the index finger on your right hand and I'll bring you straight out. Just do that for me now so that I know that you understand. (Therapist waits for client's response before proceeding with the session.)

From time to time you may be aware of some noises or interruptions. These will just be a natural part of the surroundings and they won't bother you at all. Now you are thinking about your toes, and you notice a lovely warm wave of relaxation drifting into your toes. Spreading through your feet, making your feet feel so heavy and so relaxed . . . and the wave of relaxation is spreading up from your feet into your legs, slowly up through the muscles at the back of your legs, through your knees, up into your thighs, making your legs feel very heavy, very comfortable, very relaxed. All the tension is leaving your muscles and you're sinking into a deep, deep state of peace and calm and relaxation . . . and as you breathe slowly in and out you go deeper and deeper. Now, the lovely warm wave of relaxation is spreading up into your body, right up through your back, through your stomach, up into your chest, and your whole body is feeling very heavy, all the tension is leaving your muscles and you're enjoying this deep state of peace and calm and relaxation. The wave of relaxation is now travelling down through your arms, into your hands and your fingers, making your arms and hands and fingers so heavy, so relaxed. The wave of relaxation is now spreading up through your neck into all muscles of your shoulders, making you feel so relaxed, heavy, and relaxed. All the tension is leaving your shoulders and your neck as the wave of relaxation travels up into your head, up through all the muscles of your face, your chin, your lips, up through your cheeks, right through your eyes and into your forehead. All the tension is leaving your face, your face feels very heavy, very calm. The wave of relaxation is spreading up through your head, right through your scalp. You are sinking into a deep, deep state of peace and calm and relaxation.

The wave of relaxation is spreading right through your whole body relaxing every bit of you, and you will become even more deeply relaxed as I count from one to 20. With every count you will go deeper and deeper into the lovely deep state of relaxation. Breathing slowly now, feeling deeply relaxed. Counting now — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20. Deeply relaxed, feel very calm, very peaceful. Listening only to my words and the music which will carry you even further into a deep state of peace and calm and relaxation.

Ego-Enhancement

Your mind has now become very sensitive and very receptive to my suggestions. The things I'm telling you will sink deep into the unconscious part of your mind and will cause a deep and lasting impression. The things I put into your unconscious mind will exercise a great influence over the way you think, over the way you feel and over the way you behave. From now on you will feel physically stronger and fitter in every way. You will feel healthier, more alert, and more energetic. You will be more able to relax and feel calm about your life and you will be quite able to deal with all aspects of your life with strength and confidence. All aspects of your life will become more enjoyable too. You will be able to think more clearly and concentrate more easily. You will be able to give your whole undivided attention to whatever you are doing to the complete

exclusion of everything else . . . everyday you will become emotionally much calmer and much more settled and content. As you become and as you remain more relaxed in your everyday living, you will develop more confidence in your ability to control your own life . . . more confident in controlling your smoking behaviour. Every day you will feel a greater feeling of well-being and a greater feeling of personal safety and security. You will feel much happier, much more content and much more optimistic in every way.

Challenge Item (Heavy Left Arm and Hand)

You are thinking about your left arm and hand and as you think about your left arm and hand, you notice a feeling of heaviness creeping into your left arm and hand. Your left arm and hand are becoming very heavy, heavy as lead . . . getting heavier and heavier, pressing down . . . getting heavier and heavier. Let yourself feel just how heavy your left arm and hand have become — try lifting your left arm and hand, just try. (Allow 10 seconds and observe the height to which client lifts left arm and hand.) That's fine.

Now all the heaviness is drifting out of your left arm and hand and your arm and hand are returning to normal. They are back to normal . . . all the heaviness has gone. Just check that they are back to normal. Try lifting your left arm and hand now. (Observe the height to which client lifts left arm and hand.) That's fine. Now just let your arm and hand rest back to where they were.

Symbol of Peace (Post-Hypnotic Suggestion to Create a Peaceful State of Mind)

Now you're thinking of something that symbolises peace for you. It can be anything you like — maybe something from the plant or the animal world but anything you like . . . something that symbolises peace for you . . . a gentle stream or placid lake perhaps.

When you have something in mind, let me know by lifting up your right hand a little bit. (*Therapist waits for client's signal.*)

Now just hold that symbol in mind — think of that symbol — concentrate on that symbol and as you think of that symbol of peace you feel very calm, very peaceful, very much in control . . . very calm, very peaceful, very much in control and you're enjoying this feeling of being calm, peaceful and in control and if at any time you wish to re-experience this feeling of being calm, peaceful and in control you can do so by thinking of your symbol of peace, letting your breathing slow down and saying to yourself "Peace" and your own name. And you can use that as a signal to yourself in any appropriate situation to feel calm, peaceful and in control.

Suggestions for Quitting Smoking Completely

You will find from now on that you will be more and more strongly aware of the reasons for giving up smoking . . . more and more conscious of the threat to your health, of the increased chance of dying an ugly, painful death from heart disease or cancer, or fighting for each breath with bronchitis or emphysema . . . or causing severe damage to the arteries and veins in your limbs . . . you might comfort yourself that these things are a long way off, and that's true, it takes time . . . but you will find that you are now more and more aware of interference to the way you would like to be . . . the gradual lowering of fitness that smoking brings about . . . the shortness of breath when you walk, or play sport, or climb stairs . . . the raw throat you get from time to time . . . the bad taste in your mouth . . . the loss of senses of taste and smell.

You will dwell on the cost of smoking per month and per year, and think how you could spend the extra money you would save . . . you will be more and more aware that smoking is becoming less and less acceptable to others, that it is regarded as anti-social . . . that it is dangerous to those around you and you are forcing them to become passive smokers against their will.

You will find if you continue to smoke, you'll be so disgusted and disappointed with yourself that the cigarette will taste foul, like dead ashes lying overnight in an ashtray . . . you'll be overwhelmed by unpleasant feelings . . . you'll feel sick and queasy, as if you want to throw up but can't . . . you really want to vomit, but can't . . . the room will spin you'll continue to have a vile metallic taste in your mouth, you will break out in a sweat if you continue to smoke.

As the unpleasant, dangerous aspects of smoking take over in your mind you will find you do not want to pick up a cigarette in the first place, or you will put it back without lighting it . . . at the very thought of smoking you will have a mental picture of a lighted cigarette with a big red stroke through it, telling you that cigarettes are strictly forbidden.

We know that a rise in your tension level signals the urge to smoke . . . from now on you will cut that urge off before it starts by relaxing, slowing down your breathing, and using your "Symbol of Peace" . . . and as you keep doing this the urge to smoke will disappear.

Now as well as all this, your unconscious mind knows all your reasons for giving up smoking . . . it will find a safe way to get rid of your smoking habit . . . you will find that you just can't bring yourself to smoke . . . you will have no desire at all to smoke . . . your craving will disappear . . . smoking will be repugnant to you, and quite remote from your needs . . . more and more remote from your needs.

And from now on you will not smoke, you will not even be aware of the smell of other people's cigarettes. Smoking will rarely if ever enter your consciousness . . . from now on you will suffer no withdrawal effects . . . the unpleasant effects that usually accompany stopping smoking will be kept to an absolute minimum.

As your mastery over your habit increases, you will become more and more proud of your self-control and willpower . . . you will be healthier, your lungs will feel clearer, you will have far more energy, you will feel good about yourself and the world, you will enjoy life far more . . . you will be more calm and relaxed . . . there will simply be no need to smoke, no need at all to smoke.

Specific Suggestions Not Mentioned

Add specific reasons if not already mentioned that the client gave for wishing to quit smoking, (e.g., to keep spouse happy).

Suggestions for Not Putting on Weight (If Relevant to Client)

And you will find that even though food will taste better and better, you will make every effort not to gain weight . . . you will have less and less desire for high-calorie, rich, unhealthy foods . . . you will find to your pleasure that while you enjoy food much more you will be able to maintain your desired weight while protecting your body against the poison of further smoking . . . as you cease to smoke and continue to concentrate more on enjoying low-calorie, healthy food, you will feel stronger and healthier . . . your resistance to illness and disease will increase steadily, day by day.

There will simply be no need to smoke . . . no need at all to smoke.

Post-Hypnotic Suggestion for Entering Trance More Quickly

Next time we meet you will be able to go into a very deep state very quickly as I touch your shoulder like this (*Therapist touches shoulder of client*) and say "Relax, relax, name of client."

You are feeling very deeply relaxed now. You're feeling calm and peaceful. Any feeling of heaviness you may have in your body is going now and your body is feeling quite normal.

Wake Up

Listen very carefully to what I am going to tell you next. In a moment I shall begin counting backwards from 20 to one. You will gradually wake up but for most of the count you will still remain in the state that you are now in.

By the time I reach five your eyes will open but you will not be fully alert. By the time I reach one, you will be fully alert in your normal state of wakefulness.

After you open your eyes you will feel fine. You will have no headache or any other ill-effects. You will be alert and refreshed. Counting now — 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

APPENDIX 2

CUT DOWN ON SMOKING THROUGH HYPNOSIS

COMPLETE SESSION

Induction (about 10 minutes duration)

Let your eyes close now and just let yourself listen to my words and the music in the background. Just let your breathing slow down and as you do that you will begin to feel very relaxed and very comfortable. All the tension is draining away from your muscles as you sink into a deep, deep state of peace and calm and relaxation.

Signal to Hypnotist

If at any stage you wish to signal me to bring you out of the session, you can do so by raising the index finger on your right hand and I'll bring you straight out. Just do that for me now so I know that you understand. (*Therapist waits for client's response before proceeding with the session.*)

From time to time you may be aware of some noises or some interruptions. These will just be a natural part of the surroundings and they won't bother you at all. Now you are thinking about your toes and you notice a lovely warm wave of relaxation drifting into your toes. Spreading through your feet, making your feet feel so heavy and so relaxed . . . and the wave of relaxation is spreading up from your feet into your legs, slowly up through the muscles at the back of your legs, through your knees, up into your thighs, making your legs feel very heavy, very comfortable, very relaxed. All the tension is leaving your muscles and you are sinking into a deep, deep state of peace and calm and relaxation . . . and as you breathe slowly in and out you go deeper and deeper. Now, the lovely warm wave of relaxation is spreading up into your body, right up through your back, through your stomach, up into your chest and your whole body is feeling very heavy, all the tension is leaving your muscles and you're enjoying this deep state of peace and calm and relaxation. The wave of relaxation is now travelling down through your arms, into your hands and your fingers, making your arms and hands and fingers so heavy, so relaxed. The wave of relaxation is now spreading up through your neck into all muscles of your shoulders, making you feel so relaxed, heavy and relaxed. All the tension is leaving your shoulders and your neck as the wave of relaxation travels up into your head, up through all the muscles of your face, your chin, your lips, up through your cheeks right through your eyes and into your forehead. All the tension is leaving your face, your face feels very heavy, very calm. The wave of relaxation is spreading up through your head, right through your scalp. You are sinking into a deep, deep state of peace and calm and relaxation.

The wave of relaxation is spreading right through your whole body relaxing every little bit of you and you will become even more deeply relaxed as I count from one to 20. With every count you will go deeper and deeper into a lovely deep state of relaxation. Breathing slowly now, feeling deeply relaxed. Counting now — 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20. Deeply relaxed, feel very calm, very peaceful. Listening only to my words and the music which will carry you even further into a deep state of peace and calm and relaxation.

Ego-Enhancement

Your mind has now become very sensitive and very receptive to my suggestions. The things I'm telling you will sink deep into the unconscious part of your mind and will cause a deep and lasting impression. The things I put into your unconscious mind will exercise a great influence over the way you think, over

the way you feel, and over the way you behave. From now on you will feel physically stronger and fitter in every way. You will also feel emotionally stronger and fitter in every way. You will feel healthier, more alert, and more energetic. You will be more able to relax and feel calm about your life and you will be quite able to deal with all aspects of your life with strength and confidence. All aspects of your life will become more enjoyable too. You will be able to think more clearly and concentrate more easily. You will be able to give your whole undivided attention to whatever you are doing to the complete exclusion of everything else . . . everyday you will become emotionally much calmer and much more settled and content. As you become and as you remain more relaxed in your everyday living you will develop more confidence in your ability to control you own life, more confidence in your ability to control and limit your smoking. Every day you will feel a greater feeling of well-being and a greater feeling of personal safety and security. You will feel much happier, much more content and much more optimistic in every way.

Post-Hypnotic Suggestion to Create a Peaceful State of Mind

Now you're thinking of something that symbolises peace for you. It can be anything you like — maybe something from the plant or animal world but anything you like . . . something that symbolises peace for you.

When you have something in mind, just let me know by lifting up your left hand a little bit. (*Therapist waits for client's signal*.)

Now just hold that symbol in mind — think of that symbol — concentrate on that symbol and as you think of that symbol of peace you feel very calm, very peaceful, very much in control and you're enjoying this feeling of being calm, peaceful and in control and if at any time you wish to re-experience this feeling of being calm, peaceful and in control you can do so by thinking of your symbol of peace, letting your breathing slow down and saying to yourself "Peace" and your own name. And you can use that as a signal to yourself in any appropriate situation to feel calm, peaceful, and in control.

Suggestions for Setting a Target Reduction in Smoking

From now on you will feel more relaxed and free of tension . . . from now on you will have the personal power to control your own smoking. You will be in the commanding position in the smoking situation; you will be a smoker who has the ability to control and limit your smoking behaviour. Every morning, just after you wake up, you will decide how many cigarettes you will allow yourself to smoke on that day. Each morning you will write the target number down for the day on the card. You decide each morning what the target number will be and remember the target may be zero if you so choose. You have the power to decide what size the target will be and for that day you may smoke the number of cigarettes up to and including the target number without any discomfort.

Now you're going into a deeper state of relaxation. Deeper and deeper. The next words I'm going to say will have a dramatic effect on your unconscious mind. These are most important. They're going to sink deeply into your unconscious mind and influence the way you behave from now on. If you smoke more than your target number the cigarettes will taste most unpleasant. You will feel an awful feeling of nausea with every cigarette you smoke over the target number and an awful queasiness will come over you. You will have a horrible sickly feeling. You won't be sick but you will feel awfully queasy, most unpleasant. Your mouth will feel very nasty and a really lousy, sickly taste, will come over your whole body. As you taste each puff of the cigarette, a feeling of nausea will creep over you, you will feel very queasy, really vomitty.

With every cigarette you smoke more than your target number, for every one you will have an irresistible urge to squash out that cigarette, to put it right out and as you put it out, the queasiness and the nausea which is there will disappear. The queasiness will disappear as you squash out the cigarette and you will feel relieved and relaxed. The urge to smoke, when you squash the cigarette out, will be gone.

You're feeling very deeply relaxed now. You're feeling calm and peaceful. Any feelings of heaviness you may have in your body are going now and your body is feeling quite normal.

Post-Hypnotic Suggestion for Entering Trance More Quickly

Next time we meet you will be able to go into a very deep state very quickly as I touch your shoulder like this (*Therapist touches shoulder of client*) and say "Relax, relax, (name of client)."

Wake Up

Listen very carefully to what I am going to tell you next. In a moment I shall begin counting backwards from 20 to one.

You will gradually wake up but for most of the count you will remain in the state that you are now in.

By the time I reach five, your eyes will open but you will not be fully alert. By the time I reach one, you will be fully alert in your normal state of wakefulness. After you open your eyes you will feel fine. You will have no headache or any other ill-effects. You will be alert and refreshed. Counting now — 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

INTRODUCTION TO HYPNOSIS, SELF-ESTEEM, AND PERFORMANCE ENHANCEMENT

Barry J. Evans Department of Psychiatry, University of Melbourne

John Hartland (1971) was one of the first clinicians to describe how hypnotic scripts could be used for ego-strengthening. These generalised supportive statements, designed to increase self-confidence, enhance coping effectiveness, and limit anxiety and worry were used as part of every induction in all therapy he conducted.

Hartland, I believe, understood the importance of self-esteem and the role of feelings of self-efficacy and personal empowerment as elements in effective coping, adjustment to the crises of life, and overall mental well-being. Whether the use of generalised ego-strengthening statements in therapy for every client may be disputed (see, for example, Gibson & Heap, 1991), there is certainly clear anecdotal evidence from numerous case reports that specific ego-strengthening suggestions and metaphors, tailored to the needs of individual clients, are effective in therapy.

It makes an interesting observation that writers, researchers, and clinicians routinely talk about terms such as "self," "self-esteem," "self-efficacy," and "ego-strengthening" without there being any clear definitions of these terms, nor a clearly enunciated and accepted description as to what they are and how they affect human functioning. The first paper in this section addresses this critical shortcoming in the literature.

In the first paper, Simon Stafrace makes the point that the concepts of "self," "self-concept," and "self-efficacy" are not well articulated in the professional literature — despite the fact that we each have some notion of what these terms mean and while we may well appreciate their importance to psychological well-being and mental health. In a thorough examination of these terms, he describes each construct and their importance to psychological health. The "self" or the "ego" is discussed from the various viewpoints in psychology and psychiatry. "Self-esteem" is then examined from the same viewpoints.

What is particularly useful for the hypnosis therapist is the author's assessment of the range of genetic, psychological, and social variables which impact on self-esteem. Worth highlighting are the variables of parent-child relationships and peer relationships in the maintenance and enrichment / reduction of self-esteem. Stafrace also draws attention to the fact that self-esteem may be influenced by a range of personal and psychosocial factors which impact on the individual over the lifespan — self-esteem is not set in childhood and adolescence and does not remain stable.

In the third part of his paper, Stafrace reviews the literature correlating psychological variables with low and high self-esteem, confirming the clinical experience of many therapists. As he points out, self-esteem can be seen both as a causal and outcome variable, so that it both results from the individual's life experiences (and thinking about these) and influences perceptions of subsequent life experiences.

The paper concludes with a review of studies which have addressed the utility of hypnosis in enhancing self-esteem, utilising what is essentially the ego-strengthening approach of John Hartland and more current practitioners. While his review of the literature shows few controlled studies of the efficacy of ego-strengthening in hypnotically-based therapy, it remains clear that the use of such techniques is widespread and, presumably, considered effective.

There are numerous reports in the literature describing the use of egostrengthening suggestions: for enhancing clients' self-control and personal efficacy; helping individuals cope with the stresses of illness, surgery, and pain; and assisting in cognitive restructuring. There are also reports of hypnotic egoenhancement techniques being successfully used to control phobias, reduce examination anxiety, and increase sports and academic performance. Hammond (1990) details a number of ego-strengthening scripts which are immediately useful for a range of therapeutic applications.

The general focus of much of the literature published on ego-enhancement with hypnosis is to help individuals cope more effectively with their pain, their anxiety, their performance deficit — whatever the purpose of the therapy. The additional readings in this section extend the utility of hypnosis in a dramatic way: going beyond developing coping effectiveness aimed at dealing with life experiences and stresses, to helping individuals develop and extend their potential for life and to enjoy the wonder that a fuller understanding and capacity for life's enjoyment and fulfilment can bring.

Both papers which conclude this section were written by Harry Stanton, a practitioner well-known for his therapeutic techniques designed to enhance performance and human capacity in a wide variety of intellectual, sporting, professional, and recreational pursuits.

In the first paper, Stanton proposes a model of therapist directedness, incorporating ego-strengthening techniques as an integral part of the process of all therapy. These are designed to facilitate ego-strengthening suggestions at the unconscious level, helping to change client perspectives on life experiences. The paper concludes with a report of a clinical application of the technique.

In his second paper, Stanton describes the integration of ego-strengthening techniques within the theoretical framework of Gurdjieff (1950), with both proposing the view that every event which an individual experiences — whether "good" or "bad" — can be used to promote personal growth and development. This philosophical approach to life (and therapy) is detailed in a specific approach to induction, suggestion, and de-induction. The paper again concludes with the report of a clinical evaluation of the technique.

REFERENCES

- Gibson, H. B., & Heap, M. (1991). Hypnosis in therapy. London: Lawrence Erlbaum Associates.
- Gurdjieff, G. L. (1950). Beelzebub's tales to his grandson (All and everything. Second series). London: Routledge and Kegan.
- Hammond, D. C. (1990). Handbook of hypnotic suggestions and metaphors. New York: American Society of Clinical Hypnosis.
- Hartland, J. (1971). Medical and dental hypnosis (2nd ed.). London: Baillière, Tindall and Cassell.

SELF-ESTEEM, HYPNOSIS AND EGO-ENHANCEMENT

Simon P. Stafrace Psychiatrist in Private Practice

Barry J. Evans Department of Psychiatry, University of Melbourne

Graham D. Burrows AO, KSJ
Department of Psychiatry, University of Melbourne
Austin & Repatriation Medical Centre

Self-esteem is a construct underlying many psychological and psychiatric theories. At the same time, despite its integral role in therapy, it is not well articulated in the literature. This paper describes the concepts of self-esteem and self-concept, their role in psychological and emotional well-being, and utilisation in a range of therapies. It concludes with a review of hypnosis in ego-strengthening.

Self-esteem is a key concept in accounts of normal personality and mental disorder. It has been said to embody a feeling or an "hedonic" tone that attaches a sense of value to experiences of the self and permits for a personal judgement of worthiness (Coopersmith, 1967). Its clinical significance, however, remains ambiguous and subject to paradoxical assertions. For example, pathological levels of self-esteem are said to both predispose to, and arise from, psychological disturbance. Similarly, the enhancement of self-esteem has been described as a primary goal of psychotherapeutic intervention and as an indirect or incidental outcome of only minor clinical interest (Bednar, Gawain Wells, & VandenBos, 1991; Dryden, 1984; McKay & Fanning, 1992; Steffenhagen, 1990).

Undoubtedly, some of this uncertainty stems from the fact that the construct itself is not well understood. As with "depression," the term "self-esteem" is used both colloquially and as a technical reference. Consequently, though most researchers and clinicians assume an intuitive understanding of the term, they may not describe the same construct when referring to it (Blascovich & Tomaka, 1991). Furthermore, the existence of self-esteem as a discrete component of the human personality has not been demonstrated convincingly and it remains unclear as to which of its characteristics should be regarded as normal and in what settings (Robson, 1988).

Self-esteem has a role in numerous psychological and psychopathological processes. It has been correlated with motivation, conservatism, prejudice, authoritarianism, attraction, deviant behaviour and performance. Low self-esteem is associated with depression, anxiety, post-traumatic stress disorder, substance abuse and adjustment to acute and chronic medical conditions (Robson, 1988; Roy, Neale, & Kendler, 1995). Unfortunately, most of the studies which have investigated the clinical significance of the construct have utilised cross-sectional designs. These do not permit determination of causation and

whether changes to self-esteem are primary or secondary to the aforementioned attitudes, behaviours, and disorders.

It also remains unclear what role the enhancement of self-esteem per se plays in individuals' recovery from a range of mental disorders. While most forms of psychotherapy are said to benefit self-esteem, investigations of psychotherapeutic interventions that specifically target self-esteem are rare. This limitation is equally evident in the literature concerning hypnosis and self-esteem. Consequently, despite the availability of a range of hypnotic strategies aimed at enhancing self-esteem, their effectiveness in achieving this objective and thus ameliorating psychological disturbance and psychiatric disorder is no better validated than other psychotherapeutic interventions.

This paper reviews current conceptualisations of self-esteem. The constructs of self, the self-concept, and self-efficacy will be considered and differentiated from self-esteem. Studies of the role of self-esteem in the development and maintenance of mental disorders and behavioural problems, and those studies which have explored the effectiveness of interventions that target self-esteem in psychotherapy, are then reviewed. These include contributions from the clinical and experimental hypnosis literature.

THE SELF, THE EGO, SELF-CONCEPT, AND SELF-EFFICACY

Heinz Kohut, one of the most innovative proponents of a dynamic psychology of self, purposefully avoided a definition of the term in all his writings despite the fact that the construct represented a central configuration in his work.

The self is . . . like all reality . . . not knowable in its essence . . . We can describe the various forms in which the self appears, can demonstrate the several constituents that make up the self . . . and explain their genesis and functions. We can do all that, but we will still not know the true essence of the self as differentiated from its manifestations. (Kohut, 1977, p. 310–312)

While not methodologically useful, Kohut's position emphasises the point that, like self-esteem, the self is basically a metaphorical construct used to symbolise an aspect of human psychology (Smith, 1985). Seeking to operationalise the term would undoubtedly facilitate its measurement but could also lead to reification of the concept. The creation of rigid paradigms could, in turn, influence the interpretation of empirical findings and thereby limit any further growth in an understanding of the construct.

Within the field of psychology, two theoretical schools dominate current thinking about the self. These are the psychodynamic and the cognitivebehavioural approaches. Differences between the two orientations exist not only in the methodologies they use, but also in the basic assumptions they make about the structure of personality and mediators of behaviour. Nevertheless, representations of the self as global and stable or multidimensional and dynamic are not restricted to one framework or another and a convergence in the conceptualisation of self within the two theoretical traditions is becoming increasingly evident.

The Self as Global and Stable or as Multidimensional and Dynamic

Some theorists suggest the "self" is a relatively stable and global attribute, in much the same manner as personality or intelligence. Thus, Campbell (1981) defines the term as the immediate experience of the individual's psychophysical total, including both conscious and unconscious attributes, at any given moment. In much the same vein, Meares (1992) presents a view of self as comprising the individual's moment-by-moment sense of existence.

An alternative approach conceptualises the self as multidimensional or multifaceted. In promoting this hypothesis, James (1890) emphasised the pluralistic nature of self. He suggested the "self as knower" needed to be distinguished from the "self as known," and the "self as subjectively experienced" could differ from the "self as presented." James further postulated that the self was composed of a number of constituent elements that served as the basis for a coherent personal identity but which retained a capacity to struggle against one another for expression (Segal & Kendall, 1990). Horney, elaborating further on this point, referred to the whole person as experienced at any one point in time, as the "actual self." She distinguished this from the "real self," representing the individual's potential for further growth, and the "ideal self," defined as the idealised image of the self that is aspired to. Intrapsychic conflict was conceived as emerging from differences in the needs and aspirations of the various aspects of self (in Robson, 1988).

Psychodynamic Perspectives of Self and Its Distinction from Ego

Classical psychoanalytic theory and the related schools of ego psychology and object relations theory avoid a view of the self which embraces subjective experience, in favour of one oriented towards function.

Psychodynamic thinking conceptualises the intrapsychic world as one of inter-agency conflict between the three components of Freud's (1923) structural model of psyche viz, the id, ego, and superego. The id functions to discharge tension arising from the instinctual drives of sexuality and aggression. It is controlled by the superego and aspects of the ego. The former combines a proscribing moral conscience and a prescribing ego-ideal. The latter is viewed as incorporating an unconscious aspect, which includes defense mechanisms, and a conscious executive entity that regulates the integration of perceptual stimuli, thought, and affect.

Within the tradition of *ego psychology*, the significance of the self tends to be minimised, despite the fact that Freud used the term "ego" both in reference to an impersonal intrapsychic structure and the individual's subjective self-experience. If the self is considered at all, it tends to be differentiated from ego according to its interactional context and its functions and is viewed as representational rather than a source of action and agency in its own right. Thus, whereas ego is defined by its interplay with other intrapsychic agencies, the self is characterised as evolving from interactions with significant others. In this perspective, the self is viewed as an intrapsychic representation of the individual

as experienced in interactions with others. No allowance is made for the concept of self as incorporating all subjective experience or as a source of autonomous activity in its own right (Gabbard, 1990).

Object relations theory emphasises the internalised relationships between representations of self and other. Rather than sexuality and aggression being primary drives, object relations theorists attribute prominence to the individual's drive to establish relationships. The internalisation of object relations involves the splitting of the ego into unconscious suborganisations. The selfsuborganisations incorporate aspects of the ego in which the individual experiences ideas and feelings as his/her own. The object-suborganisations are those aspects of the ego that the individual identifies with an external agency. Conflict is not merely a struggle between impulse and defence, but also a clash between opposing pairs of internal self- and object-suborganisations (Ogden, 1983).

Recent attempts to integrate object relations theory with ego psychology have considered further the relationship of the ego and the self. Models of the self-asagency have been described, in which the self is seen as actually playing a role in initiating relatedness and unity with the environment (Sutherland, 1983). Alternatives to the notion that self and ego are distinct have also been explored and include the proposition that the self is embedded in the ego and is the end product of many self-representations (Kernberg, 1982).

Whereas object relations theory emphasises the internalised relationships between representations of self and other, self psychology stresses how external relationships help maintain self-esteem and self-cohesion. For self psychologists, the construct of self is central to an understanding of human behaviour. Meares (1992) defined the self as one's immediate sense of being, which is experienced in the context of an organised structure of memories of states of personal existence, also known as self-representations. The latter is a concept that is also central to cognitive models of self-organisation, and refers to assumptions and beliefs about the self that evolve as an outcome of interactions with significant others in the environment during the developmental phase. Narcissism (or put simply, self-love) is presented as normative and with its own developmental pathway. Narcissistic needs are viewed as persisting throughout life, in parallel with object love or the drive to form relationships with others. Thus, self-esteem is presented as a component of the normal personality and not the sign of developmental immaturity implied by Freud in his formulation of the psyche (1914).

Cognitive-Behavioural Perspectives on Self

Theorists in the behavioural tradition initially rejected the self as a valid area of investigation. This was because of its subjective nature, the lack of an operational definition, and consequent difficulties associated with its measurement. The increasing acceptance of hypothetical constructs as predictors of behaviour and the reframing of self as a cognitive construct have combined to render theorising about self as a legitimate area of interest to cognitive-behaviourists (Harter, 1990).

Within a cognitive-behavioural framework, the self comprises a complex system of multifaceted structures, made up of affective, cognitive and behavioural structural components, known as self-schemas (Markus & Nurius, 1986). Schemas are pre-existing generic memory representations that facilitate retrieval and organise new information into categories, sets of beliefs about different aspects of the self, which give meaning to events (Meares, 1992). Collectively, they form the basis of the self-concept (Baskovich & Tomaka, 1991; Bednar et al., 1991).

Individuals hold an array of representations about the self, which are constructed from the information contained in the unfolding experiences of life. Self-concept is also influenced by judgements made of the individual by others and identifications with family and friends (Beck, Rush, Shaw, & Emery, 1979). For reasons of temperament or experience, a small number of self-representations receive a high degree of cognitive, affective, and somatic elaboration. These give rise to the self-schemas that come to dominate both conscious and unconscious awareness, forming the "core" self (Markus, 1990).

This view of the self was extended by Cloninger, Svrakic, and Przybeck (1993) who described an empirically based seven-factor model of personality in which the self-concept was presumed to be a mediating factor through which temperament and character interact. Self-concept varies according to the extent to which a person identifies the self as an autonomous individual, an integral part of humanity, and an integral part of the universe as a whole.

Within this framework, self-esteem is viewed as a cognitive construct that emerges from the self-concept and constituting a set of evaluative beliefs about the self (Guidano & Leotti, 1983). Cloninger's seven-factor model provides a theoretical basis for the role of self-esteem as a determinant *and* consequence of a range of behavioural abnormalities and mental disorders.

A related concept in cognitive-behavioural theory is self-efficacy, defined as confidence in one's ability to deal with change by implementing adaptive and problem solving behaviours (Rutter, 1985). Though related to self-esteem, the terms are not synonymous and may not even be correlated in certain situations (Gage & Polatajko, 1994).

The concept of self-efficacy arose from the observation of discrepancies between attained skills and performance outcomes. Though skill and motivation are basic requirements for performance, differences in performance between individuals with equivalent skills must be attributed to other processes. Traditional cognitive models have ascribed the *skill-performance* discrepancy to a variation in action-outcome expectancy. This represents a belief that a given response will lead to a particular goal. Bandura (1977) suggests, however, that action-outcome expectancy does not account for all of the variance between skills and performance, and that a separate cognitive process, which he termed self-efficacy, must be considered as an additional explanatory factor.

The term "perceived self-efficacy" (PSE) refers to the subjective judgment of one's capacity to utilise one's skills in order to organise and implement a course of action, with the aim of attaining a designated performance (Bandura, 1982). The development of PSE is a dynamic process, influenced by experiences of success and failure in the tasks individuals carry out throughout life. PSE is affected by four variables:

- 1. Personal performance accomplishments are the most influential, and the success or failure of one's efforts will enhance and decrease PSE respectively.
- 2. The vicarious experience of observing others perform specific tasks allows for learning to precede actual performance, enhancing the expectation that a specific task can be carried out competently.
- 3. Persuasion is a less effective strategy, and involves the use of language to communicate rational thoughts, which challenge false assumptions about one's competence.
- 4. Physiological arousal may communicate fear and, in so doing, may decrease one's expectation of success in a given task. Strategies that induce relaxation and decrease arousal may enhance self-efficacy.

Information derived from these four sources is interpreted and integrated through a process of cognitive appraisal, which itself is influenced by the life experiences of the self, and by others and the environment. The appraisal process involves an analysis of the requirements of the task, the degree to which success or failure can be internally or externally attributed, and finally, the personal and situational resources and constraints that may have influenced the task. The greater the degree to which the individual can attribute success to stable internal factors and failure to external or transient internal factors, the greater the sense of self-efficacy (Gage & Polatajko, 1994).

Bandura and Adams (1977) demonstrated that PSE is an important determinant of performance and improvements in PSE are good predictors of improved subsequent performance. Additionally, they demonstrated that improved PSE is enhanced when subjects use active learning, rather than vicarious learning, suggesting that performance-based procedures are more powerful learning strategies than symbolically based experiences (Gage & Polatajko, 1994). These findings have since been replicated in a number of controlled experiments (Gage & Polatajko, 1994).

Rutter (1985) contends that self-esteem may arise from self-efficacy. Such a relationship undoubtedly exists, and self-esteem does appear to be affected by experiences of success and failure in dealing with the physical and interpersonal world. Moreover, the attribution of one's successes to internal qualities and of one's failures to external factors appears to be an important process in maintaining self-esteem. However, self-efficacy is only correlated with selfesteem when task competency is valued by, and highly relevant to, the individual. For example, one may be uncompetitive as an athlete, and have poor perceived self-efficacy in this area. This may not impact upon self-esteem if other competencies exist that attract social approval or confer social status, or help the individual master challenges (Brooks, 1992).

SELF-ESTEEM

As with definitions of "self," there are differences in the conceptualisation of self-esteem. Whereas *structural psychoanalytic* models of personality view self-esteem as a product of tension between different components of the psyche, *cognitive* models emphasise the influence of self-representations or self-schemata, and *behavioural* models devote attention to the impact of observable behaviours on the individual's sense of self-worth. In contrast, *interpersonal* and *systemic* models shift attention away from intrapsychic processes and highlight exclusively the importance of relationships between individuals and within society in the development of self-regard.

The Structure of Self-Esteem

Global self-esteem is defined as overall feelings of self-worth, derived from evaluations of specific aspects of the self-concept. The assumption that self-esteem is a composite rather than a single entity has relevance to both the clinical and research setting. Individuals who experience diminished esteem in specific aspects of the self may compensate for this by reducing the salience and personal relevance of those aspects of self and/or emphasising areas of higher self-esteem. A similar approach to treatment may also assist clinicians dealing with lowered self-esteem in individuals (Blascovich & Tomaka, 1991).

Numerous dimensions of self-esteem have been described. Rosenberg (1965) referred to *personal self-worth* and *appearance* and, like Coopersmith (1967), alluded to the importance of *perceived social competence* and *power*. The role of *interpretive processes* in arriving at a self-view was highlighted by Beck's cognitive theory of depression (Beck et al., 1979). This was further refined by work on learned helplessness (Abramson, Seligman, & Teasdale, 1978), which proposed that self-esteem might be influenced by *attributional style*, in particular the internal attribution of negative events. Romney (1994) extended this hypothesis to incorporate stable and global attributions as well.

An important aspect of self-esteem that is often neglected in formulations of the construct is the *affective response* evoked by the self-evaluative cognitions that comprise it. Robson alluded to this in describing self-esteem as "the *sense of contentment and self-acceptance* that stems from a person's appraisal of his own worth, significance, attractiveness, competence, and ability to satisfy his aspirations" (1988, p. 13). Similarly, Meares (1992) referred to the almost *indefinable feeling* at the core of self-esteem, activated by the mirroring responses of others to expressions and actions that are unique, personal, and infused with meaning to the individual concerned. Such an emotional response must be differentiated from the associated cognitions, for though ideas of mastery and associated plans of action do arise from it, it embodies a variety of feelings that emerge as a result of perceived judgments of self-worth (Grunebaum & Solomon, 1987).

The Determinants of Self-Esteem

The various theoretical frameworks hold the common assumption that selfesteem is influenced by psychosocial and environmental factors. In contrast to the abundance of studies on psychosocial determinants, little attention has been paid to the genetic or familial determinants of self-esteem. The importance of these factors is suggested by twin and adoption studies of various other personality characteristics that show some degree of genetic control for most traits (McGuffin & Thapar, 1992).

The Influence of Genetic Factors on Self-Esteem

In the only published study of its kind, Roy et al. (1995) attempted to quantify the relative importance of genetic and environmental influences on self-esteem, by comparing over 600 monozygotic and dizygotic female Caucasian twin pairs. These were assessed for levels of self-esteem on two occasions, about sixteen months apart. The authors suggested self-esteem was a relatively stable trait. Genetic factors accounted for about 52% of the variance and environmental factors for the remainder. One third of the genetic variance of self-esteem could be accounted for by three factors: one common to neuroticism; depression and self-esteem; another to self-esteem and depression; and a third specific only to self-esteem.

The implication of this finding is that the genetic influence on self-esteem is likely to be complex and is probably mediated by other inherited factors that, in turn, modify self-esteem. Thus, the hereditability of self-esteem may be linked to that of certain mental disorders, such as depression, with which it has been correlated and which is itself subject to some degree of genetic control (Silberg, Heath, & Kessler, 1990). Another factor that could mediate the hereditability of selfesteem is temperament. Indeed, the four dimensions of temperament identified by Cloninger et al. (1993) have all been shown to be independently heritable.

Psychosocial Influences on Self-Esteem

Despite the undoubted importance of genetic factors and temperament, environmental factors accounted for nearly a half of the total variance in selfesteem identified in the Roy et al. (1995) study. The effect of these factors tended to be stable over the period of the study, and typically, the ones that appeared to influence self-esteem most were *not* common to both members of a twin pair. In addition, no evidence was found to suggest that short-term fluctuation in the environment impacted significantly upon self-esteem.

These findings are consistent with theories that self-esteem can be influenced by aspects of the childhood environment not shared by members of the twin pair, such as differences in parental attitudes to each child. Moreover, enduring conditions of adult life, such as chronic unemployment or marital discord, and the lasting effects of discrete events in adulthood, such as marital separation or physical or psychological trauma, could also have an important bearing upon self-esteem.

The Influence of Parent-Child Relationships on Self-Esteem

Within the psychodynamic tradition, the importance of interpersonal relationships in acquiring a sense of self-worth was brought to prominence by the object relations school. Mahler (1977) postulated a process of individuation within the parent-child dyad in infancy which is marked by the consolidation of individuality and the beginnings of object constancy. This occurs in the pre-oedipal phase in the third year of life, and involves the integration of split views of the mother into a whole. This is then internalised as an emotionally soothing inner presence and, in this manner, the regulation of self-esteem becomes reliant upon internalised sources.

Bowlby (1988), whose formulation of attachment theory was influenced in part by the object relations school, also emphasised the importance of the infant-mother relationship. He suggested the quality of attachment experiences in early childhood impacted upon future development through the formation of internal working models of the self and of the mother that were then generalised to other relationships. Consequently, secure attachment to a principal figure in early childhood may be the basis for incorporating self-reliance as an enduring personality trait and developing a stable sense of self-worth. Interestingly, attachment style may continue to influence self-regard even into adulthood. Roberts, Gotlib, and Kassel (1996) reported an insecure attachment style in adulthood can be associated with dysfunctional attitudes, which in turn predispose to lower levels of self-esteem.

Brooks (1992) suggested the development of self-esteem also involves the dynamic interaction of a child's inborn temperament and environmental forces that respond to or act independently of the child. Thus, the difficult child is characterised as demanding, frequently over-reacts to situations, reveals little pleasure in activities, and fails to attend or respond positively to others. He or she is more likely to evoke a negative reaction from others. In contrast, the easy child, who is typically calm, warms up to and engages with strangers readily and takes pleasure in activities, is more likely to evoke positive responses (Thomas & Chess, 1984).

A number of factors moderate the impact of a child's temperament upon self-esteem. The extent to which the responses of others are internalised, forming the basis of self-evaluation, is influenced by the unique qualities of the child. Consequently, positive and negative responses from caregivers do not necessarily lead to predictable effects upon self-esteem. Moreover, the nature of the match between child and other, typically the parent in early childhood and peers and teachers in middle childhood and beyond, is of vital importance (Brooks, 1992).

Coopersmith (1967) clarified the qualitative elements within the child-parent relationship that predispose to high self-esteem in childhood. These include the unconditional acceptance of children by their parents; clearly defined and enforced limits to their behaviour; respect and latitude for individual action; and high self-esteem in the parents. Oliver and Paull (1995) studied 186 undergraduate university students still in frequent contact with their families, to determine

associations between parental rearing style, family climate, self-esteem, selfefficacy, and depression. "Affectionless control" — the perception of family and parents as providing little affection but excessive control — accounted for 13% of the variance in self-esteem, self-efficacy, and depression.

Gender issues also require consideration. In general, it appears the self-esteem of men is more vulnerable to the perceived appraisals of parents than is that of women (Bartle, Anderson, & Sabatelli, 1989; Kawash, Kerr, & Clewes, 1985). Conte, Plutchik, Picard, Buck, and Karasu (1996) reported on a retrospective questionnaire-based survey of 155 psychiatric patients and found that measures of self-esteem were more highly correlated with parenting variables for men than for women. Specifically, items measuring parental acceptance/autonomy were positively correlated and items measuring parental inconsistency were negatively correlated with self-esteem. Among women, only paternal rejection was associated with low self-esteem.

The Influence of Peer Relationships in Childhood and Adolescence on Self-Esteem

A number of authors have shifted the focus of research interest to peer relationships in childhood and adolescence. Grunebaum and Solomon emphasised that, while the child-parent relationship provides a foundation of security, which facilitates exploration of the social environment, it is within the child's peer relationships that the growth of self-mastery, social skills, and self-definition occur.

It is through . . . the actual interaction and play among equals (of a positive nature) that the child becomes less afraid of others, can bear to . . . see himself in their reflected appraisals, . . . (and) . . . develops a better sense of self and self-esteem. (1987, p. 506)

Isberg, Hauser, and Jacobson, (1989) suggested decreasing reliance upon parental feedback for self-esteem regulation is dependent upon ego development and individuation. Gecas and Schwalbe (1986) and Hoelter (1984) suggested the influence of peer relationships may be greater in adolescent females, further evidence of a more rapid development of ego in females than in males.

The Influence of Interpersonal Variables and other Situational Factors throughout the Life Span on Self-Esteem

The extent to which self-esteem in adults continues to be influenced by social forces and life events is controversial. Some authors emphasise the role of interpersonal relationships in infancy, childhood, or adolescence, and view selfesteem as reflecting a stable and enduring set of attitudes (McCrae & Costa, 1988). In contrast, others propose that situational factors, life events, and social feedback can modify aspects of self-esteem throughout the life span (Rutter, 1987).

From this perspective, self-esteem has been described as inseparable from its relational context and as "never finally settled . . . (but only ever) re-negotiated at each developmental crisis (Cotton, 1983, p. 139)." Cooley (1902), referring to the importance of the reactions of others in shaping self-esteem, introduced the concept of the "looking-glass self." Extending this idea further, self-esteem has been conceptualised as a product of the reflected appraisals of others, including signals of attention, love, submission, respect, approval, praise, and affection (Brooks, 1992; Mead, 1934). Rutter (1987) expressed the view that secure, harmonious love relationships, together with successful task accomplishments, continue to influence the self-concept throughout the life cycle.

Markus and Nurius (1986) proposed a model of self-esteem that assumes the construct to combine both stable and dynamic elements. In this model, a *core-self* reflecting enduring self-concepts is distinguished from a *working-self*, which is more tentatively held and includes concepts of the self that are more situationally responsive.

Cognitive-Behavioural Models

Behavioural formulations focus exclusively on the observable. Thus, Bednar et al. (1991) proposed that self-esteem is the natural consequence of a person's tendency to *confront* what one fears and has previously avoided. Brooks (1992) defined self-esteem as involving not just an appreciation of one's worth and importance, but also a capacity to act responsibly and with respect towards others. Self-esteem includes attitudes of regard towards others, as well as towards the self.

From the perspective of *cognitive models* of personality and behaviour, self-esteem is an *enduring system of beliefs* about oneself, one's social environment, one's ability to deal with life's challenges and control what will happen. As with the construct of self, self-esteem may be viewed as stable and global or dynamic and multidimensional. It is activated by experience, shaped by behaviour, and then influenced by the outcomes of that behaviour, giving rise to a dynamic reciprocal process that is continuously in force (Brooks, 1994).

Within a cognitive framework, self-esteem is embedded in the individual's self-representations and the *evaluative component* of the self-concept. This is in contrast to the *content component*, which is made up of the physical characteristics, attitudes, social roles, and cultural affiliations unique to the person. Self-referent evaluations are concerned with issues of self-acceptance, self-worth, self-regard, self-efficacy, and degree of correlation between the actual and ideal self (Katz, Rodin, & Davis, 1995).

The cognitions forming the basis of self-esteem may derive, not just from the experience of interpersonal relationships, but also from internal and external comparisons. Thus, in adolescents, self-esteem appears dependent upon comparisons with peers and is based upon popularity, power over others, and task competence (Coopersmith, 1967). Internal comparisons may also be relevant, between the ideal self that incorporates one's aspirations and the actual self founded upon one's achievements (Lancet, 1988).

This process of comparing that which is aspired to against that which is perceived within oneself was elaborated by Brissett (1972). He describes two social-psychological processes which can influence self-esteem. The first, a

process of self-evaluation, involves making a conscious judgment about the social significance of one's attributes. One's achievements are considered according to a set of standards or values that include an image of the ideal self and internalised social judgments regarding one's identity and one's performance in achieving that identity. In contrast, the second process, self-worth, embodies a sense of having executive control over one's behaviour. This involves making one's behaviour consistent with one's self-concept and the assumptions one makes about oneself. Thus, whereas the process of self-evaluation is perceived as being externally controlled, that of self-worth has an intrinsic quality. Brissett argued the two processes do not always complement each other, and that their failure to do so may lead to personal unhappiness.

A Social or Systemic Perspective

Within the systemic perspective, self-esteem is seen as being influenced by a network of interpersonal relationships that extends beyond individuals and is dependent upon group membership. In some cultures, a sense of self-worth is based largely upon membership of family, social group, tribe, nation, and even religion, with initiation rites characterising acceptance into the group. At another level, self-esteem may even depend upon whether the individual can see himself in a comprehensible relationship to the rest of the universe and, in this manner, spiritual beliefs may indeed actuate a sense of self-worth (Lancet, 1988).

A number of studies have actually investigated the social correlates of low self-esteem. Kaplan (1975) tested high school students on three occasions over a 12-month period and demonstrated that self-derogation scores did not remain stable for a large proportion of the sample. Perceived devaluation of self by peers predicted a worsening in negative self-attitudes. Bachman and O'Malley (1977), in following up a sample of 1600 male high school students to early adulthood, found that once self-esteem as baseline, family background, and prior ability were controlled for, job status made an additional contribution to self-esteem.

In an important cross-sectional investigation of 395 women, Brown, Bifulco, Veiel, and Andrews (1990) found that negative interactions with family members and the lack of a close confiding relationship were associated with negative selfevaluation, while higher-status employment was correlated with a positive evaluation of self. When the same sample of women was re-evaluated after a period of seven years, the most powerful predictors of change in self-esteem were favourable changes in the quality of close relationships and increased work status, both for the woman and her partner (Andrews & Brown, 1995). It was unclear from the design of the study whether the changes in self-esteem and mental state preceded or were followed by the psychosocial changes.

The Stability of Self-Esteem through the Life Cycle

Self-esteem has been conceptualised by some as a stable entity, in much the same way as personality or intelligence. The empirical evidence on this point, however, is conflicting and points to the existence of continuities and discontinuities in the course of development.

Dusek and Flaherty (1981) observed that self-esteem develops during childhood and remains relatively stable throughout adolescence. This has been confirmed by a number of longitudinal studies, which demonstrated few changes in self-esteem from late childhood through the teenage years and into early adulthood (Bachman & O Malley, 1977; Barnes & Farrier, 1985).

The failure to demonstrate changes in self-esteem with age, however, may be in part due to limitations in the measures used (Robson, 1988). Indeed, other investigators have shown that, in the short term at least, self-esteem can be manipulated experimentally (Anderson & Williams, 1985) and that age can be shown to account for some variance in self-esteem over the course of the developmental cycle (Nehrke, Hulicka, & Morganti, 1980).

Variations in self-esteem with age was investigated by Block and Robins (1993) who studied 92 adolescents, over a nine-year period from early adolescence to early adulthood. The longitudinal consistency of self-esteem was greater for females than for males. This implied self-esteem was well established by early adolescence in females, but not males, whose self-representations remained relatively malleable. For the combined sample, no age-related changes in the mean level of self-esteem were recorded. Males, however, tended to increase and females decrease in self-esteem over time, though there was appreciable consistency in rank-order. This accords with cross-sectional data suggesting there are more girls than boys with low self-esteem, and that this difference grows larger by late adolescence (Simmons & Rosenberg, 1975). Block and Robins (1993) point to gender differences in socialisation which restrict the range of experiences for girls but broaden it for boys, as one possible explanation of this difference.

Of interest, when changes in self-esteem occurred between early adolescence and early adulthood, *specific personality characteristics predicted increases in self-esteem*. These differ according to gender. Thus, significant in females were interpersonal qualities involving an orientation towards others, such as protectiveness, humour, warmth and generosity. In males, self-esteem increased in those subjects who were able to control personal anxiety levels, implying an orientation towards the self.

In old age, the stability of self-esteem is less well understood, as few studies have been carried out on elderly subjects. An investigation based upon telephone interviews with 300 retired workers in the U.S. found that self-esteem did not decline in the transition to retirement. Pre-retirement self-esteem and pre-retirement commitment to the role of worker or spouse continued to exert a positive effect upon self-esteem after retirement (Reitzes, Mutran & Fernandez, 1996). On the other hand, loss of self-esteem can occur, in association with retirement from competitive activities, and an awareness of society's largely unsympathetic attitude to old people, and this may lead to depression (Butler & Lewis, 1973).

THE CLINICAL SIGNIFICANCE OF SELF-ESTEEM

Each individual's self-esteem may be conceived as a causal variable that determines or influences other psychosocial phenomena, or as an outcome variable influenced by life events and interpersonal feedback.

As an outcome variable, reductions in self-esteem may follow the experience of such stressful life events as unemployment, or medical or psychiatric illness. As a causal factor, positive self-esteem may be considered a necessary condition for achievement. It is a driving force behind all human activity and an organising principle upon which personal theories of reality are constructed (Robson, 1988). Self-esteem also has a role in information processing, motivation, and such interpersonal activities as the choice of a life partner (Katz et al., 1995). The way children think and feel about themselves affects the quality of their relationships with peers, the prevalence of drug and alcohol abuse and teenage pregnancy, together with motivation and performance in school and in sports. Self-esteem also influences the willingness of adolescents to persevere at various tasks and their capacity to be resilient and bounce back from adversity (Brooks, 1992).

Correlations of High Self-Esteem

Persons with high self-esteem are less socially isolated, and demonstrate fewer tendencies to be exploitative or hostile-dependent with others. Coopersmith (1967) postulated persons with high self-esteem are more accepting, better able to lead active lives, and demonstrate a sense of being self-determining. They are better able to tolerate internal or external distress without isolating themselves from inner experiences, are less anxious, less sensitive to criticism, more willing to express a controversial opinion, and pay greater attention to personal values than to group mores. They tend to have better physical health, enjoy better relationships, value independence, welcome competition, and anticipate more success (Rosenberg, 1965).

Positive and stable self-esteem influences one's ability to cope with stressful life circumstances. Individuals with higher self-esteem are said to be more successful at problem solving, show greater resilience in response to stress and more likely to seek out and use social supports. Stressful experiences may also bolster self-esteem if successfully navigated by increasing self-confidence, selfefficacy and promoting personality growth and self-worth (Rutter, 1985).

Correlations of Low Self-Esteem

Low self-esteem is correlated with a number of personality characteristics including dependency, the need for approval, helplessness, apathy, feelings of powerlessness, isolation, withdrawal, submissiveness, and compliance. Masked hostility, passivity, and a tendency to downgrade or denigrate others or project one's failings onto others are also significantly correlated with low self-esteem. Poor self-regard predisposes the individual to reduced ability to choose jobs suited to one's needs and abilities; a diminished association between task performance and satisfaction; a tendency to accept unfavourable assessments as accurate; less likelihood of scholastic success; and vulnerability to interpersonal problems in adolescence. In the elderly, low self-esteem is associated with poorer health, more daily pain, greater disability, and increased somatisation, together with anxiety and depression (Ingham, Kreitman, Miller, Sashidharan, & Surtees, 1986; Robson, 1988).

The Relationship between Low Self-Esteem and Depression

Low self-esteem is correlated with depression in child psychiatric patients, adult psychiatric patients, and college student samples (Overholser, Adams, Lehnert, & Brinkman, 1995). What remains unclear is whether changes to self-esteem are primary or secondary to the onset of affective disturbances. Thus, low self-esteem has been conceptualised as a *consequence of depressive behaviour*, in particular, inactivity and a lack of reinforcement (Lewinsohn, 1974); as an *outcome of the depression-prone personality* (Pardoen, Bauwens, Tracy, Martin, & Mendlewicz, 1993); and as *central to the pathogenesis of depression* (Beck et al., 1979).

Beck and his colleagues (Beck et al., 1979) postulated that, among individuals predisposed to depression, negative attitudes and value judgments towards the self exist in a latent state, and are then activated by minor experiences of deprivation and guilt. Abramson, Seligman, and Teasdale (1978) further argued that depressed individuals were characterised by a tendency to make *attributions* for negative life events that were internal, global, and stable. In other words, negative events are perceived as resulting from factors that are the individual's responsibility, persist throughout time and generalise to other situations. Romney (1994), in a study of 45 psychiatric patients with both psychotic and affective disorders, found that all three attributional styles affected depression solely through the mediation of self-esteem.

As with clinical research pertaining to self-esteem in other domains, investigations of the relationship between depression and low self-esteem tend to be cross-sectional in design. Issues of causality, therefore, are difficult to assess and one must rely on prospective studies in order to clarify the role of self-esteem in the development and maintenance of depressive disorders.

In adolescent psychiatric inpatients, improvement in depression coincides with increases in global self-esteem, and there is a strong association between the severity of depression and low self-esteem (King, Naylor, Segal, Evans, & Shain, 1993). In another prospective study, Gardner and Oei (1981) studied 16 depressed subjects assigned to behavioural and cognitive treatments. No relationship between depression and self-esteem was evident at baseline. However, post-treatment, there was significant negative correlation between the two, suggesting recovery from depression had a positive impact on self-esteem. These findings appear to lend weight to Lewinsohn's (1975) hypothesis that feelings of low self-esteem and depression need not necessarily co-exist. Brown

 $^{^1}$ It is important to highlight that self-esteem deficits, including self-reproach, poor self-image, negative self-concept, and low self-worth are especially prominent in depressed adolescents and tend to be more common than the biological symptoms of depression often reported by adults (Inamdar, Siomopoulos, Osborn, & Bianchi, 1979).

et al. (1990) further distinguished between negative and positive evaluations of self and observed these can co-exist in depressed individuals and have different implications for treatment.

Other factors may moderate the impact of self-evaluative beliefs and depression. When 1656 adolescents were investigated at 16 and 22 years, the prevalence of depression was highest among those persons from divorced families who, at age 16 years, also reported low self-esteem. An intimate relationship was found to protect young adults from depression even in the presence of the risk factor of low self-esteem in adolescence, irrespective of family background or gender (Palosaari & Aro, 1995).

Low self-esteem may indirectly increase the risk of suicidal behaviour by increasing hopelessness and pessimism about the future. Hopelessness is a cognitive factor closely related to suicidal behaviour and suicidal ideation, and tends to be stable over time (Beck, Steer, Kovacs, & Garrison, 1985). In a study designed to examine self-esteem deficits and suicidality in adolescents, 542 adolescent psychiatric inpatients and high school students were investigated. Differences appeared to be determined by gender and hospitalisation status, so that males reported mean higher self-esteem than females, while high school students scored higher on self-esteem than hospital patients. Correlations between variables, however, remained similar across gender and hospitalisation status. Thus, low self-esteem was related to higher levels of depression, hopelessness, suicidal ideation, and an increased likelihood of having previously attempted suicide. When predicting the presence of suicidal ideation, depression and hopelessness accounted for 20% of the variance, while self-esteem added a further 9%. Among all adolescents with low self-esteem, 48% had attempted suicide at least once, compared to 21% of subjects with high self-esteem, a significant difference (Overholser et al., 1995).

Self-Esteem and Restricting and Purging Eating Disorders

Low self-esteem is well recognised among individuals with eating disorders (Lindeman, 1994). Silverstone (1992) proposed chronic self-esteem may be a necessary prerequisite to the development of an eating disorder and, further, might represent the final common pathway through which the multiple aetiological factors involved in the causation of eating disorders act.

Evidence in support of an association between the purging and restricting eating disorders and low self-esteem derives from correlational studies in subjects already afflicted (Weinreich, Doherty, & Harris, 1985). In the first prospective study to investigate the role of self-esteem in the aetiology of eating disorders prior to their onset, self-esteem was measured in 594 schoolgirls aged 11-12 years. Almost 400 of these girls were successfully followed up at the age of 15-16 years. Girls with low self-esteem at age 11-12 years were eight times more likely to have developed eating disorders and other psychosocial problems at follow-up. The authors argued these results needed replication, but recommended the enhancement of self-esteem be considered in the prevention of eating disorders (Button, Sonuga-Barke, Davis, & Thompson, 1996).

Self-Esteem and Obesity

The relationship between self-esteem and obesity has not received a great deal of empirical evaluation, so that the exact nature of the relationship between the two is not entirely clear. Specifically, it is yet to be determined whether self-esteem is *consistently* related to obesity. In addition, it remains uncertain whether *physical or global* self-esteem is affected by obesity, whether the relationship differs according to demographic variables such as age, gender, or race/ethnicity and whether self-esteem moderates changes to weight during weight loss treatment programmes.

French, Story, and Perry (1995) reviewed 35 studies investigating the relationship between self-esteem and obesity in children and adolescents. Thirteen cross-sectional studies clearly showed lower self-esteem in obese children and adolescents. Five of the six studies that included a measure of body self-esteem showed this was diminished compared to normal weight controls. Six out of eight treatment studies showed that weight loss treatment programmes appear to improve self-esteem. It remains unclear whether increases in self-esteem are related to enhanced weight loss.

Self-Esteem and Cancer

In this setting, self-esteem has been investigated as an *outcome variable*, a *mediator* of other psychosocial outcomes, and as a *personal resource that facilitates coping*. Uni-dimensional global measures of self-esteem generally reveal no significant differences between cancer patients and controls. However, when self-esteem is investigated as a multifaceted construct, one of the most consistent findings is of a diminution of body self-esteem, especially in patients with disfiguring cancer treatments. There is limited evidence of heightened self-worth, but other domains of self-esteem are poorly investigated because of the lack of suitable multidimensional inventories. Positive self-esteem does not predict survival or treatment compliance, but appears to mediate the effects of social supports upon the well-being of melanoma survivors, as well as the psychological adjustment of a group of women three months after removal of a breast lump (Katz et al., 1995).

PSYCHOTHERAPY AND SELF-ESTEEM

Although global self-esteem is a relatively stable characteristic especially in adults (Blascovich & Tomaka, 1991), it has already been noted that aspects of self-esteem can be modified by environmental factors, even in adult life, and that global measures might not be sufficiently sensitive to detect changes in constituent domains of self-esteem.

McGuire and McGuire (1996) demonstrated that self-esteem could be enhanced by using directed thinking tasks. These were aimed at manipulating the prominence of emotionally salient self-characteristics in order to maximise

desirable ones and minimise unattractive ones. In a separate experiment, lowering of self-esteem resulted in depression, anxiety, hostility and withdrawal (Wilson & Krane, 1980). Such findings suggest increasing self-esteem in a therapeutic setting is possible and might actually ameliorate clinically significant disturbances, such as affective disorders. Indeed, Fennel and Zimmer (1987, in Robson, 1988) demonstrated a short-term improvement in depressed mood in persons who spent 30 minutes focusing upon positive aspects of the self-concept. Whether such changes in mood or self-esteem can be made to last was not made clear from the study.

In a meta-analysis of 400 psychotherapy outcome studies, Smith and Glass (1977) reported the greatest overall benefit of all forms of therapy was to reduce fear and anxiety and increase self-esteem. Interestingly, despite this finding and the work of several authors on the non-specific effects of psychotherapy (e.g., Frank, 1974), the enhancement of self-esteem is not generally regarded a specific focus of psychotherapy and its impact upon self-esteem is rarely monitored.

Studies of interventions specifically designed to enhance self-esteem are rare. In the only such empirical study identified, Schreiber and Schreiber (1995) described a study in which 22 undergraduate university students were exposed to 20 sessions over 10 weeks of muscle relaxation coupled with positive selfesteem suggestions. When compared to a control group of 30 students, the experimental group had higher academic scores, but no differences in measures of self-esteem or anxiety were found.

Of the different forms of psychotherapy, cognitive-behaviour therapy (CBT) appears best suited to achieve the direct enhancement of self-esteem. Viewing self-esteem as a cognitive structure comprising the evaluative component of the self-concept suggests the possibility of change through such processes as cognitive restructuring.

The two theoretical developments that most influenced the development of CBT were the rational-emotive therapy (RET) of Ellis (in Dryden, 1984) and the cognitive model of depression described by Beck (Beck et al., 1979). Both share the view that psychological disorders, such as depression, arise as a consequence of irrational or maladaptive ways of thinking.

The primary psychological disturbance identified in Ellis's model consists of a tendency to make absolutistic evaluations of perceived events, which are then couched in terms of dogmatic "musts," "shoulds," "ought to's," "have to's," and so on. Various types of irrational thinking are then derived from such statements, including global evaluations of the self, which are argued to be irrational by definition. Three key phases in RET can be identified. Initially, clients are helped to identify the links between their irrational beliefs and dysfunctional emotions and behavioural responses to these. Then, the therapist helps the individual gain insight by challenging these distorted beliefs and encouraging alternative rational beliefs. Finally, a working-through phase permits acquisition of emotional insight whereby the client is able to internalise these rational ideas, act on them and integrate them into their emotional repertoire (Dryden, 1984).

Beck's model of depression, which has become the template for cognitive

models of a range of psychological disorders, also refers to a set of distortions of reasoning known as the cognitive triad. This consists of negative views of the self, current experience, and the future. Beck noted that depressed patients characteristically view themselves as wanting in the very attributes they value the most. Shortcomings are magnified, strengths ignored, and a distorted view of self maintained by habitual errors of reasoning. These include: overgeneralisation from single events; selective abstraction by which positive information can be ignored; arbitrary inference involving the drawing of negative conclusions which are unsupported by the evidence as a whole; magnification and minimisation in evaluating the implications and importance of events; personalisation in which one takes responsibility for negative events over which one has no control; and absolutistic dichotomous thinking or thinking in polar opposites.

Beck's model of personality further assumes that irrational thoughts stem from underlying schemata or cognitive templates, previously described in this paper, through which all experience is interpreted and which can become modified by successful therapeutic intervention (Twaddle & Scott, 1991). The cognitivebehaviour therapy that emerged from Beck's formulation of depression combines a number of techniques that can be applied to the enhancement of self-esteem. These include cognitive restructuring, rehearsal (Gauthier, Pellerin, & Renaud, 1983), and activity scheduling (Gardner & Oei, 1981).

In treatment, cognitive therapists regard negative self-evaluations as hypotheses that require empirical testing. Pervasive self-criticisms are brought to awareness by encouraging the client to monitor automatic negative thoughts, say in a diary. The individual is then taught to make connections between thought and mood and to objectively assess the evidence for and against assumptions about the self, the environment, and the future. In this manner, the person learns to identify cognitive distortions and, consequently, to interpret experiences more realistically. Rational thinking hopefully leads to affective change and amelioration of the presenting complaint.

Difficulties associated with the restructuring of dysfunctional patterns of thinking about the self may result from problems involved in altering attributional styles which underlie poor self-esteem (Sober-Ain & Kidd, 1984). Although learned helplessness theory suggests attributing negative events to unstable, external, specific factors has greater impact on positive self-esteem than internal, stable and global attributions, this has not been shown to have clinical significance. Seligman (1981) and Fuchs and Rehm (1977) both recommended cognitive strategies that include a focus upon self-concepts, self-evaluation, selfefficacy, and attributional thinking. Rehm's therapy of self-management has been evaluated, compared with Beck's CBT and found to be effective in the treatment of depression. However, there is no evidence to suggest that it is successful in affecting change in attributional thinking or self-evaluation or that improvements in mood in depressed patients occur as a result of such changes (Twaddle & Scott, 1991).

HYPNOSIS IN ENHANCING SELF-ESTEEM, EGO-STRENGTHENING, AND PERFORMANCE ENHANCEMENT

Hypnotic techniques offer the clinician an abundance of options for enhancing self-esteem and self-efficacy. Their impact upon the core beliefs that characterise self-esteem may be direct, as in the case of ego-strengthening, or indirect, as in the case of a variety of interventions which enhance self-worth through the relief of distressing affects, behaviours, and cognitions and the resolution of intrapsychic conflict.

Ego-Strengthening

Hartland (1971) published one of the earliest descriptions of the application of hypnosis to the enhancement of self-esteem, calling his technique egostrengthening. Its use is based upon the principle that negative responses to physical or psychological impairment might arise both as a consequence of the impairment itself and as a result of secondary alterations to aspects of the selfconcept. Thus, just as a physically compromised patient may be stabilised before proceeding to surgery, so too a psychologically impaired individual may benefit from positive suggestions of self-worth and personal effectiveness (Torem, 1990). As Hartland postulated, some clients may be unwilling to let go of their symptoms until they feel strong enough to do without them.

Because of the significant impact upon clinical practice made by Hartland's (1971) publication, the concept of ego strength is of considerable importance in the field. Ego strength differs from self-esteem, though self-esteem is probably a product of high ego strength. Put simply, ego strength refers to the capacity of the ego to carry out its functions of dealing with external reality and integrating the conflicting demands of reality with those of the id and superego. Conceptualisation of ego strength is difficult, both because of its high level of abstraction and its multi-faceted nature. Approaches to the evaluation of ego strength appear to revolve around assessment of the relative intactness of ego functions and the ease with which impaired ego functions can be restored to efficiency (Calnan, 1977).

Ego-strengthening comprises a set of standard suggestions aimed at augmenting the client's ego, ego defences, and general sense of self-worth, with the expectation that such an outcome will facilitate symptom resolution. The technique described by Hartland involves the use of suggestions that the future will be brighter; confidence, health and energy will be restored; and that the client will acquire whatever goals they desire. The pairing of such suggestions with feelings of calmness and relaxation in the hypnotic state is intended to facilitate the subject's uncritical acceptance of what are essentially post-hypnotic suggestions.

Numerous authors recommend that ego-strengthening suggestions be included in almost every induction, to reinforce self-reliance and a positive selfimage (Waxman, 1989). Indeed they are often described, in original or amended form, as augmentative to a range of therapeutic paradigms. Nevertheless, Gibson and Heap (1991) have criticised them for their non-specificity and the absence of any imagery-evoking instructions. For instance, suggestions such as "you will think more clearly," and "you will feel happier," involve complex processes, and it seems unlikely that subjects will respond to them in the same way as the suggestion of arm levitation or a pleasant image. Moreover, little is revealed about how such states are to be achieved.

The experience of hypnosis can be pleasant and uplifting, especially when the client has the sense of being in some kind of an altered state. It is most likely this, together with the person's confidence, trust, and hopeful expectation concerning therapy, that is being exploited in Hartland's ego-strengthening technique, rather than their suggestibility *per se*. If these ingredients are absent, then the ego-strengthening routine will fall decidedly flat, even with a suggestible subject.

Accordingly, Gibson and Heap (1991) recommend that ego-strengthening suggestions should be tailored to the individual needs of the client. The therapist should also be more precise about the behavioural, cognitive, and physiological responses presumed to mediate the desired feelings of strength, optimism, self-confidence, and calmness. This may include the use of imagery and metaphor, specific post-hypnotic suggestions, and the anchoring of cues to desired emotional and cognitive states.

A variation of ego-strengthening, which achieves the greater precision recommended by Gibson and Heap, is termed *ego-assertiveness retraining* (Waxman, 1989). It is derived from the assertiveness training techniques of Wolpe and Lazarus (1966) and constitutes an approach to enhancing self-efficacy for specific tasks. In the hypnotic state, the subject's enhanced capacity for dissociation and visual imagery is used to recreate, in imagination, the feared situation. The subject is then asked to imagine increasingly threatening interactions, and positive suggestions of self-assertion are paired with feelings of calmness, composure, control, and confidence. Cognitive rehearsal and roleplay are utilised to demonstrate coping and to enhance self-confidence and beliefs of self-efficacy. This process may be repeated through a hierarchy of fears or of increasingly complex performances, with the client being required to reinforce therapeutic gains by repeating exposure *in vivo* between sessions.

Other Hypnotic Techniques Used to Enhance Self-Esteem

From a cognitive-behavioural perspective, many of the hypnotic interventions used to strengthen self-esteem may be viewed as involving the client learning, through a process of persuasion, how to challenge their irrational assumptions underlying the self-concept. Thus, while the client is in a trance state, self-hypnotic and self-management skills for coping with anxiety, anger or other emotions can be taught, and cognitive therapy concepts and methods for altering imprinted ideas reinforced. Post-hypnotic suggestions are used to reinforce and facilitate positive internal dialogue and self-talk (Hammond, 1990).

The heightened suggestibility that characterises the hypnotic state is used to

reinforce specific beliefs clients hold about their ability to achieve specific outcomes, thereby enhancing self-efficacy and, indirectly, self-esteem. This can be achieved through the use of metaphors, direct and indirect suggestions, such as ego-strengthening suggestions, trance ratification procedures to convince the person of the power of the mind and inner potentials, and personalised selfhypnosis tapes to provide regular reinforcement of suggestions.

Finally, their heightened capacity for visualisation, characteristic of hypnosis, can help clients experience positive interactions and successful performances in imagination. In this way, they may be exposed to enactive experiences, which have a powerful influence upon learning and self-efficacy beliefs (Bandura, 1977). Techniques that achieve these outcomes may involve age progression and mental rehearsal, as well as hypnotic conditioning techniques.

From the psychodynamic viewpoint, positive self-esteem is a state of being on good terms with one's superego. Consequently, psychotherapeutic interventions aimed at enhancing self-esteem achieve this outcome by reducing the degree of intrapsychic conflict between aspects of the tripartite psyche. This is the essence of the presumed work of psychodynamic psychotherapy — to extend the sphere and control of the ego by freeing it from the conflicts of earlier life. Hypnosis can be used in this way by facilitating the rapid unconscious exploration and working through of the roots of self-image problems.

Hypnosis is also especially relevant in mobilising non-verbal processes in order to achieve therapeutic outcomes. In this respect, symbolic imagery techniques may be relevant and hypnosis can be used to obtain unconscious commitments from the client. Watkins and Watkins' (1981) ego-state therapy utilises symbolism and metaphor in order to access specific ego states. In this manner, ego-strengthening is achieved and mature and constructive ego-states are allowed to achieve executive control over immature ones more of the time (McNeal & Frederick, 1993).

Empirical Studies of the Effectiveness of Hypnosis in Enhancing Self-Esteem and Alleviating Associated Clinical Disorders

Although ego-strengthening is often mentioned in the clinical hypnosis literature, very little is known about the effectiveness of strategies to enhance self-esteem. In my review of the literature for this paper, only four studies could be identified which studied the impact of hypnotic interventions on self-esteem, using instruments that are acceptable measures of self-esteem.

In the first of these studies, Flannery and Baer (1975) attempted to determine whether, among students in a natural classroom setting, academic self-esteem could be altered by the use of hypnosis, suggestion, or a behaviour modification procedure. Eight subjects were assigned to each of four experimental groups, including a hypnosis group and an attention-control group. Subjects were exposed to each intervention for one hour weekly over four weeks. The authors did not describe the content of the therapeutic intervention. No significant differences or trends were observed, though subjects reported numerous subjective benefits.

Johnson and his colleagues (Johnson, Johnson, Olsen, & Newman, 1981) explored the impact of group hypnotic and self-hypnotic training on the academic performance of learning disabled children and their self-esteem. Three hypnotic training sessions and instructions for six weeks of daily self-hypnotic practice, containing suggestions for imagery related to improvement, were given to fifteen children aged 7 to 13 years, their reading teacher, and parents. Their responses were compared to a similar but untreated control group of eighteen children. No overall differences were observed between the groups for either academic performance or self-esteem. A multiple regression analysis revealed that, for the experimental group, the childrens' hypnotic susceptibility score and self-hypnotic practice by the children and parents were the most important predictors of improvement in self-esteem.

In their study, Koe and Oldridge (1987) investigated the interaction between hypnotisability and Hartland's ego-strengthening techniques on improved selfesteem. Fifty-two volunteer university students were divided into four groups, and told that they were about to participate in an experiment to evaluate the impact of hypnosis on reading performance and self-concept. Subjects in each experimental cell underwent systematic relaxation, hypnotic induction and deepening, and visualisation of a tranquil scene, selected by subjects. Posthypnotic suggestions, adapted for reading, were then administered. In the Achievement group, direct performance exhorting suggestions were provided. In the Self-Esteem group, the suggestions provided implied increased selfefficacy and in the Other-Esteem group, subjects perception of the opinions of significant others was targeted. A fourth group received a combination of selfand other-esteem suggestions. Findings indicated that, in susceptible subjects, defined as scoring above the mean on the Harvard Group Scale of Hypnotic Susceptibility, significant improvements in self-concept were evident after four sessions of hypnotic treatment. Aspects of the self-concept most responsive to treatment were self-satisfaction and personal self-concept, as opposed to changes in identity, behaviour, or social relationships. Significant effects were not found for type of suggestion, though susceptible subjects did worst with direct suggestions.

Finally, Taylor (1995) examined the effects of a behavioural stress-management programme on HIV-positive men who were asymptomatic, but had T-cell counts below 400. Ten subjects were randomly assigned to treatment and no-treatment groups. Treatment consisted of 20 bi-weekly sessions of progressive muscle relaxation and electromyograph biofeedback-assisted relaxation training, meditation, and hypnosis. The hypnotic element of the treatment intervention consisted of progressive relaxation, deepening using a visual metaphor, positive esteem suggestions, and post-hypnotic suggestions of remaining disease-free.

At baseline, all subjects showed abnormal scores on measures of anxiety and mood. Self-esteem scores were average or below average. At study exit, the treatment group showed significant improvement on all the dependent measures, including anxiety, mood, self-esteem, and T-cell count. This was maintained at one month follow-up. Limitations of this study were the small sample size.

Further, the design did not allow one to determine whether the improvement in self-esteem was independent of the improvement in anxiety, depression, and possibly physical well-being.

Conclusion

The evidence reviewed does suggest that high self-esteem is associated with adaptive functioning and personal contentment. It further points convincingly to an association between low self-esteem and a number of clinical disorders and dysfunctional attitudes and behaviours. The relative lack of prospective studies, however, is problematic as it is remains unclear how this relationship evolves, and whether the importance of self-esteem is as a predisposing, precipitating, or maintaining factor. In addition, questions as to the stability of self-esteem and of changes induced by a variety of psychosocial factors remain largely unanswered.

Researching the impact of hypnosis upon self-esteem is made difficult by the absence of an operationalised definition of self-esteem and a lack of widely accepted scales for the rating of self-esteem. The available data from studies with hypnosis suggest an intuitive effectiveness of hypnotic techniques in enhancing self-esteem and ameliorating psychological distress. While empirical research is imperative in establishing the effectiveness of any therapeutic technique, practitioners of clinical hypnosis seemingly attest to the value of hypnosis in enhancing self-esteem and promoting more positive performance.

Completed as partial requirement for the Graduate Diploma in Mental Health Sciences (Clinical Hypnosis), the University of Melbourne.

REFERENCES

- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.
- Anderson, S., & Williams, M. (1985). Cognitive/affective reactions in the improvement of selfesteem. When thoughts and feelings make a difference. Journal of Personality and Social Psychology, 49, 1086-1097.
- Bachman, J., & O Malley, P. (1977). Self-esteem in young men: A longitudinal anlaysis of the impact of educational and occupational attainment. Journal of Personality and Social Psychology, 35, 365-380.
- Bandura, A. (1977). Self-efficacy: Towards a unifying theory of behaviour change. Psychological Review, 84, 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist, 37, 122-
- Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behaviour change. Cognitive Therapy and Research, 1, 287-310.
- Barnes, M. E., & Farrier. S. (1985). A longitudinal study of the self-concept of low-income youth. Adolescence, 20, 199-205.
- Bartle, S. E., Anderson, S. A., & Sabatelli, R. M. (1989). The model of parenting style, adolescent individuation and adolescent self-esteem: Preliminary findings. Journal of Adolescent Research, 4, 283-289.

- Beck, A., Steer, R. A., Kovacs, M., & Garrison, B. (1985). Hopelessness and eventual suicide: A ten-year prospective study of patients hospitalized with suicidal ideation. *American Journal of Psychiatry*, 142, 559–563.
- Bednar, R. L., Gawain Wells, M., & VandenBos, G. R. (1991). Self-esteem: A concept of renewed clinical relevance. *Hospital and Community Psychiatry*, 42, 123–125.
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.). Measures of personality and social psychological attitudes Vol 1. Measures of social psychological attitudes (pp. 115–158). San Diego: Harcourt Brace Jovanovich.
- Block, J., & Robins, R. W. (1993). Longitudinal study of consistency and change in self-esteem from early adolescence to early adulthood. *Childhood Development*, 64, 909–923.
- Bowlby, J. (1988). Developmental psychiatry comes of age. *American Journal of Psychiatry*, 145, 1–10.
- Brissett, D. (1972). Towards a clarification of self-esteem. *Psychiatry*, 35, 255–263.
- Brooks, R. B. (1992). Self-esteem during the school years. Its normal development and hazardous decline. *Pediatrics Clinics of North America*, 39, 537–550.
- Brooks, R. B. (1994). Children at risk: Fostering resilence and hope. *American Journal of Orthopsychiatry*, 64, 545–553.
- Brown, G. W., Bifulco, A., Veiel, H., & Andrews, B. (1990). Self-esteem and depression. II. Social correlates of self-esteem. *Social Psychiatry and Psychiatric Epidemiology*, 25, 225–234.
- Butler, R. N., & Lewis, M. I. (1973). Aging and mental health: Positive psychosocial approaches. St. Louis: C.V. Mosby.
- Button, E. J., Sonuga-Barke, E. J., Davis, J., & Thompson, M. (1996). A propsective study of selfesteem in the prediction of eating problems in adolescent schoolgirls: Questionnaire findings. *British Journal of Clinical Psychology*, 35, 193–203.
- Campbell, R. J. (1981). Psychiatric dictionary (5th ed). New York: Oxford University Press.
- Cloninger, C. R., Svrakic, D. M., & Przybeck, T. R. (1993). A psychobiological model of temperament and character. *Archives of General Psychiatry*, 50, 975–990.
- Conte, H. R., Plutchik, R., Picard, S., Buck, L., & Karasu, T. B. (1996). Gender differences in recalled parental childrearing behaviours and adult self-esteem. *Comparative Psychiatry*, 37, 157–166.
- Cooley, C. H. (1902). Human nature and the social order. New York: Charles Scribner and Sons.
- Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco: Freeman.
- Cotton, N. S. (1983). The development of self-esteem and self-esteem regulation. In J. E. Mack, & S. L. Ablon (Eds.). *The development and sustaining of self-esteem in childhood* (pp. 122–150). New York: International University Press.
- Dryden, W. (1984). Rational emotive therapy: Fundamentals and innovations. London: Croom Helm.
- Dusek, J. B., & Flaherty, J. F. (1981). The development of the self-concept during adolescent years. *Monographs of the Society for Research in Child Development*, 46, 1–61.
- Flannery, R. B., & Baer, D. J. (1975). Paradox of experimental failure/experiential success in three methods of behaviorally altering academic self-esteem. *Psychological Reports*, 37, 170.
- Frank, J. D. (1974). Persuasion and healing. New York: Schoken Books.
- French, S. A., Story, M., & Perry, C. L. (1995). Self-esteem and obesity in children and adolescents: A literature review. *Obesity Research*, *3*, 479–490.
- Freud, S. (1914). On narcissism: An introduction. In J. Strachey (Ed.). The standard edition of the

- complete psychological works of Sigmund Freud, Vol 19. London: Hogarth Press, 1963.
- Freud, S. (1923). The ego and the id. In J. Strachey (Ed.). The standard edition of the complete psychological works of Sigmund Freud, Vol 19. London: Hogarth Press, 1961.
- Fuchs, C. Z., & Rehm, L. P. (1977). A self-control behavior program for depression. Journal of Counseling and Clinical Psychiatry, 45, 206–215.
- Gabbard, G. O. (1990). Psychodynamic psychiatry in clinical practice. Washington DC: American Psychiatric Press.
- Gage, M., & Polatajko, H. (1994). Enhancing occupational performance through an understanding of perceived self-efficacy. American Journal of Occupational Therapy, 48, 452-461.
- Gardner, P., & Oei, T. P. (1981). Depression and self-esteem: An investigation that used behavioural and cognitive approaches to the treatment of clinically depressed clients. Journal of Clinical Psychiatry, 37, 128–135.
- Gauthier, J., Pellerin, D., & Renaud, P. (1983). The enhancement of self-esteem: A comparison of two cognitive strategies. Cognitive Therapy and Research, 7, 389–398.
- Gecas, V., & Schwalbe, M. L. (1986). Parental behaviour and adolescent self-esteem. Journal of Marriage and the Family, 48, 37-46.
- Gibson, H. B., & Heap, M. (1991). Hypnosis in therapy. London: Lawrence Erlbaum Associates.
- Grunebaum, H., & Solomon, L. (1987). Peer relationships, self-esteem and the self. International *Journal of Group Psychotherapy, 37, 475–510.*
- Guidano, V. F., & Leotti, G. (1983). Cognitive processes and emotional disorders: A structural approach to psychotherapy. New York: Guilford Press.
- Hammond, D. C. (1990). Handbook of hypnotic suggestions and metaphors. New York: American Society of Clinical Hypnosis.
- Harter, S. (1990). Developmental differences in the nature of self-representations: Implications for the understanding, assessment and treatment of maladaptive behaviour. Cognitive Therapy and Research, 14, 113–142.
- Hartland, J. (1971). Further observations on the use of ego strengthening techniques. American Journal of Clinical Hypnosis, 14, 1–8.
- Hoelter, J. (1984). Relative effects of significant others on self-evaluation. Social Psychology *Quarterly, 47, 255–262.*
- Inamdar, S., Siomopoulos, G., Osborn, M., & Bianchi, E. (1979). Phenomenology associated with depressed moods in adolescents. *American Journal of Psychiatry*, 136, 156–159.
- Ingham, J. G., Kreitman, N. B., Miller, P. M., Sashidharan, S. P., & Surtees, P. G. (1986). Selfesteem, vulnerability and psychiatric disorder in the community. British Journal of Psychiatry, 148, 375-385.
- Isberg, R. S., Hauser, S. T., & Jacobson, A. M. (1989). Parental contexts of adolescent selfesteem. Journal of Youth and Adolescence, 18, 1-23.
- James, W. (1890). The principles of psychology. London: Macmillan.
- Johnson, L. S., Johnson, D. L., Olson, M. R., & Newman, J. P. (1987). The uses of hypnotherapy with learning disabled children. Journal of Clinical Psychology, 37, 291–299.
- Kaplan, H. B. (1975). The self-esteem motive and change in self-attitude. Journal of Mental and Nervous Disease, 161, 265-275.
- Katz, M. R., Rodin, G., & Davis, G. M. (1995). Self-esteem and cancer: Theory and research. Canadian Journal of Psychiatry, 40, 608-615.
- Kawash, G. F., Kerr, E. N., & Clewes, J. L. (1985). Self-esteem in children as a function of perceived parental behaviour. Journal of Psychology, 119, 235-242.
- King, C., Naylor, M., Segal, H., Evans, T., & Shain, B. (1993). Global self-worth, specific self-

- perceptions of competence and depression in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32, 745–752.
- Koe, G. G., & Oldridge, O. A. (1987). An experimental investigation of the interaction between hypnotic responsiveness and type of esteem suggestion on self-concept. *American Journal of Clinical Hypnosis*, 30, 44–50.
- Kohut, H. (1977). Analysis of the self. New York: International University Press.
- The Lancet. (1988). Self-esteem. October 22, 943-944.
- Lewinsohn, P. M. (1975). Engagement in pleasant activities and depression level. *Journal of Abnormal Psychiatry*, 84, 729–731.
- Lindeman, A. K. (1994). Self-esteem: Its application to eating disorders and athletes. *International Journal of Sports Nutrition*, 4, 237–252.
- Mahler, M. S., Pine, F., & Bergman, A. (1975). The psychological birth of the human infant: Symbiosis and individuation. New York: Basic Books.
- Markus, H. (1990). Unresolved issues of self-representation. Cognitive Therapy and Research, 14, 241–253.
- Markus, H., & Nurius, P. (1986). Possible selves. American Psychiatrist, 41, 954–969.
- McCrae, R. R., & Costa, P. T. (1988). Recalled parent-child relations and adult personality. *Journal of Personality*, 56, 417–434.
- McGuffin, P., & Thapar, A. (1992). The genetics of personality disorder. *British Journal of Psychiatry*, 160, 12–23.
- McGuire, W. J., & McGuire, C. V. (1996). Enhancing self-esteem by directed-thinking tasks: Cognitive and affective positivity asymmetries. *Journal of Personality and Social Psychology*, 70, 1117–1125.
- McKay, M., & Fanning, P. (1992). Self-esteem. Oakland: New Harbinger Publications.
- McNeal, S., & Frederick, C. (1993). Inner strength and other techniques for ego strengthening. *American Journal of Clinical Hypnosis*, 35, 170–178.
- Mead, G. H. (1934). Mind, self and society. Chicago: University of Chicago Press.
- Nehrke M. F., Hulicka I. M., & Morganti, J. B. (1980). Age differences in life satisfaction, locus of control and self concept. *International Journal of Aging and Human Development*, 11, 25–33.
- Ogden, T. H. (1983). The concept of internal object relations. *International Journal of Psychoanalysis*, 64, 227–241.
- Oliver, J. M., & Paull, J. C. (1995). Self-esteem and self-efficacy; perceived parenting and family climate; and depression in university students. *Journal of Clinical Psychiatry*, 51, 467–481.
- Overholser, J. C., Adams, D. M., Lehnert, K. L., & Brinkman, D. C. (1995). Self-esteem deficits and suicidal tendencies among adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 919–928.
- Palosaari, U. K., & Aro, H. M. (1995). Parental divorce, self-esteem and depression: An intimate relationship as a protective factor in young adulthood. *Journal of Affective Disorders*, 35, 91–96.
- Pardoen, D., Bauwens, F., Tracy, A., Martin, F., & Mendlewicz, J. (1993). Self-esteem in recovered bipolar and unipolar out-patients. *British Journal of Psychiatry*, 163, 755–762.
- Reitzes, D. C, Mutran, E. J., & Fernandez, M. E. (1996). Pre-retirement influences on post-retirement self-esteem. *Journal of Gerontology (Series B, Psychological Sciences & Social Sciences)*, 51, S242–249.
- Roberts, J. E., Gotlib, I. H., & Kassel, J. D. (1996). Adult attachment security and symptoms of depression: The mediating roles of dysfunctional attitudes and low self-esteem. *Journal of*

- Personality and Social Psychiatry, 70, 310–320.
- Robson, P. J. (1988). Self-esteem: A psychiatric view. British Journal of Psychiatry, 153, 6-15.
- Romney, D. M. (1994). Cross validating a causal model relating attributional style, self-esteem, and depression: An heuristic study. Psychiatric Reports, 74, 203–207.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Roy, M. A., Neale, M. C., & Kendler, K. S. (1995). The genetic epidemiology of self-esteem. British Journal of Psychiatry, 166, 813-820.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorders. British Journal of Psychiatry, 147, 598-611.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. American Journal of Orthopsychiatry, 57, 316-331.
- Schreiber, E. H., & Schreiber, K. N. (1995). Using relaxation techniques and positive self-esteem to improve academic achievement of college students. Psychological Reports, 76, 929–930.
- Segal, Z. V., & Kendall, P. C. (1990). Selfhood process and emotional disorders. Cognitive Therapy and Research, 14, 111–112.
- Seligman, M. E. P. (1981). A learned helplessness point of view. In L. P. Rehm (Ed.). Behaviour therapy for depression. New York: Academic Press.
- Silberg, J. L., Heath, A. C., & Kessler, R. (1990). Genetic and environmental effects one selfreported depressive symptoms in a general population twin sample. Journal of Psychiatric Research, 24, 197-212.
- Silverstone, P. H. (1992). Is chronic self-esteem the cause of eating disorders? Medical Hypotheses, 39, 311–315.
- Simmons, R. G., & Rosenberg, F. (1975). Sex, sex roles, and self image. Journal of Youth and Adolescence, 4, 229-258.
- Smith, M. L., & Glass, G. V. (1977). Meta-analysis of psychotherapy outcome studies. American Psychologist, 32, 752-760.
- Sober-Ain, L., & Kidd, R. F. (1984). Fostering changes in self-blamers beliefs about causality. Cognitive Therapy and Research, 8, 121-137.
- Steffenhagen, R. A. (1990). Self-esteem therapy. New York: Praeger.
- Sutherland, J. D. (1983). The self and object relations: A challenge to psychoanalysis. Bulletin of the Menninger Clinic, 47, 525-541.
- Taylor, D. N. (1995). Effects of a behavioural stress management program on anxiety, mood, self-esteem and T-cell count in HIV-positive men. Psychiatric Reports, 76, 451–457.
- Thomas, A., & Chess, S. (1984). Genesis and evolution of behavioural disorders: From infancy to early adult life. American Journal of Psychiatry, 141, 1-9.
- Twaddle, V., & Scott, J. (1991). Depression. In W. Dryden, & R. Rentoul (Eds.). Adult clinical problems: A cognitive-behavioural approach (pp. 56-85). London: Routledge.
- Waxman, D. (1989). Hartland's medical and dental hypnosis. London: Bailliere Tindall.
- Weinreich, P., Doherty, J., & Harris, P. (1985). Empirical assessment of identity in anorexia and bulimia nervosa. Journal of Psychiatric Research, 19, 297-302.
- Wilson, A., & Krane, R. (1980). Change in self-esteem and its effects on symptoms of depression. Cognitive Therapy and Research, 4, 419–421.
- Wolpe, J., & Lazarus, A. A. (1966). Behaviour therapy techniques. Oxford: Pergamon.

EGO-ENHANCEMENT FOR POSITIVE CHANGE

Harry E. Stanton *University of Tasmania*

This paper discusses the use of generalised ego-enhancement suggestions as part of a three-level model of therapist directiveness. A specific approach to ego-enhancement is then described. This makes use of Hammond's (1990) serenity place metaphor, extended to emphasise the concepts of changed perspective and communication with the unconscious mind. A two-session application of the approach to 17 clients expressing a sense of dissatisfaction with their lives is outlined. Happiness, operationalised as scores on the happiness thermometer, showed improvement immediately after treatment and further improvement six months later.

Havens and Walters (1989) have suggested a three-level model of hypnotherapy, using the criterion of therapist directiveness. The first level affirms that effective hypnotherapy may, on many occasions, be accomplished solely through the elicitation of a relaxed trance state in which patients learn whatever their unconscious minds have to offer.

With most clients, Havens and Walters believe, it is necessary to go beyond such an induction and to utilise the trance state. A gentle focusing upon problem areas, possible through the use of techniques such as ego-enhancement, may be conceptualised as a second level in which the therapist, while providing some stimulus toward an understanding of the presenting problem and/or its solution, still places considerable emphasis upon clients' own initiative and resources. The metaphors used at this level are sufficiently specific to provide conscious guidance messages, yet they are also directed toward the unconscious mind.

For most clients, the permissive, indirect approaches of levels one and two enable them to develop new skills, conclusions, and solutions. However, a minority of individuals require the more straightforward or direct approach of level three, in which specific therapeutic instructions are used. Havens and Walters believe such suggestions are more likely to be accepted and acted upon if communicated to clients when they are in a trance state. Even at this more directive level, ego-enhancement suggestions of a wide-ranging nature may still be employed.

Since the days of Hartland, ego-enhancing suggestions have been used to help clients feel better about themselves. Hartland (1965, 1971) claimed clients tend to improve under the influence of generalised ego-enhancing suggestions which make no attempt to deal with specific symptoms. These standardised suggestions, delivered to the person after a hypnotic induction, are designed to eliminate tension, anxiety and fear, and to gradually restore the individual's self-confidence in their ability to handle problems. My clinical experience echoes that of Hartland and I have often been amazed at the improvement clients make over a wide gamut of problems when exposed to generalised ego-enhancing

suggestions. More objective experimental evidence supports this subjective view.

Using psychiatric patients attending a community mental health centre as subjects, Calnan (1977) investigated Hartland's approach and concluded that virtually all his subjects reported feeling more relaxed and self-confident. It was noticeable that patients reported the changes they experienced in exactly the same words and those of the Hartland suggestions, yet they displayed no awareness of the origin of these descriptions.

A comparison of clients' belief in the efficiency of Hartland's ego-strengthening technique with a series of positive suggestions derived from Ellis' rationalemotive therapy also produced positive results (Stanton, 1977). Even when these suggestions did not deal directly with their symptoms, patients indicated a strong belief in the value of suggestive therapy.

Equally positive was the outcome of an experiment designed to investigate whether the use of generalised ego-enhancing suggestions could increase internal control as defined by scores on Rotter's Internal-External (I-E) Scale (Stanton, 1979). The script used in this study (Stanton, 1975) included suggestions derived from Hartland (1971) designed to produce increased calm, relaxation, and self-confidence, with considerable emphasis falling upon the power of individuals to effect change within themselves.

AN APPROACH TO EGO-ENHANCEMENT

The ego-enhancement procedure described in this paper builds on Hammond's (1990) serenity place metaphor. This is, in most respects, the conventional "special place" metaphor used so widely in hypnotherapeutic work. However, it does have two useful additions, the first of these involving the concept of perspective. In Hammond's words "In this place of serenity and security, things can come into perspective. You can be aware of actual feelings, with a correct sense of proportion, free from the distortions of a mood set or set of circumstances" (p.131). To this suggestion, I add the concept of a scale. One end point, O, marks the worst possible thing clients can imagine happening to them, and the other end point, 10, marks total peace and contentment. Clients' current problems may then be placed on the scale where it seems appropriate, most people realising the problem with which they have been so involved may not be worth the importance they are attaching to it.

The second of Hammond's additions involves the establishment of communication with the unconscious mind. His suggestion is:

And in this special place, independent of anything that I say, you can receive what you most need right now. Your unconscious mind knows what you most need. And I don't know exactly how you'll receive that . . . before awakening, you'll receive from your unconscious a special gift, or an experience or memory . . . or perhaps you might hear what you need. (p.131)

Within this framework, I add an exercise suggested by Rosanoff (1988) which

goes as follows:

Imagine a traffic light in your peripheral vision, red at the top for stop, yellow in the centre for caution, green at the bottom for go. Place the traffic light on one side of your field of vision; do not let it be in the middle. Make sure that you can sense it clearly. Think of a current situation you are involved in. Check the lights. Which light is on? Try other situations and identify which light is on . . . the lights are there to help you define your intuitive feelings. You may never spontaneously see a light but you will get the feeling associated with the lights. And the lights will help you define that feeling more accurately. (pp.104–105)

Should some clients be unable to use the traffic lights as a means of communication with the unconscious mind, they might:

Remember a situation when things did not go right. What did it feel like? Now, listen. Your intuition will produce a sound or word . . . Now, remember a situation which required you to wait and be patient. Remember what that felt like. Let your intuition produce a sound to go with this feeling . . . it may be a tone, a tune, a familiar phrase or word, or a noise. Now, remember a situation when you needed to keep going, or get going, where continued action or new action was required. Remember what that felt like? Let your intuition produce a sound or word to link with this feeling . . . think of a current situation in your life. Listen to the sound that comes with it. Reflect on what the sound and your intuition are communicating to you. (pp.106–107)

Rosanoff's term "intuition" corresponds reasonably well with Hammond's "unconscious," as may be observed in a further alternative which may be used to focus on feelings rather than sounds and mental pictures:

Remember a situation when things did not go right. What did it feel like? Your intuition is going to exaggerate this feeling. Where do you feel it in your body? What does it feel like? Have you ever experienced this feeling before? Soak in this sensation. Let it be imprinted in your body. Let it go. Now, think of a situation in which you had to wait and be patient. What did this feel like to you? Again, let your intuition exaggerate this feeling. Soak in the physical sensation. Then, let it go. Repeat the exercise with a situation that required you to keep going, take action, or proceed as planned. (pp. 108–109)

THE STUDY

Two sessions were involved in the treatment of clients using the above egostrengthening enhancement approach. This first occupied 50 minutes and included case-taking, establishment of rapport, and guiding the client through the serenity place metaphor. One week later, a second 30-minute session provided an opportunity for clients to talk about their experiences of the previous week and for repetition of the metaphor.

Clients were not selected in any way but came for therapy in the normal way,

expressing both a dissatisfaction with their lives and a desire to effect change of some positive kind. Five of the 17 people experiencing the serenity place metaphor were referred by a medical practitioner (3 males, 2 females), while the other 12 (4 males, 8 females) were self-referred.

A face valid scale which asked clients to rate their present level of happiness was administered as part of the case-taking procedure. Choice of this subjective form of measurement was influenced primarily by the work of Allport (1960) and Combs and Snygg (1959), who have emphasised that the most important element in personality measurement is a persons's own perceptions of the way he or she is functioning. If people say they are unhappy, they are likely to behave in a manner reflecting the same.

The scale used is the Thermometer (Francis & Stanley, 1989), which is easy to administer, has high face validity, and is reliable (Price, McGrath, Rafii, &

Figure 1. Happiness Thermometer



Imagine that this is a thermometer recording the level of your happiness. Please indicate whereabouts you usually are on this thermometer by circling the appropriate number

Buckingham, 1983). Figure 1 represents the scale.

RESULTS

No sex difference was apparent, nor was there any significant difference between subjects referred by a medical practitioner and those self-referred. Mean scores derived from three administrations of the thermometer, were 3.7 one week before commencement of the two treatment sessions, 5.4 the second, one week after their completion, and 6.1 six months later. The lower the mean score, the lower the level of happiness.

A definite treatment effect emerges from an analysis of variance of these data (F, 2, 16 = 31.69, p < .001). Comparison of post-treatment thermometer scores with those recorded before commencement of treatment indicates a significant increase in patients' happiness level (t = 6.06, df = 16, p < .001). This improvement was maintained at the follow-up, with the six-months thermometer scores being significantly higher than those recorded pre-treatment (t = 6.81, df = 16, p < .001). When the follow-up scores were compared with those of the immediate posttreatment administration of the happiness thermometer, a further significant difference was apparent (t = 2.4, df = 16, p < .05).

CONCLUSION

These results are quite encouraging. Though the sample is small and no control group was used, clients appeared to feel distinctly happier one week after the two sessions than they did prior to treatment. This improvement was maintained at the six months follow-up with further increases in happiness level, as measured by the thermometer, being recorded.

The improvement was particularly noticeable for those clients who continued to use the serenity place metaphor during the six-month period after treatment had concluded. Although the difference in thermometer score between these clients and those who made no further use of the method was not statistically significant, visual inspection of the data suggests that a difference did exist. A further study involving more subjects is needed to clarify this point.

No attempt was made to measure hypnotisability or depth of hypnosis in the present study. My clinical experience in the use of ego-enhancement has indicated that depth of hypnotic trance does not appear to exert any strong influence over the response to suggestions. However, further investigation of the approach I have outlined might indicate an interaction between effectiveness of treatment and hypnotisability.

Because of their gentle and non-intrusive nature, ego-enhancing metaphors such as the serenity place, the perspective scale, and communication with the unconscious mind seem capable of use with virtually any client. Their great virtue is the manner in which they convey universally applicable messages about the nature and source of therapeutic change and their non-threatening stimulation of clients' inner resources for self-healing.

Such ego-enhancing is unlikely to cause harm and would seem likely to assist those clients finding difficulty in coping with their life situations. Certainly, in the admittedly somewhat uncontrolled study reported, clients seemed to feel happier after treatment than they did beforehand. That this improvement was still apparent six months later is particularly encouraging.

Adapted from Stanton, H. E. (1993). Ego-enhancement for positive change. *Australian Journal of Clinical and Experimental Hypnosis*, 21, 59–64.

REFERENCES

Allport, G. (1960). Personality and social encounter. Boston: Beacon Press.

Calnan, R. D. (1977). Hypnotherapeutic ego-strengthening. *Australian Journal of Clinical and Experimental Hypnosis*, *5*, 105–118.

Combs, A. W., & Snygg, D. (1959). Individual behaviour (2nd ed.). New York: Harper.

Cove, E. (1922) Self-mastery through conscious auto-suggestion. New York: American Library Science.

Francis, R., & Stanley, G. (1989). Analogue measurement of dental fear. Australian Psychologist, 24, 55–60.

Hammond, D. C. (1990) Handbook of hypnotic suggestions and metaphors. New York: W. W. Norton.

Hartland, J. (1965). The value of "ego-strengthening" procedures prior to direct symptom removal under hypnosis. *American Journal of Clinical Hypnosis*, *8*, 89–93.

- Hartland, J. (1971). Medical and dental hypnosis and its clinical applications (2nd ed.). London: Baillière, Tindall and Cassell.
- Havens, R. A., & Walters, C. (1989). Hypnotherapy scripts. New York: Brunner-Mazel.
- Price, D. D., McGrath, P. A., Rafii, A., & Buckingham, B. (1983). The validation of visual analog scales as ratio scale measures for chronic and experimental pain. Pain, 17, 45–56.
- Rosanoff, N. (1988). Intuition workout. Boulder Creek, CA: Asian Publishing.
- Stanton, H. E. (1975). Ego-enhancement through positive suggestion. Australian Journal of Clinical Hypnosis, 3, 32–36.
- Stanton, H. E. (1977). The utilization of suggestions derived from rational-emotive therapy. International Journal of Clinical and Experimental Hypnosis, 25, 18–26.
- Stanton, H. E. (1979). Increasing internal control through hypnotic ego-enhancement. Australian Journal of Clinical and Experimental Hypnosis, 7, 219–223.

GURDJIEFF AND EGO-ENHANCEMENT: A POWERFUL ALLIANCE

Harry E. Stanton *University of Tasmania*

Twenty-four housewives wishing to take more control over their lives were matched on their Control-over-Life Thermometer scores, one member of each pair being randomly allocated to either an Experimental or a Control group. While this latter group read material on how they might achieve the increased control they desired, the Experimental group had two 50-minute sessions during which they learned how to embed suggestions derived from the work of Gurdjieff into a framework designed to maximise their acceptance. The Control-over-Life Thermometer was administered on two further occasions, one immediately after completion of the second training session and one as a follow-up six months later. After completion of this first stage of the study, Control group housewives experienced the same two treatment sessions as had the Experimental group. Results indicated that control of life, as operationally defined by the Thermometer, was significantly greater both immediately after treatment and at the six month follow-up.

Although he was a very influential teacher, the Armenian philosopher, Gurdjieff, left very little written evidence of his work. The book which he expected to revolutionise peoples' thinking, *Beelzebub's tales to his grandson* (1950), had relatively little impact. The reason is not hard to find. It is a difficult book, both in the depth of its content and in the awkwardness of its style. This is unfortunate, for Gurdjieff has much to offer the modern day therapist.

However, Gurdjieff's death did not mean the demise of his teaching. Today students, mystics, and intellectuals continue to show ever-increasing interest in the Gurdjieffian teaching procedures, termed the Work. Many of his students continue to instruct people in these procedures and have written extensively about them.

Perhaps, in the therapeutic context, Nicol's *Psychological commentaries on the teachings of Gurdjieff* (1950–6) are of the most value, but many other writings contribute to the interpretation of his work (e.g., Bennett, 1974; Oupensky, 1950; Wilson, 1986). From these accounts, Gurdjieff's emphasis on avoiding mechanical patterns of actions emerges very clearly. He believed that Man, because he is basically asleep, reacting automatically to circumstances and taking no direction over his life, needs to practise continual self-observation in order to make himself less robotic.

Wilson (1986), who wrote that "Gurdjieff's system is probably the greatest single-handed attempt in the history of human thought to make us aware of the potential of human consciousness." (pp.122), has emphasised the importance of Self-remembering, a concept sometimes difficult to grasp from Gurdjieff's own writing but one that is absolutely essential to the therapeutic application of his system. When we pay attention to the external world around us, we are, he

would claim, like arrows pointing outward. If we close our eyes and turn inward, our attention becomes an arrow pointing inward. Should we attempt to point the "arrow" in and out at the same time, we discover how difficult this is to achieve. After a second or two, we either forget the outside world, and commence to daydream, or we forget ourselves and become absorbed in whatever we are observing in the external world.

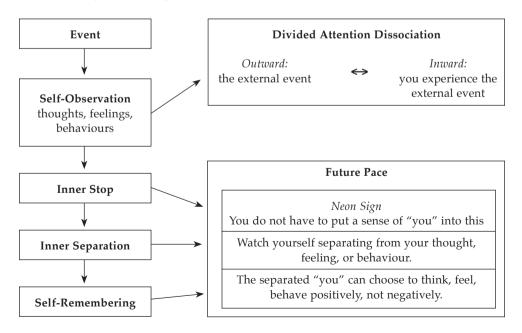
Yet, Gurdjieff taught that these moments when the arrow points both ways at once, which he termed self-remembering, are the most important of our lives. We are aware not only of what is happening to us, but that it is happening to us. Then we can chose whether or not to put a sense of ourselves into an event. Selfremembering makes us intensely aware, intensely conscious of how we are living our lives and, if knowledge is indeed power, gives us the opportunity to take increased control over ourselves. Achieving such self-mastery is surely one of the key objectives of any form of therapy. In this paper, I shall attempt to describe how it might be achieved.

GURDJIEFFIAN THEORY

Gurdjieff believed that every event which occurs in our lives carries with it the potential for personal growth. The process through which we can stimulate such growth may be diagrammed in the following way.

"Self-Observation" means becoming conscious of how you handle a particular event, of becoming aware of "what is" as distinct from what you add to "what is" in terms of your thoughts, your feelings and your behaviour. For example, should you be criticised by your spouse, that criticism is "what is." Your anger,

Figure 1. Gurdjieffian Theory



defensiveness and indignation, should that be your response, are what you add to this.

Through becoming conscious of what you are doing, you give yourself the opportunity to modify this should you so desire. Without such self-observation you will mechanically repeat the same thoughts, feelings and behaviour over and over again even if they are very much to your disadvantage. Should you observe yourself thinking, feeling and/or behaving in a positive way, this gives you the opportunity to praise yourself, something we do far too rarely.

However, when you do observe yourself thinking, feeling and/or behaving in a negative, self-destructive manner, that is where you can use "Inner Stop" or thought stopping. "This is not something I want to do, or think, or feel." Through using Inner Stop, you have created the opportunity to distance yourself from the unwanted thought, feeling or behaviour. This distancing Gurdjieff termed Inner Separation and it involves telling yourself, "I do not have to put the power of my thoughts, feelings or behaviour into this. This is not me."

After separating yourself from the negative approach to an event, you can make use of "Self-Remembering." I feel that a modification of Gurdjieff's original concept in which negatives are replaced by positives is likely to be helpful at this point. This would involve telling yourself that, "I don't have to be like this. I can be quite different as I was when" and you then direct your thoughts to some past event when you behaved, felt or thought quite differently. In other words, you are putting the power of your thoughts, your feelings and your behaviour into what you chose rather than into whatever comes along.

Let's see how this would work out with a particular event. Recently I spent three weeks in the United States, I was teaching courses on achieving change through single-session therapy. The teaching faculty was excellent and the students were so eager to learn that it was a wonderful experience. I arrived back in Australia feeling really elated, totally positive, and enthusiastic. Yet virtually everyone I talked to on my return was negative, critical, and complaining. Almost without realising it, I became part of this chorus of negativity. Then, through self-observation, I saw what I was doing and said, "Stop." I then separated from the negative thoughts and feelings, and remembered how I was in America. By immersing myself in these memories, I changed my state, replacing the unwanted critical state with one of positive enthusiasm.

This is how the process works, but it requires practice — a lot of practice. I remind myself every morning that I am committed to operating in this way. I do this because of the enormous benefits it has brought, enabling me to take more control over my life than I ever imagined possible. This process comes between you and life, allowing you to take control over many of the events that previously controlled you. Not that you will be able to do this on every occasion. As human beings we are far from perfect so we must just do the best we can. However, if you realise that you have blindly gone ahead and acted in a way disadvantageous to you, without observing yourself in the manner I have outlined, all is not lost. In your imagination, go back over the event, this time doing it correctly by observing yourself and your reactions to the events, stopping the negatives,

separating from them, and remembering a positive event.

FORMULATION OF GURDJIEFFIAN WISDOM AS SUGGESTIONS

One way of implementing the Gurdjieffian approach is through the use of hypnotic suggestion. His basic ideas could be formulated in the following manner with embedded commands in italics.

You will be able to treat everything that happens, every event, as a learning experience, an opportunity to grow as a person.

You will be able to divide your attention, observing the event and also observing your thoughts, feelings, and behaviour about that event. In this way you will be able to separate what actually is from what you are adding to what is and become aware of how you handle the situations that occur in your life.

You will be able to say "Stop" mentally or out loud whenever you observe yourself thinking, feeling or behaving in ways that are negative and self-destructive. Perhaps it will be as if a big neon sign illuminates in your mind with the 'Stop' message.

You will be able to separate from these negative thoughts, feelings and behaviours telling yourself: "This is me. This is what I am like."

USING THE 5/1 — SUGGESTION — 1/5 METHOD

To help clients behave in the way envisaged by the Gurdjieffian model, the 5/1— success — 1/5 technique is likely to be helpful. Three steps are involved in this technique: (1) inducing a receptive mind set; (2) placing a single suggestion, or a single theme involving a network of suggestions, in the mind; and (3) returning to alertness.

The procedure begins with the use of six deep breaths. Focus is upon the outbreath. As clients exhale, they count "5," letting go with the breath. They count "4" with the next breath, letting go a little more, and continuing to do so with the next three breaths, counting "3," "2," and "1." On the final breath, as they let go as much as possible, they use a key word or words such as "Relax," "Calm," "Peace," or "Let go."

Clients then move to the suggestion procedure. In this case, the suggestions encapsulating the Gurdjieffian theory would be given. Imagery could well be employed at this stage with clients going into the future and "seeing" themselves handling various situations according to these suggestions. They would also go back into the past and remake previous events which they had not handled well.

The final step repeats the six deep breaths pattern, this time emphasis falling upon the in-breath. As clients breathe in, they count "1," imagining they are drawing in alertness and energy. This process continues as they count "2, 3," "4," and "5." with the next four in-breaths. On the final breath, as they breathe in, they use a key word such as "Wide awake," "Energy," "Zest," or "Go" to restore them to a state of alertness.

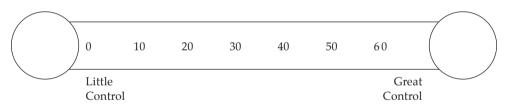
EXPERIMENTAL APPLICATION

Many people believe that they have very little control over their lives, yet they do not know what they can do to improve upon this situation. Twenty-four housewives, ranging in age from 26 to 52, who were taking a variety of adult education courses, responded to the opportunity offered them of learning how to gain more control over their lives.

Each subject completed an adaptation of the Fear Thermometer (Figure 2) (Francis & Stanley, 1989) which was termed the Control-over-Life Thermometer. This thermometer format has a number of advantages including high face validity, familiarity, ease of administration, and satisfactory reliability and validity (Hornblow & Kidson, 1976; Luria, 1975; Price, McGrath, Rafii, & Buckingham, 1983). As the Francis and Stanley study demonstrated adequate reliability and validity for a Thermometer Scale bounded by marker phrases, this form was employed in the present study.

In the first stage of the experiment, the subjects were paired on the

Figure 2. Control-over-Life Thermometer



Imagine that this is a thermometer recording how much control over your life you feel you have. Please indicate where you usually are on this thermometer by circling the appropriate number.

Thermometer scores, one member of each pair being allocated at random to either a Control group or an Experimental group. Two 50-minute sessions were used, spaced one week apart. Control group subjects used this time to read books and articles on achieving a greater degree of control over their lives. It was emphasised on several occasions that many people had been helped through reading these books and that the principles outlined in their pages has stood the test of time. A similar expectancy of improvement was engendered in the Experimental group subjects who were shown how to embed the Gurdjieffian suggestions in the 5/1-1/5 format. The Control-over-Life Thermometer was administered to both groups immediately after completion of the second session and again six months later.

The first session began with the experimental group subjects discussing the extent to which they felt they had some degree of control over their lives. As this discussion proceeded, I introduced the concept of the Control-over-Life

Thermometer, this being completed as a means of providing a pre-treatment score. By informing subjects of the success other people had experienced through use of the Gurdjieffian system, I aroused both their interest and their expectancy, this being further enhanced by the suggestion that use of a simple breathing technique could increase the power of their own thinking. The 5/1 - 1/5technique was then explained and subjects trained in its use. Once this had been achieved, they practised with the Gurdjieff suggestions, first through listening to me and then by themselves.

Torry (1972) has pointed out that of the four factors present in all successful psychotherapy, it is the creation of a state of belief and expectancy in the client that is of most importance. Though, in experimental studies, it is conventional for therapist variables to be neutralised as much as possible, no attempt was made to do so in the present case. As the therapist's ability to create a receptive state in clients is of such importance, it appears counter-productive to eliminate it from any procedure designed to improve client well-being. In laboratory attempts to effect such an elimination, I believe, lies the main reason why such experimental work is often so irrelevant to clinical practice.

Probably the creation of a state of expectancy, the belief that something special is going to happen, is the main argument for the use of an "induction" such as the 5/1 pattern. As Barber (1978) indicated, hypnotic induction techniques are helpful not because the subject is in a "trance" or "hypnotised." Rather, their influence lies in reducing subjects' critical attitude toward the suggestions so they more readily accept these as believable and able to assist them in achieving their goals.

One week later, in the second session, the experimental group subjects discussed their experiences of the previous week, then again practised embedding the Gurdjieff suggestions in the 5/1 - 1/5 framework. At this time, considerable re-making of the less successful experiences of the week's events occurred together with age progression into a future in which events were handled in a manner reflecting achievement of the desired control over life goals.

The Control group, in the second stage of the experiment, experienced the same two treatment sessions as had the Experimental group. In this way, they functioned as their own controls, providing further data pertaining to the effect of the technique.

RESULTS

Stage 1

Data derived from Control-over-Life Thermometer administrations are set out in Table 1.

A repeated measures analysis of variance indicated the existence of a highly significant difference between Experimental and Control groups (F = 11.32, df =5, p < 01). Comparison of the immediate after-treatment scores of the two groups revealed a significant increase in Control-over-Life on the part of the former, as compared to the latter, this being operationalised in terms of scores on the Control-over-Life Thermometer (*Scheffe F* = 5.36, df = 11, p<.01). Consideration of

Table 1. Mean Scores and Standard Deviations for two groups of subjects on the Controlover-Life Thermometer administered before, immediately after, and Six Months after Treatment (N = 24).

Group	Before treatment	Immediately after treatment	6 months after treatment
Experimental	32.1	60.3	64.3
	(16.9)	(19.6)	(18.1)
Control	37.8	39.3	36.9
	(20.1)	(21.2)	(21.2)

the six-month follow-up scores of the two groups indicated that the higher Control-over-Life level of the Experimental group had been maintained (*Scheffe* F = 3.42, df = 11, p < .05).

A comparison of the Experimental group's pre-treatment score with that recorded immediately after treatment (*Scheffe F* = 5.13, df = 11, p<.01) and six months later (*Scheffe F* = 3.71, df = 11, p<.05) indicated a significantly increased Control-over-Life score. No such increase was displayed by the Control group.

Stage 2

Table 2, which presents the data pertaining to the second phase of the study when control group subjects experienced the same treatment procedure, confirmed the presence of the same improvement pattern.

For the Control group, the six-month follow up score from Stage 1 of the experiment was used as the pre-treatment score. When this was compared to Control-over-Life Thermometer scores, by means of a repeated measures analysis of variance, immediately after (*Scheffe* F = 4.79, df = 11, p<.05), and six months later (*Scheffe* F = 5.14, df = 11, p<.05) the two treatment sessions, a significant increase in control over life is apparent (F = 6.77, df = 2, p<.01).

DISCUSSION

These results suggest that the housewives in both the Experimental group of the first stage of the study, and the Control group of the second stage, were able to significantly increase control over their lives, defined operationally by the Control-over-Life Thermometer, through use of the technique outlined in this paper. Improvement had been maintained six months after conclusion of the experiment.

Table 2. Mean Scores and Standard Deviations for the Control group on the Control-over-Life Thermometer administered before, immediately after, and six months after Treatment (n = 12).

Group	Before treatment	Immediately after treatment	6 months after treatment
Control	36.9	57.8	61.8
	(21.2)	(21.6)	(18.6)

This positive result seems quite out of proportion to the brevity of treatment involved, two sessions each of 50-minutes duration, and the simplicity of the actual technique, a combination of suggestions and self-induced mental preparation to increase the likelihood that these will be accepted at a deep level. However, as pointed out earlier, another factor likely to have been influential in the achievement of this result was the belief engendered in these housewives that the treatment was likely to produce the increased control over their lives that they desired.

Such a belief is usually found when positive suggestive therapy is employed. That is the reason why, in this study, I encapsulated Gurdjieffian wisdom in a series of ego-enhancing suggestions, an approach which made it part of a therapeutic tradition proven to be very effective in helping people improve the quality of their lives (e.g., Calnan, 1977; Dimond, 1981; Kluft, 1983; Stanton, 1989). The findings of such studies indicate that clients tend to improve under the influence of generalised ego-enhancing suggestions even when these make no attempt to deal with specific symptoms.

This is not to assert that the procedure will always produce the desired outcome on every occasion. Unfortunately we are yet to find such a panacea. However, it did seem valuable to the housewives in the study reported in this paper not only immediately after conclusion of treatment, but six months later. Through use of the technique, they appeared to have improved their capability to take more control over their lives, an outcome they avidly sought. Actually, the maintenance of the initial improvement over a longer term was a very pleasing feature of the study, one which indicated the potential of the treatment method.

No attempt was made, in the present study, to measure hypnotisability or depth of hypnosis. My experience in the clinical use of hypnosis has indicated that depth of hypnotic trance does not appear to exert any strong influence over client responsivity to suggestion. However, further investigation into the gentle and non-intrusive approach I have outlined in this paper might indicate an interaction between effectiveness of treatment and hypnotisability which could enhance its value.

Reprinted from the American Journal of Clinical Hypnosis, 40(1), 1997, 376-384, with permission of the Editor.

REFERENCES

Barber, T. X. (1978). Hypnosis, suggestions and psychosomatic phenomena. In J. L. Fossage & P. Olsen (Eds.). Healing: Implications for psychotherapy. New York: Human Sciences Press.

Bennett, J. (1974). Gurdjieff today. London: Coombe Springs Press.

Calnan, R. D. (1977). Hypnotherapeutic ego strengthening. Australian Journal of Clinical Hypnosis, 5, 105–118.

Dimond, R. E. (1981). Hypnotic treatment of a kidney dialysis patient. American Journal of Clinical Hypnosis, 23, 284–288.

Francis, R., & Stanley, G. (1989). Analogue measurement of dental fear. Australian Psychologist, 24, 55-60.

- Gurdjieff, G. L. (1950). Beelzebub's tales to his grandson (All and everything, second series). London: Routledge & Keegan.
- Hornblow, A. R., & Kidson, M. A. (1976). The visual analog scale for anxiety: Validation study. *Australian and New Zealand Journal of Psychiatry*, 10, 339–341.
- Kluft, R. P. (1983). Hypnotherapeutic crisis intervention in multiple personality. *American Journal of Clinical Hypnosis*, 26, 73–83.
- Luria, R. E. (1975). The validity and reliability of the visual analog mood scale. *Journal of Psychiatric Research*, 12, 51.
- Nicol, M. (1950–56). Psychological commentaries on the teachings of Gurdjieff (6 vols.). London: Vincent Stuart.
- Oupensky, P. (1950). In search of the miraculous: Fragments of an unknown teaching. London: Routledge & Kegan Paul.
- Price, D. D., McGrath, P. A., Rafii, A., & Buckingham, B. (1983). The validation of visual analog scales as ratio scale measures for chronic and experimental pain. *Pain*, 17, 45–56.
- Stanton, H. E. (1989). Ego enhancement: A five-step approach. *American Journal of Clinical Hypnosis*, 31, 192–198.
- Torrey, E. F. (1972). The mind game: Witchdoctors and psychiatrists. New York: Emerson.
- Wilson, C. (1986). G. I. Gurdjieff: The war against sleep. Wellingborough, Northamptonshire: The Aquarian Press.

RECOVERED MEMORY, HYPNOSIS, AND PROFESSIONAL ISSUES

Kevin M. McConkey University of New South Wales

Peter W. Sheehan

Australian Catholic University

INTRODUCTION

Memory is sometimes perfect, and sometimes not: we remember things that are accurate, inaccurate, and an amalgam of fact and fiction. Memory functions reasonably well in everyday life, but we can mislead ourselves and others by what we think we remember. Over the last decade in particular, discussion about recovered memory of childhood sexual abuse has polarised many of those who work in, and come to, clinics and courts. That discussion has been especially strong when hypnosis has been used to enhance the recovery of memory of childhood sexual abuse. The scientific, clinical, and legal matters involved — and the professional and public scrutiny of the position that individuals adopt — have given rise to a range of complex issues. This paper aims to provide an evaluative summary of concepts, findings, and guidelines concerning recovered memory, hypnosis, and professional issues.

There is a large and increasing number of publications on these topics (Applebaum, Elin, & Uyehara, 1996; Brown, Scheflin, & Hammond, 1997; Conway; 1997; Lynn & McConkey, 1998; Pezdek & Banks, 1996; Schacter, 1995, 1996; Spanos, 1996), and we are necessarily selective in the material we include in this chapter (see also McConkey, 1995, 1997, in press; McConkey & Sheehan, 1995). Where appropriate, however, we refer to material (Cossins, 1997; Freckelton 1996; Guilliatt, 1996; Mullinar & Hopkinson, 1997; Mullinar & Hunt, 1997; Roberts, 1998; Royal Commission into the New South Wales Police Service, 1997; Thomson, 1995) that assists in placing consideration of recovered memory and hypnosis within the professional and legal context of Australian society.

RECOVERED MEMORY

Discussion of the nature of recovered memory of childhood sexual abuse on the one hand and the nature and effects of childhood sexual abuse on the other hand often become intermingled and confused. This confusion makes it difficult to present a balanced position on the issues associated with reported memories of childhood sexual abuse, especially when anyone seeking to present a balanced view is likely to be accused of "sitting on the fence" (Mullinar & Hopkinson, 1997). Nevertheless, it is important to state that sexual abuse during childhood can be associated with major problems during adulthood (Kendall-Tackett, Williams, & Finkelhor, 1993), and it is important to state also that some adults decide to report childhood sexual abuse after many years of silence (Freyd,

1996). In the debate about recovered memory, these aspects are not in dispute. Rather, the central issue is the reporting of a memory of childhood sexual abuse by adults who had not previously indicated any memory of abuse. For some, this type of reporting is seen to involve the recovery of true memories (Pope, 1996; Pope & Brown, 1996); for others, this type of reporting is seen to involve the creation of false memories (Loftus, 1993, 1997; Pendergrast, 1995).

As a constructive process that is influenced by a wide range of cognitive and social events, memory can be accurate, fallible, incomplete, malleable, and susceptible to distortion by external factors (Bartlett, 1932; Kihlstrom, 1994). These external factors can include information that is provided during the encoding of the original event, during the storage of that memory, and during the retrieval of that memory (Schacter, 1995, 1996). Moreover, people can believe strongly in the accuracy of their memories, even though those memories are incorrect (Payne, Neuschatz, Lampinen, & Lynn, 1997). As Lynn and Payne (1997) pointed out, "memory is not so much a vehicle for accessing static snapshots of the past as it truly "was," so much as it is a dynamic medium of experience imbued with drama and feeling, and invigorated by the inherently human capacity for narrative creation" (p. 55). Thus, memory should not be accepted as self-validating. In other words, the fact that someone remembers an event does not make the remembered event a fact.

Although there is broad agreement that "normal" memory is malleable, there is an argument by some (Freyd, 1996; Terr, 1994; van der Kolk, 1994) that "traumatic" memory does not follow the same rules as does memory for nontraumatic events, and an argument that the empirical evidence obtained about the processes of normal memory does not apply to discussion of traumatic memory. For instance, van der Kolk and Fisler (1995) stated that "If trauma is defined as the experience of an inescapable stressful event that overwhelms one's existing coping mechanisms, it is questionable whether findings of memory distortions in normal subjects exposed to videotaped stresses in the laboratory can serve as meaningful guides to understanding traumatic memories" (p. 506), and also that "traumatic memories may be encoded differently than memories for ordinary events, perhaps via alterations in attentional focusing, perhaps because extreme emotional arousal interferes with hippocampal [i.e., explicit] memory functions" (p. 508). Although this position has some appeal, there is no strong evidence that memory for traumatic events should follow psychological principles that are entirely different from those followed by memory for non-traumatic events. On the contrary, there is strong evidence that traumatic memories can be influenced by the same range of cognitive and social events that influence non-traumatic memories (Foa, Molnar, & Cashman, 1995). Moreover, the evidence indicates that memory is more likely to be enhanced than impaired by high levels of emotion and stress (McGaugh, 1992), and this suggests that traumatic memories are, if anything, likely to be more distinctive, long lasting, and retrievable than are non-traumatic memories. Consistent with this and following an analysis of theoretical and empirical work on traumatic memory, Shobe and Kihlstrom (1997) concluded that "nothing about the clinical evidence suggests that traumatic memories are special, or that special techniques are required to recover them" (p. 74). This latter point is especially important because it makes us think more carefully about the techniques that we use in clinical work, and the inferences that we draw about any traumatic memories that are reported during therapy.

An argument about the special nature of traumatic memory is often linked to the concept of repression in the debate about recovered memory of childhood sexual abuse. In a general sense, repression involves the motivated forgetting of information that is threatening to the self (Bowers & Farvolden 1996; Singer 1990). Historically, there was substantial variation and internal inconsistency in the writings of Freud on the concept of repression (Bowers & Farvolden 1996; Crews 1997; Macmillan 1991), and currently there are many variants in conceptualising repression and related constructs such as dissociation (Lynn & Rhue 1994; Spiegel 1994). This imprecision and variation is one of the problems in this debate and it underscores the relatively limited value of the concept of repression beyond a general description of assumed process. Moreover, there is a relative dearth of empirical support for repression. For instance, in his review of relevant empirical research, Holmes (1990) concluded that "despite over sixty years of research . . . there is no controlled laboratory evidence supporting the concept of repression" (p. 96), and that "the concept of repression has not been validated with experimental research and its use may be hazardous to the accurate interpretation of clinical behavior" (p. 97).

Whereas the limitations of the concept of repression (and of dissociation) need to be recognised, we should not simply ignore the clinical observations and personal anecdotes that appear to point to ways in which people can set aside or avoid thoughts and memories that are unpleasant or threatening to them. Thoughts about, and memories of, important personal events can be set aside from normal awareness, and an appropriate concept such as repression or dissociation is needed to help understand that process (McConkey, 1997). Accepting the value of such a concept, however, does not necessarily require an acceptance of the accuracy of all reports of those thoughts and memories. As Bowers and Farvolden (1996) noted "Endorsing the concept of repression does not commit theorists to the belief that recovered memories must be historically accurate in all particulars. A memory, by virtue of having been repressed, does not somehow escape the distortions and constructive features of memories in general"(p. 361).

Despite personal anecdotes (Mullinar & Hunt, 1997; Mullinar & Hopkinson, 1997), the repression or dissociation of a memory of a traumatic childhood event may be relatively rare. The fact that people sometimes remember events that they had forgotten does not mean that those events were traumatic, nor does it mean that those particular memories were repressed. The non-reporting of such events may occur because of normal forgetting, embarrassment over reporting the events, the consequences of reporting the events, or various other reasons that relate to factors other than repression. In this respect, clinicians cannot "distinguish between those [clients] who do not recall actual abuse and those who do not report on it, and among the former, between memory failures that reflect repression, dissociation, and other pathological processes, and those that are benign" (Kihlstrom, 1995, p. 66). As Nash (1994) argued "when we are faced with patients who experience themselves as suddenly and agonizingly remembering a previously forgotten trauma . . . we should above all else recognize the enormous clinical importance of this material . . . [but recognize also that memories do not literally return in pristine form, unsullied by contemporary factors like suggestion, transference, values, social context, and fantasies elaborated at the time of (and subsequent to) the event" (p. 357).

This view is in contrast to that of Bass and Davis (1988), whose views the Royal Commission into the New South Wales Police Service (1997) reported to have been "particularly influential within government sexual assault services in this country" (p. IV-652). Bass and Davis (1988) told their readers that "If you are unable to remember any specific instances like the ones [about sexual abuse] mentioned above but still have a feeling that something happened to you, it probably did . . . To say, "I was abused" you don't need the kind of recall that would stand up in a court of law. Often the knowledge that you were abused starts with a tiny feeling, an intuition . . . Assume your feelings are valid. So far, no one we have talked to thought she might have been abused, and then later discovered that she hadn't been. The progression always goes the other way, from suspicion to confirmation. If you think you were abused and your life shows the symptoms, then you were" (pp. 21–22). Somewhat similar assumptions and advice can be seen in Mullinar and Hunt (1997) who told readers that "We believe that there is one essential ingredient for healing: we need to recognise and feel our pain. This means giving up denial, accepting the truth, acknowledging that we were abused as children and that it hurt, and that what was done to us was wrong and bad. The earlier you acknowledge and face the pain within you, the faster your healing will be. It is your courage that will allow you to begin to consider embracing the truth about your childhood. It is your courage that will enable you to move forward" (p. viii). These types of comments underscore the need for professionals to understand in some detail what contemporary empirical research tells us about recovered memories of sexual abuse.

Research that has examined whether memories of childhood sexual abuse can be repressed and recovered has raised questions about any general assumption of the veridicality of recovered memory and its utility in the clinic and in the court. Pope and Hudson (1995) analysed four studies (Briere & Conte 1993; Herman & Schatzow 1987; Loftus, Polonsky, & Fullilove 1994; Williams 1994) to determine whether confirmatory evidence of the reported abuse had been presented and whether amnesia for the abuse had been demonstrated; notably, these were the only relevant studies that they could locate. Pope and Hudson (1995) concluded that the four studies did not present confirmatory evidence of the abuse and did not demonstrate amnesia for the abuse, and they argued that the "present evidence is insufficient to permit the conclusion that individuals can "repress" memories of childhood sexual abuse" (p. 126). In other words, there is no prospective data of adequate methodology to show that people repress and recover traumatic memories (Pope, 1996).

Nevertheless, it is useful to consider selected studies in a little more detail because they demonstrate the difficult conceptual, methodological, and inferential issues that are involved in conducting research on recovered memory of childhood sexual abuse (McConkey, 1997). Herman and Schatzow (1987) reported on the recovered (or suspected) memories of childhood sexual abuse of women who were in group therapy. Because of the problems in understanding the nature of the sample, the nature of the memory deficits that they had experienced or were experiencing, the corroboration of abuse claimed by some of the cases, and the fact that some of the cases were apparently composites of several cases, it is very difficult to draw meaningful inferences from this study. Harvey and Herman (1994) reported on the memories of three adult cases of childhood trauma. One involved the continuous recall of sexual abuse but with particular interpretations and understandings of the events that were said to constitute the abuse, another involved a mixture of partial recall and shifts in the individual's understanding of childhood sexual abuse, and another involved substantial amnesia by the individual of childhood sexual abuse. Harvey and Herman (1994) drew attention to the multiple paths that can lead to the reporting of memories of childhood sexual abuse, and argued that different clinical approaches needed to be adopted with these different types of cases.

Briere and Conte (1993) reported that almost 60% of a sample of people in therapy had identified a period in their lives in which they had no memory of the occurrence of childhood molestation. These authors suggested the more violent the abuse and the earlier the abuse had occurred, the more likely it was that a period of amnesia had been experienced; also, they indicated that a greater number of current psychological symptoms were present in patients who had experienced periods of amnesia than in those who had not. Briere and Conte (1993) acknowledged their study was limited in various ways including the selection of their sample (the individuals were in therapy, and the therapist chose who to include in the sample), and the accuracy of the reports of childhood molestation and periods of amnesia (they were asked whether there was ever a time when they could not remember an abuse experience). Asking people if they "remember whether they forget" is a doubtful methodology. In a somewhat similar study, Loftus, Polonsky, and Fullilove (1994) interviewed women with a history of abuse, and asked them whether they had forgotten the abuse for a period of time. Although only about 20% of these women indicated such a period, the meaning of this finding is not clear because of the same methodological problems that can be seen in the study by Briere and Conte (1993). Elliott and Briere (1995) examined the recall of childhood sexual abuse in a sample of the general population, and found that 42% of the respondents with a history of sexual abuse had experienced less memory of the abuse at some time in their life compared to other times. Moreover, delayed recall or the recovery of memory was associated with the reported use of threats at the time of the childhood sexual abuse. Finally, those who had recently recovered memories of abuse were reported to have more clinical symptomatology than those who had not. In their

focus on a non-clinical sample, Elliott and Briere (1995) pointed to the need for a closer examination of the recovery of memory away from the therapeutic setting.

In an oft-cited study, Williams (1994, 1995) interviewed women who had histories of sexual abuse in childhood that had been documented in hospital records. She found that 38% of the women did not recall the abuse that had been documented 17 years previously. In particular, those women who were younger at the time of the abuse and those who had been molested by someone they knew were more likely to not recall the previously documented abuse. Given these findings, Williams (1994) argued that the recovered memory of childhood sexual abuse by some women should not be surprising, and that the absence of a memory of abuse should not be seen as necessarily indicating that no abuse had occurred during childhood. In commenting on this research, Loftus, Garry, and Feldman (1994) highlighted many of the strengths and weaknesses of this study. They indicated how the findings supported the claim that individuals can forget a sexually abusive experience, but did not support any claim that childhood sexual abuse is typically laid aside from awareness and reliably recovered during adulthood. As Loftus et al. (1994) pointed out, some of the women were so young when they were abused that the information was probably not encoded adequately, and others who were abused when older may have simply forgotten the events as they had forgotten many other events of childhood. In this respect, it is important not to label the normal forgetting of abnormal events as repression. Williams (1994) highlighted that some individuals who had experienced childhood sexual abuse may not report such abuse during a clinical examination because they had forgotten it. This study is important not only because it provided information of value and indicated some of the problems involved in conducting meaningful research, but also because the reception and discussion of the findings by both scientists and practitioners interested in this issue indicated how easy it is to mislead and to be misled (Loftus et al. 1994). In this respect, the complexity of the findings have been masked sometimes by overly simplified statements about the inferences that can be drawn from them; that is a problem that can be seen in some of the contrasting reviews (Cossins, 1997; Thomson, 1995) that have appeared in the literature in Australia. The extreme positions that have been put by experts about repressed memories of childhood sexual abuse have led, understandably perhaps, to a view by a leading legal scholar that "At present, given the shadows hanging over the reliability of the [repressed memory] syndrome and the degree of disagreement about its legitimacy, the probative value of expert evidence about the syndrome must be accounted slight and its prejudicial value high" (Freckelton, 1996, p. 33). Resisting the pull of the extreme, the current research tells us that recovered memory of childhood sexual abuse should not be seen as self-validating: its accuracy, inaccuracy, or both needs to be determined independently instead of being assumed by the client, the professional, or others.

As Bowers and Farvolden (1996) pointed out "what complicates the situation

is that many therapists accept such abuse memories at face value, in part because they feel they are rejecting the patient unless they confirm each and all of his or her ideas, memories, and beliefs" (p. 361). This tendency is unfortunate not only because it may provide inappropriate approval for clients to assume the validity of memories that may not be accurate, but also because it may convey that the clinician knows the truth about the client. Although Herman (1992) considered that the "therapist should make clear that the truth is a goal constantly to be striven for, and that while difficult to achieve at first, it will be attained more fully in the course of time" (p. 148), the fact is that clinicians neither know nor have any special way of accessing truth (Spence, 1982, 1994). As Bowers and Farvolden (1996) stated "Neither the therapist nor the patient has privileged access to the origins of a patient's distress. The therapist can have more or less plausible theories regarding why the patient is distressed, but such theories should not be mistaken for the Truth — however compelling the theory may seem" (p. 373). That is a position with which many would agree, although it is one that is difficult to adopt in the emotionally and politically charged nature of discussion about recovered memory (Lynn & McConkey, 1998; McConkey, 1997; McConkey & Sheehan, 1995).

HYPNOSIS

Because "recovered memories can be accurate . . . and compelling memories can be completely unfounded" (Banks & Pezdek, 1994, p. 267), there are many difficulties associated with clinical work that involves the recovery of memory. Such clinical work can facilitate the creation of illusory memories, and the creation of such memories may be linked to particular therapeutic techniques (Lindsay & Read, 1994) referred to as "memory recovery therapies." Of course, as Pezdek (1994) noted, some people come to therapy with reasonably clear memories of childhood sexual abuse, and other people come to therapy after the spontaneous recovery of memory in the absence of any therapeutic intervention. Nevertheless, Ceci and Loftus (1994) argued that "clients can be led to co-construct vivid memories of events that never transpired; repeated suggestions, imagery instructions, journal writing, and trance inductions are potent psychological mechanisms that we are beginning to realise can lead to false memories" (p. 362). Hypnosis has often been singled out for special attention in this regard, if only because there is substantial research on the effects of hypnosis on memory.

The use of hypnosis to enhance memory can lead to major changes in recall, as well as in the confidence that people hold in the accuracy of their recall (McConkey, 1992; McConkey & Sheehan, 1995). The influence of hypnosis on memory has been the focus of substantial comment (American Medical Association, 1985, 1994), and the influence of hypnosis on recovered memory has been the focus of two special issues of the International Journal of Clinical and Experimental Hypnosis (October, 1994; April, 1995). Overall, it is clear that people can believe strongly in the accuracy of their hypnotically enhanced memories,

even when those memories are wrong. In summary of the experimental findings about the effect of hypnosis on memory, McConkey (1992) concluded that "It should be understood clearly that the experimental findings provide no guarantee that any benefits (e.g., increased accurate recall) will be obtained through its use, and that some costs (e.g., inaccurate recall, inappropriate confidence) may well be incurred through its use" (p. 426).

In summarising, it is useful to consider briefly some of the studies on the use of hypnosis to enhance memory that are the basis of these comments (for a detailed review, see McConkey & Sheehan 1995). For instance, hypnosis can lead to an apparent increase in memory, because it may lead people to generate and report more material as memory than they would if hypnosis is not involved (McConkey & Kinoshita, 1988). Also, the findings show clearly that hypnotised individuals can accept subtle changes to their memory, incorporate those changes into their memory, and develop confidence in the accuracy of what they report; in fact, one of the most consistent findings from the experimental research is that hypnosis may lead people to be inappropriately confident in the accuracy of their memory (Krass, Kinoshita, & McConkey, 1988; Nogrady, McConkey, & Perry, 1985). Moreover, hypnosis can lead to the creation of pseudomemory when a hypnotised person accepts a suggestion for false information and subsequently reports that information as a genuine memory (Barnier & McConkey, 1992).

In terms of research on the hypnotic creation of false memory (McConkey, Barnier, & Sheehan, 1998), Orne (1979) presented a simple demonstration along these lines. He established that the subject went to bed at (say) midnight and rose at (say) 8 am on a particular night and hypnotically age regressed the subject to relive that night. During hypnosis, he asked the subject whether she heard two loud noises (this is a subtle suggestion), then asked the subject to describe the noises and what she did in response to them, and after hypnosis asked the subject about the night. According to Orne (1979), "The subject's altered memory concerning the night . . . will tend to persist (unless suggestions are given to the contrary) particularly because the subject was asleep at the time and there are no competing memories. The more frequently the subject reports the event, the more firmly established the pseudomemory will become" (p. 323). Based on demonstrations such as this, as well as on various forensic cases, Orne (1979) concluded that pseudomemories developed in hypnosis may be accepted as an actual memory of the original events, and that this false memory will be held with subjective certainty and reported with conviction. Across various studies that have been conducted since then (Barnier & McConkey, 1992; McConkey, Labelle, Bibb, & Bryant, 1990), the findings point to levels of complexity in the hypnotic creation of false memory. For instance, high hypnotisable subjects are more likely than low hypnotisable ones to accept, incorporate, and maintain hypnotically suggested false memories in the experimental setting, although such (nonhypnotically) suggested false memories can be seen to occur in a variety of other circumstances (Garry & Loftus, 1994). In this sense, the use of hypnosis to create false memories may potentiate the plasticity of memory, but the plasticity can also be influenced by other techniques.

Although much of the literature on the hypnotic modification of memory points to negative aspects and outcomes, it is important to note that, in some ways, such modification may also have positive aspects and outcomes. Historically, for instance, Janet's (1889/1973; Ellenberger, 1970) famous case of Marie illustrates this. Marie was a 19-year-old woman who suffered from a number of hysterical symptoms, including anaesthesia of the left side of her face and blindness of her left eye. Using hypnotic age regression, Janet determined that as a 6-year-old, Marie had slept with a child of the same age who had impetigo on the left side of her face. After this childhood incident, Marie had developed an almost identical impetigo and had developed blindness as well. To treat this problem, Janet hypnotically age regressed Marie to the time of the incident and reconstructed the memory: "I put her back with the child who had so horrified her; I make her believe that the child is very nice and does not have impetigo (She is half convinced. After two re-enactments of this scene I get the best of it); she caresses without fear the imaginary child. The sensitivity of the left eye reappears without difficulty, and when I wake her up, Marie sees clearly with the left eye" (Janet, 1889/1973, p. 436–440; quoted in Ellenberger, 1970, p. 364).

Contemporary examples of this treatment approach also demonstrate the hypnotic reconstruction of memory. Baker and Boaz (1983), for instance, reported the treatment of a 30-year-old woman's dental phobia. During hypnotic age regression, the woman described being taken to the hospital for a tooth extraction at nine years of age and becoming terror stricken during the procedure; her comments highlighted that she felt that she was not being comforted by anyone. Accordingly, the clinician suggested that, as she thought about being taken into the operating room, she would remember the doctor holding her and stroking her forehead and telling her she would not be afraid. The woman said she could hear the doctor comforting her, and subsequently reported her fear was diminished as she re-experienced entering the operating room. A second session of hypnotic age regression involved repetition of the suggestion that the doctor was comforting her, and the woman reported further reduction of her anxiety. During follow-up, the woman recalled the suggested material as an original memory, without reporting awareness of either the construction of the suggested pseudomemory or the trauma associated with the original memory. Thus, the use of hypnosis assisted in the creation of the therapeutically positive new (false) memory. Moreover, the woman became so committed to the accuracy of the memory that the constructed events were indistinguishable from the original event and were integrated into the understanding and knowledge that the woman developed about herself. This case report underscores that "the act of remembering involves the reperception of internal representations that are created from experiences with the world . . . [and] that false and veridical memories are experienced by the rememberer quite similarly" (Payne et al., 1997, p. 59).

The blurred overlaps between the hypnotic enhancement of true memory and

the hypnotic creation of false memory becomes even more obvious in Smith's (1996) case of a woman whom he helped to recover and deal with an apparent memory of being abused by neighbours during childhood. Cindy presented with serious depression, suicidal ideation, and obsessional behaviour; even after admission to a psychiatric hospital, her treatment progressed with no apparent improvement. Although she could recall a college rape incident and an abortion two years later, she had no memories of childhood abuse. To explore this possibility, and to help Cindy access and master her emotions about present and past experiences, she was hypnotically age regressed to childhood across a number of sessions. During a regression to eight years of age, she recalled being invited to a neighbour's house, told to undress, encouraged to touch herself and another girl, being fondled by a male neighbour, and having photos taken. She also recalled similar events at 12 or 13 years of age that involved being threatened with a knife. Her apparent recall of these events helped her to make sense of the emotions associated with those events, and in her view helped her to understand some of her current problems. By the end of treatment, Cindy's overall functioning had improved substantially and these treatment gains were reportedly maintained at a five-year follow-up.

From Cindy's point of view, hypnosis was a key factor in her improvement, because it allowed her to "remember and share intimate details very quickly" (Smith, 1996, p. 124). Notably, however, Cindy made no effort to corroborate her hypnotically retrieved memories of the events at the neighbour's house. Indeed, Smith acknowledged that "in the absence of external verification, there is no way to know whether Cindy's memories are authentic or not. They seemed compellingly real to her and to me, but from a scientific standpoint, "seeming" real is not confirmation" (1996, p. 124). Nevertheless, these memories, whether accurate or inaccurate, appeared to offer a plausible explanation for Cindy's symptoms, and served as a successful "therapeutic leverage for recovery" (Smith, 1996, p. 124). As Lynn, Kirsch, and Rhue (1996) argued, however, such memory recovery work can be a gamble, and clinicians must consider the possible risks and benefits of using hypnosis to recover memories; indeed, the emotional, societal, legal, and financial stakes can be very high in such cases.

In recognition of those stakes and the need to assess and manage risks, Lynn et al. (1996) offered a number of recommendations to help professionals decide whether the "benefits of attempting to access potentially forgotten life experiences outweigh the potential risk of distorted memories" (p. 404). These recommendations include warning the client about the risk of memory distortion, exercising caution regarding the wording and implications of therapeutic suggestions, and evaluating the credibility of memories recovered during therapy. Whether the (high risk) therapeutic gains with Marie and Cindy would have occurred if such recommendations had been followed is something about which we can only speculate. Of course, when we consider the impact of hypnosis on memories reported in the clinical setting, it is important to keep in mind that such memories usually involve events or experiences that have played a significant part in the life of the individual and that are embedded within a biological, affective, interpersonal,

sociocultural, and historical context. The professional who enters this context should do so with both confidence and caution.

PROFESSIONAL ISSUES

A major professional schism in the debate about recovered memory (and hypnosis) is that, for some, the recovery of memory of childhood sexual abuse is an essential part of the therapeutic experience and central to the successful outcome of therapy (Courtois, 1995). For others, however, the assumption that memories of childhood sexual abuse need to be recovered encourages an attitude of victimisation and is counterproductive to the successful outcome of therapy (Loftus, Milo, & Paddock, 1995; Nash 1994). For instance, Loftus et al. (1995) commented, "therapy that focuses exclusively on the past and what might have been done to the client, still leaves the client wallowing in the victim role. We have only traded one cultural myth for another: that we are never responsible for our own problems or our own healing" (pp. 307–308).

In fact, therapy that focuses on recovered memory may have negative effects on well-being. McElroy and Keck (1995) provided three case reports of three women with eating or obsessive-compulsive disorders who were told that their symptoms were based on child sexual abuse and that the recovery of memories of this abuse would be important in treatment. Two of the women were unable to recover any such memories and their conditions deteriorated; their conditions improved in response to traditional treatment. McElroy and Keck (1995) argued that placing clients under pressure to recover memories of abuse, when they do not believe that they have been abused, may have significant negative consequences for treatment. Brenneis (1994) highlighted how a clinician's belief in the recovery of early traumatic experiences may lead patients to produce false beliefs about such experiences through the operation of direct and indirect suggestion. He considered that clinicians should be aware of the potential risks and benefits of holding a strong belief in the possibility of recovering traumatic memories, and that the current evidence suggested that the risks to the client's well-being are likely to be greater than the potential benefits.

Across relevant studies and case reports in the literature, there is in fact no clear evidence of the "presumed therapeutic benefits of various memory recovery techniques" (Grossman & Pressley, 1994, p. 279). There seems to be no convincing studies or individual cases that demonstrate the nature of the benefits derived from the recovery of memory. Of course, it may be that certain techniques do lead to benefit when used by appropriately trained individuals, or that there is value in the recovery of memory if it occurs in the context of genuinely therapeutic activities. However, there is no convincing evidence that recovered memory actually leads to improvements in well-being. As Grossman and Pressley (1994) indicated, the crucial question of whether the potential benefits outweigh the potential costs of attempts to recover memory of childhood sexual abuse cannot be answered at this stage.

Read and Lindsay (1994) concluded that "research evidence does not support

the idea that a large percentage of clients who have no conscious recollections of childhood sexual abuse were in fact abused" (p. 430); that there is "no compelling evidence in support of the idea that therapeutic approaches designed to help clients recover suspected repressed memories are helpful" (p. 430); and that "there is substantial evidence consistent with the idea that overzealous use of such techniques and ancillary practices may lead some clients who were not abused as children to come to believe that they were abused" (p. 430). Similarly, Lindsay (1995) highlighted the need to determine whether the recovery of memory is actually associated with positive therapeutic outcomes, and concluded that "there is not a single controlled study demonstrating any beneficial effect of therapeutic efforts to recover hidden memories of [childhood sexual abuse] in clients who report no abuse history, and there is no convincing evidence to support the claim that practitioners can discriminate between clients with no awareness of abuse histories and clients with no abuse histories" (p. 288).

The seemingly popular acceptance of the notion of recovered memory in the face of limited scientific support has led various individuals (Bloom, 1994; Bowers & Farvolden, 1996; Knapp & VandeCreek, 1996; London, 1997; Lynn et al., 1996; McConkey & Sheehan, 1995; Pope & Brown, 1996; Yapko, 1994) and organisations (American Medical Association, 1994; American Psychiatric Association, 1993; Australian Psychological Society, 1994; British Psychological Society, 1995; Royal Australian and New Zealand College of Psychiatrists, 1996; Royal College of Psychiatrists, 1997) to issue statements and guidelines about the reporting of recovered memory. Bowers and Farvolden (1996) highlighted two over-arching concerns. First, clinicians should not define healing in terms that require themselves and their clients to understand the latter's problems in the same way. Second, clinicians should always consider alternative hypotheses to account for clients' problems, and should be especially careful not to fixate on one of those hypotheses. McConkey's (1997) consideration of the available statements and guidelines underscored general agreement that (a) childhood abuse is a reality that may have devastating consequences, (b) the existence of particular problems in adulthood is not a reliable indicator of the occurrence of abuse in childhood, (c) memories may be unreliable, and inaccurate memories can be held strongly, (d) the existence of repression should not be rejected, but it can not be accepted without question, (e) recovered memories of childhood abuse may or may not be accurate, and independent corroboration is the only way of determining this, (f) clinicians' responsibilities to their clients are best met through a cautious approach to the assumptions they make and the techniques they use, and (g) clinicians' professional and ethical responsibilities are best met by avoiding an excessive encouragement or discouragement of reports of childhood sexual abuse. Knapp and VandeCreek (1996) commented in more detail on specific risk management procedures for psychologists who are treating individuals who recover memories of childhood sexual abuse. They argued that "effective treatment included maintaining appropriate boundaries, developing an accurate diagnosis that is based on a collaborative relationship with the patient, using intervention techniques that have been empirically derived or in other ways have received the profession's endorsement, obtaining informed consent from patients when using experimental techniques, and showing concern for the patients' long-term relationship with their families of origin. Consultation in difficult cases and careful documentation are also essential" (Knapp & VandeCreek, 1996, p. 455). Moreover, Pope and Brown (1996) set out specific questions to be addressed by clinicians who are considering the use of hypnosis to recover memories: "(a) Am I competent in the clinical uses of hypnosis as demonstrated by my education, training, and experience? (b) Have I adequately considered alternative approaches that do not involve hypnosis? (c) Have I consulted with a qualified attorney to ensure that I understand the ways that using hypnosis may affect the client's legal rights (e.g., admissibility of claims, testimony, or other evidence based on hypnotically refreshed recollection)? (d) Am I adequately aware of the research and theory about the use of hypnosis for this population in this situation? and (e) Have I accorded the client full informed consent or informed refusal?" (p. 126). An additional and perhaps initial question, of course, is whether the use of hypnosis will actually add anything to the treatment of the client (McConkey, in press).

The various statements and guidelines that currently exist highlight that clinicians need to know how to work in a setting of ambiguity, uncertainty, and differential demands. Most recently, the Royal College of Psychiatrists (1997; see also Brandon, Boakes, Glaser, & Green, 1998) in a strongly worded set of recommendations of good practice in treating patients with recovered memories of childhood sexual abuse, for instance, advises against persuasive or suggestive techniques and encourages psychiatrists to voice any doubts which they may have about the historical accuracy of patients' recovered memories. Thus, to engage in competent practice clinicians must have a knowledge of memory research, an understanding of trauma and memory loss, and must develop specific intervention skills and practices to work with clients who may recover memories. In terms of hypnosis, professionals need to be alert that its use can be potentially problematic; in particular, hypnosis can offer no guarantee of the veracity of the reports that it may elicit, and the memories that are recovered during hypnosis may be very difficult to corroborate independently. The legal implications for both the client and the professional also need to be considered. In this respect, it is worth considering some relevant decisions in Australian courts.

In R v Jenkyns (1993), the court held that the onus was upon the party seeking to introduce hypnotically elicited evidence to establish that it is safe to admit in any particular case. In R v Tillott (1995), the court commented that "there is much to be said for the proposition that any therapeutic process which serves to entrench a prospective witness' memory is so "inherently dangerous" that the rejection of post-therapy evidence should not be dependent upon proof that the memory was a distorted one. The risk should be assumed at least on a prima facie basis" (p. 37). In R v Eishauer (1997) the court upheld an appeal against a conviction of sexual assault of the appellant's stepdaughter, and the dilemma for the court was captured by Sperling J in commenting that "The difficulty in the present case is the choice between a true recovered memory and an honestly experienced false memory. Common experience does not enable one to say that the memory of a painful event, absent for a long time and later experienced, is more likely to be a revived, true memory than an honestly experienced false memory" (p. 18). The reference to common experience in this comment relates to the fact that the trial judge ruled as inadmissible any expert testimony about the nature of recovered memory of childhood sexual abuse. At trial, the jury found sufficient merit in the evidence of the complainant to convict the appellant; at appeal, the court by majority found that there was a reasonable doubt as to the reliability of the evidence and found that the accused should be acquitted (Roberts, 1998). Thus, the courts are not only in a dilemma about the nature of recovered memory, but also in a confused state about whether or not expert testimony will help them to resolve that dilemma. As the Royal Commission into the New South Wales Police Service (1997) commented, "the reception of expert evidence in this area, and its use by a jury, raises different considerations, depending on whether it is called to: explain the workings of memory and the concept or recovered memory; identify the complainant's symptoms, and explain the circumstances in which the memories were recovered; suggest that the complainant's symptoms are consistent with the symptoms of recovered memory; or conclude that the complainant is experiencing recovered memory syndrome" (p. IV-663).

In terms of the use of hypnosis to enhance memory in R v Jenkyns (1993), the court found it appropriate to follow the New Zealand Court of Appeal guidelines of R v McFelin (1985). These guidelines are that "in all cases where the Crown proposes to call post-hypnotic testimony: 1. The fact that the witness was hypnotised should be disclosed to the defence, and all relevant transcripts and information provided on request. 2. If objected to, the evidence should be excluded unless the Judge is satisfied that it is safe to admit it in the particular circumstances. 3. The Judge should have regard as to whether the hypnotism was carried out by a qualified person independent of the police and the prosecution, and with sufficient safeguards against the influencing of the subject by suggestions of otherwise. 4. Pending the establishment of New Zealand Guidelines, in deciding whether safeguards are sufficient reference may be made to overseas guides, such as the Californian section set out in this judgment. They are not mandatory in New Zealand but indicate standards to be aimed at as far as reasonably possible. 5. The Judge should also have regard to the strength of any confirmatory or supporting evidence to be called by the Crown. This applies in all cases but is especially important in relation to any recollection or purported recollection which is not proved by the Crown to have existed before hypnotism. 6. If he admits the evidence, the Judge should warn the jury of the special need for caution before relying on post-hypnotic evidence. The warning need not be in any particular terms but should adequately alert the jury to the dangers referred to in this judgment" (pp. 754–755).

Although the focus in these guidelines was on hypnosis, the Royal Commission into the New South Wales Police Service (1997) considered that "From the

evidence presented to the Royal Commission and from its review of the literature, it seems that whatever form of therapy is used to bring about a recovery or enhancement of memory, similar risks arise. Short of corroboration, there can be no certainty whether the memory is true or false" (p. IV-663), and put forward the view that "It would be appropriate for the guidelines issued by the [New South Wales] Commissioner of Police relating to the use of hypnosis in recovering memory to be extended to encompass all forms of therapy and therapy techniques by which memories are recovered or enhanced" (p. IV-665). Those guidelines are consistent in large part with those developed by McConkey and Sheehan (1995). Guidelines notwithstanding, it is important to note that the Royal Commission into the New South Wales Police Service (1997) concluded that "the law is most cautious in allowing the admission into evidence of memory said to be recovered under hypnosis or by other similar therapeutic techniques. The reasonable juror is likely to be sceptical or puzzled by any attempt to separate or distinguish imagination from reality in such circumstances. In the view of this Commission the present restrictions appropriate to the admissibility of such information in legal proceedings should in no way be relaxed unless and until there is strong consensus amongst experts as to the overall reliability of the information so adduced" (p. IV-666).

CONCLUDING COMMENT

Clinical work with individuals who report recovered memory of childhood sexual abuse should be undertaken with an open attitude, a commitment to evidence-based therapy, and an acceptance of their experience in a way that conveys the concern and care that is needed when dealing with any possibility of childhood abuse (McConkey, 1997, in press; McConkey & Sheehan, 1995). Hypnosis has a long history of misuse and a tendency toward controversy, and clinicians who use hypnosis must be especially careful not to engage in substandard thinking and practice. When recovered memory and hypnosis are put together, it is especially important for professionals to maintain appropriate boundaries and to use meaningful methods of diagnosis and treatment if they are to provide optimal treatment to their clients and if they are to reduce the professional and legal risks to themselves. How a clinician behaves may profoundly shape the nature of any recovered memory as well as influence how that memory is subsequently used in the clinical setting and beyond. When dealing with recovered memory and hypnosis, the behaviour of the clinician must be consistent with scientifically based and clinically sound diagnosis, intervention and interpretation.

ACKNOWLEDGEMENTS

The preparation of this chapter was supported in part by a grant from the Australian Research Council to Kevin M. McConkey. The authors are grateful to Jacquelyn Cranney, Julia Hutchinson, and Barry Evans for comments and assistance during its preparation.

REFERENCES

- American Medical Association, Council on Scientific Affairs. (1985). Scientific status of refreshing recollection by the use of hypnosis. Journal of the American Medical Association, 253, 1918-1923. (Reprinted in International Journal of Clinical and Experimental Hypnosis, 1986, 34, 1–12.)
- American Medical Association, Council on Scientific Affairs. (1994). Memories of childhood abuse. CSA Report 5-A-94. (Reprinted in International Journal of Clinical and Experimental Hypnosis, 1995, 43, 114-117.)
- American Psychiatric Association, Board of Trustees. (1993, December). Statement on memories of sexual abuse. Washington, DC: American Psychiatric Association.
- Australian Psychological Society (1994, October). Guidelines relating to the reporting of recovered memories. Melbourne, VIC: Australian Psychological Society.
- Applebaum, P., Elin, M., & Uyehara, L. (Eds.) (1996). Trauma and memory: clinical and legal controversies. New York: Oxford University Press.
- Baker, S.R., & Boaz, D. (1983). The partial reformulation of a traumatic memory of a dental phobia during trance: A case study. International Journal of Clinical and Experimental Hypnosis, 31, 14-18.
- Banks, W.P. & Pezdek, K. (1994). The recovered memory/false memory debate. Consciousness and Cognition, 3, 265-268.
- Barnier, A.J., & McConkey, K.M. (1992). Reports of real and false memories: The relevance of hypnosis, hypnotizability, and context of memory test. Journal of Abnormal Psychology, 101, 521-527.
- Bartlett, F.C. (1932). Remembering: A study in experimental and social psychology. Cambridge: Cambridge University Press.
- Bass, E., & Davis, L. (1988). The courage to heal: A guide for women survivors of child sexual abuse. New York: Harper-Collins.
- Bloom, P.B. (1994). Clinical guidelines in using hypnosis in uncovering memories of sexual abuse: A master class commentary. International Journal of Clinical and Experimental Hypnosis, 42, 173–178.
- Bowers, K.S., & Farvolden, P. (1996). Revisiting a century-old Freudian slip From suggestion disavowed to the truth repressed. Psychological Bulletin, 119, 355–380.
- Brandon, S., Boakes, J., Glaser, D., & Green, R. (1998). Recovered memories of childhood sexual abuse: Implications for clinical practice. British Journal of Psychiatry, 172, 296–307.
- Brenneis C.B. (1994). Belief and suggestion in the recovery of memories of childhood sexual abuse. Journal of the American Psychoanalytic Association, 42, 1027–1053.
- Briere, J., & Conte, J. (1993). Self-reported amnesia for abuse in adults molested as children. Journal of Traumatic Stress, 6, 21-31.
- British Psychological Society. (1995). Recovered memories: The report of the Working Party of the British Psychological Society. Leicester: British Psychological Society.
- Brown, D., Scheflin, A.W., & Hammond, D.C. (1997). Memory, trauma, treatment, and the law. New York: Norton.
- Ceci, S.J., & Loftus, E.F. (1994). "Memory work": A royal road to false memories? Applied Cognitive Psychology, 8, 351–364.

- Conway, M. (Ed.) (1997). Recovered memories and false memories. Oxford: Oxford University Press.
- Cossins, A. (1997). Recovered memories of child sexual abuse fact or fantasy? The Judicial Review, 3, 163-199.
- Courtois, C.A. (1995). Scientist-Practitioners and the delayed memory controversy: Scientific standards and the need for collaboration. The Counseling Psychologist, 23, 294–299.
- Crews, F. (1997). The memory wars: Freud's legacy in dispute. London: Granta Books.
- Ellenberger, H.F. (1970). The discovery of the unconscious: The history and evolution of dynamic psychiatry. New York: Basic Books.
- Elliott, D.M., & Briere, J. (1995). Posttraumatic stress associated with delayed recall of sexual abuse: A general population study. Journal of Traumatic Stress, 8, 629-648.
- Foa, E.B., Molnar, C., & Cashman, L. (1995). Change in rape narratives during exposure therapy for posttraumatic stress disorder. Journal of Traumatic Stress, 8, 675–690.
- Freckelton, I. (1996). Repressed memory syndrome: Counterintuitive or counterproductive? Criminal Law Journal, 20, 7-33.
- Freyd, J.J. (1996). Betrayal trauma: The logic of forgetting childhood abuse. Cambridge, MA: Harvard University Press.
- Garry, M., & Loftus, E.F. (1994). Pseudomemories without hypnosis. *International Journal of* Clinical and Experimental Hypnosis, 42, 363–378.
- Grossman, L.R., & Pressley, M. (1994). Introduction to the special issue on recovery of memories of childhood sexual abuse. Applied Cognitive Psychology, 8, 277–280.
- Guilliatt, R. (1996). Talk of the devil: Repressed memory and the ritual abuse witch-hunt. Melbourne, VIC: Text Publishing company.
- Harvey, M.R., & Herman, J.L. (1994). Amnesia, partial amnesia, and delayed recall among adult survivors of childhood trauma. Consciousness and Cognition, 3, 295–306.
- Herman, J. (1992). Trauma and recovery. New York: Basic Books.
- Herman, J., & Schatzow, E. (1987). Recovery and verification of memories of childhood sexual trauma. Psychoanalytic Psychology, 4, 1–14.
- Holmes, D.S. (1990). The evidence for repression: an examination of sixty years of research. In J. Singer (Ed.). Repression and dissociation: Implications for personality theory, psychopathology, and health (pp. 85–102). Chicago: University of Chicago Press.
- Janet, P. (1973). L'Automatisme psychologique [Psychological automatism]. Paris: Centre National de las Recherche Scientifique (Original work published 1889).
- Kendall-Tackett, K.A., Williams, L.M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. Psychological Bulletin, 113,
- Kihlstrom, J.F. (1994). Hypnosis, delayed recall, and the principles of memory. International Journal of Clinical and Experimental Hypnosis, 42, 337–345.
- Kihlstrom, J.F. (1995). The trauma-memory argument. Consciousness and Cognition, 4, 63–67.
- Knapp, S., & VandeCreek, L. (1996). Risk management for psychologists: Treating patients who recover lost memories of childhood abuse. Professional Psychology: Research and Practice, 27, 452-459.
- Krass, J., Kinoshita, S., & McConkey, K.M. (1988). Hypnotic memory and confident reporting. Applied Cognitive Psychology, 2, 35–51.
- Lindsay, D.S. (1995). Beyond backlash: Comments on Enns, McNeilly, Corkery, and Gilbert. The Counseling Psychologist, 23, 280-289.

- Lindsay, D.S., & Read, J.D. (1994). Psychotherapy and memories of childhood sexual abuse: A cognitive perspective. *Applied Cognitive Psychology*, 8, 281–338.
- Loftus, E.F. (1993). The reality of repressed memories. American Psychologist, 48, 518-537.
- Loftus, E.F. (1997, September). Creating false memories. Scientific American, 277, 70–75.
- Loftus, E.F., Garry, M., & Feldman. J. (1994). Forgetting sexual trauma: What does it mean when 38% forget? *Journal of Consulting and Clinical Psychology*, 62, 1177–1181.
- Loftus, E.F., Milo, E.M., & Paddock, J.R. (1995) The accidental executioner: Why psychotherapy must be informed by science. *The Counseling Psychologist*, 23, 300–309.
- Loftus, E.F., Polonsky, S., & Fullilove, M.T. (1994). Memories of childhood sexual abuse: Remembering and repressing. *Psychology of Women Quarterly*, 18, 67–84.
- London, R.W. (1997). Forensic and legal implications in clinical practice: A master class commentary. *International Journal of Clinical and Experimental Hypnosis*, 45, 6–17.
- Lynn, S.J. & McConkey K.M. (Eds.) (1998). Truth in memory. New York: Guilford.
- Lynn, S.J., & Payne, D.G. (1997). Memory as the theater of the past: The psychology of false memories. *Current Directions in Psychological Science*, 6, 55.
- Lynn, S.J., & Rhue, J. (Eds.) (1994). Dissociation: Clinical and theoretical perspectives. New York: Guilford.
- Lynn, S.J., Kirsch, I., & Rhue, J.W. (1996). Maximising treatment gains: recommendations for the practice of clinical hypnosis. In S.J. Lynn, I. Kirsch, & J.W. Rhue (Eds.). Casebook of clinical hypnosis (pp. 395–406). Washington, DC: American Psychological Association.
- Macmillan, M. (1991). Freud evaluated: The completed arc. Amsterdam: North-Holland.
- McConkey, K.M. (1992). The effects of hypnotic procedures on remembering: The experimental findings and their implications for forensic hypnosis. In E. Fromm & M.R. Nash (Eds.). *Contemporary hypnosis research* (pp. 405–426). New York: Guilford.
- McConkey K.M. (1995). Hypnosis, memory, and the ethics of uncertainty. *Australian Psychologist*, 30, 1–10.
- McConkey, (1997). Memory, repression, and abuse: Recovered memory and confident reporting of the personal past. In L.J. Dickstein, M.B. Riba, & J.M. Oldham (Eds.). *Review of psychiatry, vol.* 16 (pp. II–55—II–78). Washington, DC: American Psychiatric Press.
- McConkey, K.M. (in press). Hypnosis and recovered memory: Evidence-based practice. In G.D. Burrows, R.O. Stanley, & P.B. Bloom (Eds.). *Advances in clinical hypnosis*. New York: Wiley.
- McConkey, K.M., Barnier, A.J., & Sheehan, P.W. (1998). Hypnosis and pseudomemory: Understanding the findings and their implications. In S.J. Lynn & K.M. McConkey (Eds.). *Truth in memory* (pp. 227–259). New York: Guilford.
- McConkey, K.M., & Kinoshita, S. (1988). The influence of hypnosis on memory after one day and one week. *Journal of Abnormal Psychology*, 97, 48–53.
- McConkey, K.M., Labelle, L. Bibb, B.C., & Bryant, R.A. (1990). Hypnosis and suggested pseudomemory: The relevance of test context. *Australian Journal of Psychology*, 42, 197–205.
- McConkey, K.M., & Sheehan, P.W. (1995). *Hypnosis, memory, and behavior in criminal investigations*. New York: Guilford.
- McElroy, S.L., & Keck, P.E. (1995). Misattribution of eating and obsessive-compulsive disorder symptoms to repressed memories of childhood sexual or physical abuse. *Biological Psychiatry*, 37, 48–51.
- McGaugh, J.L. (1992). Affect, neuromodulatory systems, and memory storage. In S.-A. Christianson (Ed.). *The handbook of emotion and memory: research and theory* (pp. 245–268). Hillsdale, NJ: Erlbaum.

- Mullinar, L., & Hopkinson, S. (1997). The Liz Mullinar story. Sydney: Hodder & Stoughton.
- Mullinar, L., & Hunt, C. (Eds.) (1997). Breaking the silence: Survivors of child abuse speak out. Sydney: Hodder & Stoughton.
- Nash, M.R. (1994). Memory distortion and sexual trauma: The problem of false negatives and false positives. International Journal of Clinical and Experimental Hypnosis, 42, 346-362.
- Nogrady, H., McConkey, K.M., & Perry, C. (1985). Enhancing visual memory: trying hypnosis, trying imagination, and trying again. Journal of Abnormal Psychology, 94, 195–204.
- Orne, M.T. (1979). The use and misuse of hypnosis in court. *International Journal of Clinical and* Experimental Hypnosis, 27, 311-341.
- Payne, D.G., Neuschatz, J.S., & Lampinen, J.M., & Lynn, S.J. (1997). Compelling memory illusions: The qualitative characteristics of false memories. Current Directions in Psychological Science, 6, 56-60.
- Pendergrast, M. (1995). Victims of memory: Incest accusations and shattered lives. Hinsesburg, VT: Upper Access.
- Pezdek, K. (1994). The illusion of illusory memories. Applied Cognitive Psychology, 8, 339–350.
- Pezdek, K., & Banks, W.P. (Eds.) (1996). The recovered memory/false memory debate. San Diego, CA: Academic Press.
- Pope, H.G., & Hudson, J.I. (1995). Can memories of childhood sexual abuse be repressed? Psychological Medicine, 25, 121-126.
- Pope, K.S. (1996). Memory, abuse, and science: Questioning claims about the false memory syndrome epidemic. American Psychologist, 51, 957-974.
- Pope, K.S., & Brown, L.S. (1996). Recovered memories of abuse: Assessment, therapy, forensics. Washington, DC: American Psychological Association.
- R v Eishauer (1997, September 19). Unreported, New South Wales Court of Criminal Appeal.
- R v Jenkyns (1993). New South Wales Law Reports, 32, 712–728.
- R v McFelin (1985). New Zealand Law Reports, 2, 750-768.
- R v Tillott (1995). New South Wales Law Reports, 38, 1–46.
- Read, J.D., & Lindsay, D.S. (1994). Moving toward a middle ground on the false memory debate: Reply to commentaries on Lindsay and Read. Applied Cognitive Psychology, 8, 407-435.
- Roberts, H. (1998). The reliability of recovered memories of sexual abuse. Australian Law Journal, 72, 194-196.
- Royal Australian and New Zealand College of Psychiatrists (1996, May). Clinical memorandum # 17: Guidelines for psychiatrists dealing with repressed traumatic memories. Sydney: Royal Australian and New Zealand College of Psychiatrists.
- Royal College of Psychiatrists. (1997). Reported recovered memories of child sexual abuse: Recommendations for good practice and implications for training, continuing professional development and research. Psychiatric Bulletin, 21, 663-665.
- Royal Commission into the New South Wales Police Service. (1997). Final report volume IV: The paedophile inquiry. Sydney: Government of New South Wales.
- Schacter, D.L. (Ed.) (1995). Memory distortion: How minds, brains, and societies reconstruct the past. Cambridge, MA: Harvard University Press.
- Schacter, D.L. (1996). Searching for memory: The brain, the mind, and the past. New York: Basic Books.
- Shobe, K.K., & Kihlstrom, J.F. (1997). Is traumatic memory special? Current Directions in Psychological Science, 6, 70–74.

- Singer, J.L. (Ed.). (1990). Repression and dissociation: Implications for personality theory, psychopathology, and health. Chicago, IL: University of Chicago Press.
- Smith, W.H. (1996). When all else fails: Hypnotic exploration of childhood trauma. In S.J. Lynn, I. Kirsch, & J.W. Rhue (Eds.). Casebook of clinical hypnosis (pp. 113-130). Washington, DC: American Psychological Association.
- Spanos, N.P. Multiple identities and false memories. Washington, DC: American Psychological Association.
- Spence, D.P. (1982). Narrative truth and historical truth. New York: Norton.
- Spence, D.P. (1994). Narrative truth and putative child abuse. International Journal of Clinical and Experimental Hypnosis, 42, 289-303.
- Spiegel, D. (Ed.) (1994). Dissociation: Culture, mind and body. Washington DC: American Psychiatric Press.
- Terr, L. (1994). Unchained memories: True stories of traumatic memories, lost and found. New York: Basic Books.
- Thomson, D.M. (1995). Allegations of childhood abuse: Repressed memories or false memories? Psychiatry, Psychology, and Law, 2, 97–105.
- van der Kolk, B.A. (1994). The body keeps the score: Memory and the evolving psychobiology of posttraumatic stress. Harvard Review of Psychiatry, 1, 253–265.
- van der Kolk, B.A., & Fisler, R. (1995). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. Journal of Traumatic Stress, 8, 505-525.
- Williams, L.M. (1994). Recall of childhood trauma: a prospective study of women's memories of child sexual abuse. Journal of Consulting and Clinical Psychology, 62, 1167–1176.
- Williams, L.M. (1995). Recovered memories of abuse in women with documented child sexual victimisation histories. Journal of Traumatic Stress, 8, 649–674.
- Yapko, M.D. (1994). Suggestions of abuse: True and false memories of childhood sexual trauma. New York: Simon & Schuster.

INTRODUCTION TO HYPNOSIS WITH CHILDREN AND ADOLESCENTS

Barry J. Evans Department of Psychiatry, University of Melbourne

This section includes four papers, each focusing on children and adolescents and the utility of hypnosis as an adjunct to treatment for these groups, for both medical and psychological conditions. These papers also provide excellent supportive material to that provided earlier by Samuel LeBaron in his paper on management of pain in children.

In a background paper written specifically for this book, Lachlan Lipsett examines the structure and content of cognitive and psychological processes in the individual, from birth through to adolescence, integrating Piagetian views on cognitive development and the views of Erikson on psychosocial development. While this detail may seem removed from the clinical setting, even for practitioners who specialise in working with children and adolescents, it provides the reader with a clear and specific description of cognitive processing in a younger population and makes obvious the need to carefully tailor hypnotic inductions and deepening techniques to the particular client. Lipsett draws out this point by tabling appropriate induction techniques, by age.

In the second paper in this section, William C. Wester II, writing in *Clinical hypnosis with children*, describes in a practical way how to prepare children for hypnotic experiences. He makes the point, strongly emphasised by Samuel LeBaron, that parents and staff need to be involved when using hypnosis with children. The author then details three hypnotic induction techniques for younger children.

In the third paper, Leora Kuttner, also writing in *Clinical hypnosis with children*, discusses the nature of the hypnotic state in children. She confirms Lachlan Lipsett's argument that, while the chronological age of the child is relevant, equally important to the therapist is the individual's cognitive and psychosocial development, when selecting hypnotic induction and deepening techniques. The author then provides a number of case illustrations to demonstrate her arguments.

In the final paper in this section, Drs Chrissi and Barry Hart discuss the many applications of hypnosis with a range of childhood and adolescent problems. They demonstrate the relationship between "hypnosis" and "imaginative involvement" in childrens' cognitive processing and then present a number of principles which they argue underly the application of hypnosis as an adjunct to therapy. Specific hypnoanalytic techniques are described and the paper concludes with a case illustration.

Together, these four papers present a thorough and inclusive analysis of the many applications of hypnosis with children and adolescents.

HYPNOSIS WITH CHILDREN AND ADOLESCENTS: SOME DEVELOPMENTAL CONSIDERATIONS

Lachlan J. Lipsett Medical Practitioner in Private Practice

This paper examines the development of cognitive processes through childhood and adolescence, integrating the views of Piaget on cognitive development and Erikson's views on psychosocial development. The aim of the paper is to examine how the child's or adolescent's psychological and cognitive status influence the selection of hypnotic induction techniques and the use of language, imagery, and metaphor in hypnotherapeutic work. The point is reinforced constantly that inductions and therapy processes, which do not take into account the client's age and cognitive and psychological development, may often fail.

It is, of course, a truism that any practitioner using hypnosis must first be a therapist and if hypnosis is employed in the treatment of children and adolescents then the therapist must be competent to assess, diagnose, and treat patients and clients in these age groups. It is obvious that a child is not an adult and this must not be overlooked when using hypnosis in any type of therapy. The words, ideas, and images used by the therapist must be chosen to match the child's vocabulary and must be comprehensible to the child. If a child is seen over a period of time, what was appropriate once may no longer suit him as he matures further (I will use "him" to refer to both males and females).

The aim of this paper is not so much to discuss the applications of hypnosis to childhood and adolescent problems — these are addressed in the following papers and discussed in detail in Wester and O'Grady (1991) and Olness and Kohen (1996). Rather, my intention is to discuss some developmental cognitive and psychological considerations which may assist the practitioner working with children and adolescents, to match their intention to each client's capacity for thought. In the light of these factors, the range of hypnotic induction strategies applicable across the early lifespan can then be enumerated.

HYPNOTISABILITY

Olness and Gardner (1988) note that most normative studies have concluded that hypnotic ability is limited in children below the age of three years, is greatest between the ages of seven years and 14 years and decreases slightly in adolescence. It then remains stable through midlife before decreasing again in the elderly. Hilgard noted that "hypnosis reaches its height in the pre-adolescent period because, by that time, language and experience have stimulated imagination and given it content, so that those characteristics, described as child-likeness, have had a full opportunity to bloom . . . [in late adolescence] reality orientations conflict with the enjoyment of a life of fantasy and

adventure, and for many people, this means a reduction in their hypnotisability" (Hilgard, 1971, quoted in Olness & Kohen, 1996, p. 41).

DEVELOPMENT

The most prominent theorist in cognitive development is Jean Piaget, whose theoretical model is used here to introduce some of the developmental issues relevant when using hypnosis with children. His work can be integrated with that of Erik H. Erikson, who described children's emotional development as occurring in stages, and who linked his model with that of Piaget, likening their two approaches to "weaving with different strands the same cloth of development" (Wall, 1991, p. 5).

Piaget in particular developed an extensive vocabulary in the development of his theory. I use his terms sparingly and do so in an attempt to define and explain the cognitive processes operating at each stage of childhood development.

Hypnosis as an adjunct to therapy is practised in the context of the child's cognitive and emotional capacities. Each child client's cognitive abilities and emotional needs change over time and the work of therapy is assisted by an understanding of child development. This is true, not only for the therapist employing hypnosis in the treatment of children, but also for those treating adults, as these clients once were children and they bring the legacy of their past with them. First experiences have great impact and, unless something happens to change them, those experiences will be the individual's reference for the future. Watkins and Watkins make this point strongly when talking about clients with dissociative identity disorder. The authors describe the thought processes of alters (overt ego-states not requiring hypnosis for their activation, whose origin is often in severe child abuse) as being frozen in time. They write: "When we recognise that alters are usually children whose reasoning has been frozen at the time they originated, their puzzling actions can be better understood . . . Clinicians often fail to realise this when confronted with an adult body. We have usually forgotten how we thought (concretely) when we were children . . . Since alters think concretely, they frequently are not aware of the consequences of their behaviour. One alter attempted to get the patient to drink poison, reasoning, "When she's gone, then I'll come out all the time and be in charge"" (1997, p. 52).

ERIKSON'S STAGES OF SOCIAL DEVELOPMENT

Before examining Piaget's theory of cognitive development, I wish to briefly introduce the stages of psychosocial development across the lifespan, developed by Erikson (1950, 1978). According to Erikson, individuals pass through eight developmental stages on the way to maturity. Each stage is characterised by its own type of interpersonal and social crisis, which ultimately are the great tests of the ego's character.

Typically, there are two opposing tendencies operating at the time of each

Table 1: Psychosocial Stages of Development (Erikson)

STAGE	AGE	PSYCHOSOCIAL TASK	RELATED EGO STRENGTH
1	0-1 year	Trust vs Mistrust Basic needs must be met reliably	Норе
2	1-3 years	Autonomy vs Shame and Doubt Learning independence and self-confidence	Will
3	3-6 years	Initiative vs Guilt Initiating activities and learning self-control	Purpose
4	6-puberty	Industry vs Inferiority Developing physical, cognitive, and social skills	Competence
5	adolescence 12-19 years	Identity vs Identity Confusion Trying out roles and forming an integrated identity	Fidelity
6	20-24 years	Intimacy vs Isolation Forming close, lasting commitments	Love
7	25-40 years	Generativity vs Stagnation Contributing to the world through family	Care
8	41 on	Integrity vs Despair Thinking back on life with either satisfaction or disappointment	Wisdom

crisis. The crisis of each stage is resolved when the relative balance between the two tendencies is settled. Out of each crisis grows the "ego strengths" that each individual needs to mature and survive in an emotionally healthy manner.

In this paper, I will be integrating the first five of Erikson's stages with Piaget's theory of cognitive development.

It is important that the child achieves some measure of success with the tasks identified by Erikson. As he himself said: "the strength acquired at any stage is tested by the necessity to transcend it in such a way that the individual can take chances in the next stage with what was most vulnerably precious in the previous one" (cited in Wall, 1991, p. 5).

The development of thought is a gradual progression from a situation where the environment is overwhelmingly in control, as in infancy, to eventual autonomy of thought. Mature thought processes respond to the logic of the situation and judgments are made on the logical relationships between objects, and not in terms of what appears to be, as occurs at earlier levels of development. People who have psychological problems seem to be at the mercy of their ideas about the world rather than being in a position where their ideas are the result of their own logical thinking. Both cognitive structures (schemas) and processing strategies — the ultimate being those that form a logical system — become more sophisticated over time.

PIAGET'S DEVELOPMENTAL MODEL

Piaget described three main stages of early cognitive development (each with a number of sub-stages), each being qualitatively different from the others (Beard, 1969; McNally, 1973):

1. Sensorimotor Intelligence from Birth until the Appearance of Language (0-18 Months)

Reflex Reactions

Primary Circular Reactions — Chance Learning

Secondary Circular Reactions

Co-ordination of Secondary Schemas

Tertiary Circular Reactions

The Invention of New Means through Mental Combinations

2. Preparation and Realisation of Concrete Operations of Classes, Relations, and Numbers (18 months to 11-12 years)

Pre-operational stage:

Preconceptual Stage 18 months to 4 years Intuitive Stage 4 years to 7 years 7 years to 11-12 years Concrete Operations:

3. Formal Operations start about 12 years and Achieve Full Development about Three Years Later

Most of a child's thinking in any one stage or period has a characteristic structure. As children develop, the structures built at a younger age gradually evolve into an integral part of the structures of the following stage by a process Piaget called "accommodation." The accommodation of existing schemas occurs as a consequence of interaction with the environment. Accommodation to each new situation results in the differentiation of a previous structure into a new one. What form this accommodation takes is determined by the state of the child's current intellectual structures.

The sequence of periods of development is constant, but the age at which a stage is realised cannot be absolutely fixed. The environment may encourage, impede, or even prevent cognitive development. In addition, one stage may appear fairly early with one kind of situation or material but later with another - so-called "horizontal displacement" (e.g., conservation of substance with change of shape at age six with conservation of volume at age 10 or 11 years). A second type of displacement — called "vertical displacement" — is described by Piaget as a situation where a structure is reconstructed by means of different operations (e.g., orientation in the environment is done by a baby physically — in time this operation is internalised and such orientation can be done mentally).

Piaget believed that the mind has structures in the same way that the body has structures to deal with the world. These mental structures or constructs Piaget called schemas (singular schema). (Piaget later distinguished between scheme/s for organisation of action and scheme/s for organisation of images.)

The individual adapts to, and organises their environment through the cognitive structures he has available. A two-month-old child, when given a rattle, applies the schemas available — probably his "grasp-suck" schema — and will be seen to grasp the rattle, place it in his mouth, and suck it. A nine-month-old child who receives a rattle has more schemas available and thus, a wider range of behaviours may be observed (e.g., put the rattle in his mouth and/or suck, shake, roll, hit, or throw it).

The developing infant adapts his schemas through the interaction of maturation and experience. For Piaget, adaptation has two complementary aspects: (i) assimilation and (ii) accommodation. Assimilation is the intellectual process whereby the individual deals with the environment in terms of his current understandings (schemas) — relating this new experience to something which has already been experienced. At the same time as the individual is seeing the environment in familiar terms, any discrepancies present demand some adjustment of the old schemas — "accommodation" is the label applied to this process of change.

A child with a "four-legged-animal" schema called "horse," may mistakenly call a cow, on first sight, a horse. This is the process of assimilation — forcing experience into an existing schema. At the same time, they may add to their knowledge that four-legged animals may have horns — accommodation: experience forcing refinement of an existing schema or schemas. The process of balancing accommodation and assimilation Piaget called equilibration which, he argued, results in a desired state of equilibrium.

Piaget noted that motivation to learn is highest when the individual is exposed to a moderately novel situation — neither too familiar nor too novel to correspond to existing schemas. It is not the object which interests the child but how the object or experience relates to his previous experiences and to his current cognitive structures. What relevance has Einstein's theory of relativity to a five-year-old child? The child simply ignores any feature of the environment which is outside their accommodative grasp because the task is too difficult or too far removed from the current state of his schemas for it to have any significance. Similarly, if a task is so easy that the individual can assimilate it easily, he becomes bored and quickly loses interest — just what happens if an adult is given a baby's dummy. In both excessively complex or overly simple tasks, a balance of accommodation and assimilation is lacking — a state of equilibrium cannot be achieved and the individual loses interest.

The individual can only respond to experiences for which he is ready. This is relevant to school teachers who ideally present children with problems specifically designed for their state of development. It is equally vital for the therapist to present child patients and clients with experiences which allow the child to change their problem schemas which cause pain or emotional upset into new schemas with finer distinctions which avoid these painful outcomes. This therapeutic transformation of schemas is achieved through the process of accommodation.

SENSORIMOTOR STAGE (BIRTH TO 24 MONTHS)

In Piagetian terms, the sensorimotor stage extends from birth to 18-24 months. Although the newborn child cannot think at birth, it has been clearly demonstrated

that a child's earliest behaviour can change as the result of experience. Even the unborn child can learn. At birth, Piaget describes the child as having certain structures (i.e., reflexes) which they can modify. It is the progressive modification of these primitive reflexive schemas that sees the developing individual come to possess schemas of increasing complexity, which allow more sophisticated thought.

The sensorimotor stage sees the child progress from reflexive reactions to the stage where he starts to talk and, therefore, use symbols. By the age of two years, the schemas available to the child are more sophisticated, complete, and efficient than the rudimentary reflexive schemas available at birth. Nonetheless, the twoyear-old's cognition is still very limited.

The development of the concept that objects have permanence and have an existence in their own right eventually leads to the child's ability to see himself as a separate part of the environment. In time, the child will be able to relinquish his ego-centric view of the world — to be able to see the world from any perspective other than his own — that is, put himself mentally in the position of another person.

The second important gain of the sensorimotor period is the beginning of awareness of cause-effect relationships. The child experiences the world as a place of magic — a place where it seems as if things happen because of the child's existence — and, if there are bad effects, the unsophisticated child sees himself as the cause of the bad outcome. The child has no real concept of time.

During the child's first year, he moves from primitive imitative ability toward independent behaviour. This equates with Erikson's first stage of "trust vs mistrust" (0-1 years) during which the child's social and emotional development move towards a reciprocally trusting relationship with his primary caregiver which hopefully, results in a sense of hope and faith in those more powerful than oneself. The child is constantly assessing the amount of trust he is willing to place in his world.

The commencement of Erikson's second stage of autonomy vs shame and doubt (1-3 years) corresponds with Piaget's sub-stages of coordination of secondary schemas and tertiary circular reactions (described below), which mark the beginning of the child's ability to create totally new patterns of behaviour.

General Assimilation and Reflex Reactions (O - 1 month)

The newborn child possesses the basic reflexes of sucking, grasping, and crying and is able to move the various parts of his body. Initially the child will suck anything, regardless of what it is and will grasp anything that touches the palm of his hand. Piaget asserted the infant is exercising already existing schemas. During the first month, the infant gradually modifies his schema which helps distinguish between satisfying and non-satisfying suckable objects and his behaviour begins to show the first signs of direction — but not intentionality. By the end of this stage the child can distinguish in a rudimentary way between objects.

Primary Circular Reaction (2-4 months)

During these months, the infant's schemas are further integrated with coordination of such behaviours as thumb sucking and moving the head in the direction of sounds. These schemas were not present at birth but draw on those that were. A circular reaction is one in which the sequence is repeated once completed. These circular reactions are called primary as they are centred on the infant's body (e.g., if the infant moves his hand across his field of vision and finds this pleasing, this action will be repeated later on). The child's attention is starting to turn out to the environment but when an object disappears from view, as far as the infant is concerned, it ceases to exist.

Secondary Circular Reactions (4 - 8 months)

The next developmental sub-stage sees circular reactions incorporating objects in the child's environment. These are called secondary, as they involve the coordination of actions which are no longer reflexive. The reaching, pushing, and pulling behaviours of primary circular reactions are coordinated into a higher order of schema (e.g., pulling a ribbon on a toy attached to the cot so the toy will move). The infant begins to develop the concept of object permanence — when an object is removed from a child's gaze, he will briefly look for the absent object but gives up quickly. As the infant becomes more adept at moving objects around, he develops an interest in the relation of objects with one another — the beginnings of schemas applying to space. Nonetheless, the child remains egocentric and is still a long way from seeing himself as a self.

Coordination of Secondary Schemas (8 - 12 months)

Towards the end of the child's first year, the infant comes to see objects other than himself as causes of effects, starts to anticipate outcomes and clearly shows directed behaviour. The child selects the means before initiating behaviour. He will remove a barrier to get to an object. The child's dexterity increases and he examines objects more effectively, realising that objects remain the same no matter what position they are in. A child given a bottle the wrong way round will quickly turn the bottle around.

The first months of life are a time of "magic" when the infant mistakenly believes that cause-effect relations result from the infant's own internal psychological processes. During this period, the child also believes that two events occurring close together in time must be causally linked. As the first 12 months draw to an end, the infant begins to develop a dual system of causality and the appearance of secondary circular reactions allows the child to begin to separate physical and psychological causality.

Tertiary Circular Reactions (12-18 months)

Secondary circular reactions are characterised by the rigid application of simple schemas, whereas tertiary reactions are so labelled because, by age one, the child

begins actively experimenting with schemas, acting as if interested in the outcomes. By trying different actions he "experimentally" learns new ways to reach goals. When a child at this stage comes upon a problem for which he has no pre-existing schema, he will experiment and develop new means for the solution of the problem. Piaget claimed this to be an indication of intelligent behaviour, not yet the ability to think - something Piaget reserved to the application of logical structures.

Object permanence is becoming more strongly established. Children at this age can cope with "sequential displacements," looking for hidden objects. Formerly children would look where the object was usually hidden, but they are not yet ready to search for objects which have not been seen hidden — this comes in the next stage of their development.

The child may look to another to help him when required (e.g., placing the hand of an adult on a box which the infant is unable to open). Cognitive developments at this age allow the child to develop awareness of events occurring totally separate from the child and his control and wishes.

Beginnings of Thought (18-24 months)

At this age, the child is able to create internal representations of objects mentally and to use these representations for the solution of problems. Previously, he had to actively experiment to find solutions to problems, but now the child can develop solutions without active experimentation (e.g., when confronted with a box, instead of trying every schema he has available — his previous strategy he now examines the box critically and then suddenly slips his finger into the crack and opens it). "Thought" at the tertiary circular reaction sub-stage is characterised by the experimental combination of schemas in the physical world — "thought" in sub-stage six is representational — now the child can represent and combine actions internally which is a much more efficient and rapid way of dealing with the environment.

The concept of object permanence becomes more developed, with the child able to initiate a search for an object which he does not see — indicating that he can "keep in mind" an image of an object and realise that, no matter where the object is, it has permanence.

Cause and effect reasoning is more highly developed. A child pushing a box around the room who gets it stuck between the wall and a chair will, at this stage, if unable to pull it back because of lack of room for both the box and himself, likely go around the chair and push the box back the way it went in.

During the child's second year, he begins to develop concepts of time and object permanence. The development of the construct of causality is also occurring. By this, Piaget means the relatively simple capacity to anticipate what consequences follow from a certain cause. In adults, psychological causality refers to will (volition) and physical causality refers to more objective causeand-effect relations.

Summary

When working with pre-verbal children in their first year of life, it is important for the therapist to bear in mind the patient or client is prey to magical thinking (Piaget) and in the process of developing a sense of trust (Erikson). Thus, a therapist utilising self-controlling techniques beyond the child's understanding, may find that, rather than being of assistance, these could be mistaken as the cause of their distress. Simple distractional techniques are probably most appropriate at this age range, in their similarity to the comforting actions of an adult. These issues are also revisited when working with children, adolescents, and adults who have sustained damage at a very young age, as they often retain beliefs that they are the cause of the event. They are unable to distinguish internal feeling, external events, and proximity.

Wall (1991) recommends hypnotic interventions such as rocking, patting, stroking, repetitious auditory input (singing/rhyming), visual distraction with toys, or presentation of a familiar toy to hold — all of which serve to hold the child's attention outside of him/herself rather than trying to promote a sense of internal control over an event — something the child is not yet capable of exercising.

Olness and Kohen (1996) present a list of induction techniques suitable for children at this age (refer Table 2 below). This table will be referred to in relation to induction techniques for children of each age.

A 14-month-old boy (A.K.) with a middle ear ventilating tube (grommet) was troubled by a painful ear infection with accompanying purulent aural discharge. I cleaned his ear by repeated "mopping" with pieces of cotton wool twisted onto a wire wool-carrier. The boy was sitting quietly on his mother's lap while she soothed him kinaesthetically by stroking his hair. The boy was watching his mother intently as if to find out from her how he should interpret his new experience. He was relaxed and the discharge was easily cleared away before the application of antibiotic eardrops.

PREOPERATIONAL STAGE (2-7 YEARS)

The preoperational period extends from approximately 2 to 7 years. This period is often sub-divided into two shorter periods: (a) preconceptual or symbolic; and (b) intuitive or perceptual. The styles of thinking encountered in both sub-stages are not mutually exclusive however.

Preconceptual/Symbolic Period of the Preoperational Stage (2-4 years)

Cognitive processes in the preconceptual or symbolic sub-stage can be further categorised into five specific types:

Mental Symbols Symbolic Play Drawing Language Reasoning

Table 2: Induction Techniques by Age

Preverbal (0 - 2 years)

Tactile stimulation, stroking, patting. Kinaesthetic stimulation: rocking, moving an arm back and forth.

Auditory stimulation: music or any whirring sound such as a hairdryer, electric shaver, vacuum cleaner placed out of reach of the child.

Visual stimulation- mobiles or other objects that change shape, colour, or position.

Holding a doll or stuffed animal.

Early verbal (2 - 4 years)

Blowing bubbles.

Pop-up books.

Story-telling.

Stereoscopic viewer.

Favourite activity.

Speaking to the child through a doll or stuffed animal.

Floppy Raggedy Ann or Andy.

Teddy bear.

Watching induction of self on videotape.

Preschool and early school (4 - 6 years)

Blowing breath out.

Favourite place.

Multiple animals.

Flower garden.

Storytelling (alone or in a group).

Mighty oak tree.

Coin watching.

Letter watching.

Pop-up books.

Television fantasy.

Stereoscopic viewer.

Videotape.

Bouncing ball.

Thermal (and other) biofeedback.

Finger lowering.

Playground activity.

Table derived from Olness and Kohen (1996), p. 77.

Mental Symbols

The most important cognitive advance in this period is the ability of the child to represent something (object, event, or conceptual schema) by a "signifier" (language, mental image, or symbolic gesture). Children can represent (think about) something that is not physically present. They can think about familiar objects and events, together with the memories of past experiences with those

Middle childhood (7 - 11 years)

Favourite place.

Favourite activity.

Cloud gazing.

Flying blanket.

Videogames (actual or imagined)

Riding a bike.

Arm lowering.

Blowing breath out.

Favourite music.

Listening to self on tape.

Coin watching.

Fixation at point on hand.

Hands (fingers) moving together.

Arm rigidity.

Adolescence (12 - 18 years)

Favourite place/activity.

Sports activity.

Arm catalepsy.

Following breathing.

Videogames (actual or imagined).

Computer games (actual or imagined).

Eye fixation on hand.

Driving a car.

Playing or hearing music.

Hand levitation.

Fingers/hands together as magnets.

Fantasy games (e.g., dungeons and dragons).

objects or events. Thus, not only has the child the ability (from the sensorimotor period) to internalise actions to solve sensorimotor problems without direct action — but can now form internal representations of objects and events (e.g., a 16-month-old child who witnessed a playmate become angry, scream, and stamp her foot was seen to imitate the scene a couple of hours later, laughing). This deferred imitation constitutes the beginning of representation — a sequence of behaviour is witnessed, represented in some way and later accessed and imitated. To Piaget, overt imitation (sensorimotor imitation) gradually becomes internalised until it becomes possible to speak of internalised imitation as a mental symbol. Internal imitation eventually becomes so efficient that it is very difficult to detect overt behaviour at all. Practitioners of neurolinguistic programming describe the importance of attending to "minimal cues," which are subtle overt behaviours related to the client's internal thoughts and feelings.

Piaget considered the act of producing a visual image as a form of internal imitation of the original visual perception. A visual image is thus a mental symbol and, like other symbols, is a personal construct. Imitation, no matter in which modality it occurs, involves accommodation — modification of the schemas (structures) so they will parallel the behaviour of another person or the characteristic of an object. These symbols are created by the individual themself. Piaget calls words signs. Words are arbitrary, conventional, and are transmitted culturally. When a child adds a word to his vocabulary, it is through imitation and this represents the acquisition of an external model. A very important aspect of the formation of mental symbols is the meaning attached to them. As the child matures, the symbolic function involves both symbol (what the object means to the child himself) and sign (word — the culturally accepted label). What is signified is not the real object — it is always an intellectual or mental construction of the real object. For example, what does a child's mental symbol of a "dog" refer to? It depends on the child and his experiences with dogs. Different children assign "dog" to different schemas — one may love dogs, another may fear them. "Dog" thus refers to the particular understanding that, through assimilation, each child constructs. The schemas which provide the meaning (the thing signified) have been formed as the result of the interaction with the environment. The resultant meaning comes about through accommodation (updated meaning in response to environmental pressures) and assimilation (existing schemas define the meaning).

"Internal imitation" is the same as "accommodation" as the child is forced to create structures to represent an aspect of his environment. This leads to the formation of symbols which are developed as meanings through assimilation into the existing personal mental schemas of the individual. Words (signs) are acquired through imitations that are external to the child. The meanings of words are largely decided by the culture or sub-culture to which the child belongs. Words derive their usefulness in communication because of their common or shared signification — even if there are individual differences in the content of the schemas the words activate.

Symbolic Play

It is impossible for a young child to adapt to reality as an adult would because he lacks both the breadth of schemas and the sophistication of cognitive structures required. Much of what happens around a child just washes over him. In order to match his experience to his level of cognitive development, a child engages in symbolic play. In this he can match his present needs with his present ability. Play largely consists of assimilation of incoming stimuli into already existing schemas — a process of consolidation whilst imitation is more a process of accommodation with modification of schemas.

Between two and four years of age, symbolic play forms a large part of the child's activities. Play helps the child handle the frustrations and the conflicts which the child experiences when forced to conform to social rules and to obey commands. The child often does not understand the purpose of rules and commands which frequently cut across his needs and desires. Much of the child's symbolic play involves affective conflicts. The child can compensate for unmet needs, can resolve conflicts and can mentally reverse the roles of obedience and authority (e.g., a young girl can make her doll eat all her vegetables). Symbolic play allows the child to interpret the environment in his own terms and helps maintain emotional stability. The two- to three-year-old child is able to produce and comprehend metaphors tied to visual input (e.g., fireworks might be described as flowers).

Drawing

Drawing allows the child to imitate reality and involves both imitation and accommodation. Children of about two-and-a-half years scribble and this, for them, is pure play. Drawing can be said to have begun when the child starts to represent forms. Until eight or nine years of age, the child's intent is realistic but the performance is one of drawing the schemas, not what is seen. This early phase, when the child scribbles and then sees a schema in the scribble, is known as "fortuitous realism." The next stage is "failed realism" — a time when the child includes some of the required elements but fails to coordinate them into a total picture — the time of heads with legs coming out of them . . .!

Next comes "intellectual realism" when the child includes all that should be there but does not allow for perspective (e.g., a man behind a fence still has his legs drawn). Around eight or nine years of age, the child reaches "visual realism" when he draws what he can see — perspective is evident and there is clear evidence of a sense of proportion. Children about seven years of age develop the ability to appreciate the permanence of spatial relationships in two and three dimensions and develop the ability to see things from the physical position of another.

Language

The use of words in the sensorimotor period is not symbolic — the meaning of words to very young children is not constant and, under two years of age, children respond in a way which suggests that meaning is personal and not representative of a shared social meaning. In the sensorimotor period the child uses single words, advancing to two-word sentences by the end of their second year. During the third and forth years the child's use of language expands rapidly — gradually mastering the rules of syntax and gradually attaining the ability to use words to stand for absent objects or events as well as for actions and wishes that are immediately present.

Language lets the child represent a long chain of actions very rapidly, unlike sensorimotor patterns which occur in "real" time. Thought, through language, can represent simultaneously all the elements of an organised structure.

Reasoning

Children of two or three do not reason inductively or deductively — they reason transductively. In transductive reasoning, the child moves from specific to specific without any particular logical connection (e.g., Piaget's daughter advised her father "I haven't had my nap so it isn't afternoon."). The child's desires can distort their thinking — in a sense the child's reasoning is aimed at achieving a personal goal. At this age, children are unable to form true concepts as they cannot cope with general classes — they cannot distinguish between "all" and "some." Piaget described walking with a young child who, on encountering a number of slugs, was not sure whether they were a class of individual slugs, or a single slug which kept on appearing. Preconcepts are schemas which remain midway between the generality of the concept and the individuality of the elements composing them without arriving at either one or other — not true logical concepts. Children cope with "because" statements of causality better than "if" statements which come next. Transductive reasoning seems to have some of the elements of trance logic.

Summary

Preoperational children are seeking to establish a sense of control and mastery. Much of their mental functioning is perceptually based, so children prefer to keep their eyes open. They generally respond well when spoken to through a toy or a puppet. They enjoy being told stories and shown new approaches or pretending to do a favourite activity or seeing something that they like on a TV screen. These techniques enable them to represent (think about) the needed intervention externally.

Ruth Beard (1974) postulated that some restriction on adult behaviour can come from early habitual behaviour which does not become accessible to verbal directions and discussion (i.e., unconscious). Ruth suggested this may mean that therapists should provide verbal explanations or verbal instruction to clients and offer the chance to discuss therapy demands, rather than insisting on blind obedience.

Table 2 above contains a list of appropriate induction techniques for children in the preoperational stage of preconceptual or symbolic thought — called the early verbal stage by Olness and Kohen (1996).

I used the story of Androcles and the lion while treating a 3-year-old boy (RS) who needed painful daily removal of dead skin from the sole of one foot after the blood supply was damaged by an infection. In this story, an escaped slave in Egypt encounters a lion with a thorn in his foot. The slave removes the thorn, a procedure which hurts the lion a bit, and then the lion gets better. Both lion and slave are subsequently captured and taken to Rome where they meet again in the colosseum. *Just as the lion is about to eat the slave, he recognises his old friend and spares him.* Both lion and slave are released and given the freedom of the city.

After the painful initial work had been done on RS's foot with chemical anaesthesia, I found that the usually painful daily debridement could be done while telling this story, with no chemical analgesia. I saw RS six months later and I asked if he remembered the story about Androcles and the lion. He hit me and said nothing!

Intuitive/Perceptual Period of the Preoperational Stage (4-7 Years)

The intuitive / perceptual period sees further development in the child's cognitive progress. Children are now able to give reasons for their actions and beliefs and are able to sort at a "higher" level — by colour or by shape (not initially by colour and shape together). Language development progresses rapidly and assists in the internalisation of behaviour through representation. Thought however, is still restricted in quality and effectiveness because it is dominated by immediate perceptions and by the child's inability to keep more than one relation in mind at a time. The child is egocentric, having trouble distinguishing what "I" think or feel from what "you" think or feel.

These children are unable to keep in mind more than one thing at a time. Children at this stage seem to contradict themselves over time without real concern for the facts because they do not attend to what went before and they are unable to attend to both differences and similarities at the same time. They focus on only one aspect of the situation at the expense of the other. They either ignore the whole in favour of the parts (juxtaposition) or ignore the parts in favour of the whole (syncretism). In syncretism, children's reasoning leads them to group a surprising range of ideas into a confused whole — focusing on their idea of the whole and totally ignoring the differences. In juxtaposition, the child presents a number of related ideas which they are unable to relate to the whole in any meaningful way. For example, a child in the intuitive period through the course of a day answered the question. "What makes a car go?" with the following answers: "The wheels," "The motor," "The petrol," "The steering wheel." Another example of juxtaposition is seen with these successive statements by a child explaining why certain objects float: "A large boat floats because it is heavy," "A small boat floats because it is light," "A raft floats because it is flat," "A needle floats because it is thin."

These children can only concentrate on one aspect of the situation at a time in the intuitive period. This, Piaget called "centration." The classic example of the consequence of attending to only the height or width of an object, not both simultaneously, is seen in children's difficulty with conservation of volume when fluid is poured from one shaped container to another.

Children in the intuitive period do not attend to the "transformation" of say a plasticine ball to a rolled-out shape — they experience two separate perceptual events (i.e., "ball" and "snake") and ignore the transformation. Furthermore, these children in the intuitive thinking stage are not able to mentally return to the starting point. The development of "reversibility" is a characteristic ability of the "concrete thinking" child which allows the child to exhibit "conservation" — the logical structures of transformation and of reversibility compensate for the biasing distortions of perception.

Three- to five-year-old children are calm before watching an exciting visual presentation and exhibit high arousal during the event — which contrasts with say nine-year-old (concrete operational) children, who generally express more anticipatory arousal and lower arousal during the actual performance.

Five- to seven-year-old children are entering the age of high hypnotisability. They are developing the capacity for internal representation without the constraints imposed by a highly developed critical factor.

Table 2 above shows induction techniques suitable for children aged four to seven years, called pre-school and early school children by Olness and Kohen (1996).

I freely try different techniques as I have not set myself the impossible goal of achieving 100 percent successful results on all tasks at first presentation.

Five-year-old CW had a mastoidectomy for acute mastoiditis (osteomyelitis of the skull immediately behind the ear). Two days after I had drilled away the infected bone (general anaesthetic employed for the surgery), I had to start to remove a wound drain of plastic tubing. CW had complained of "pins and needles" in her foot where the intravenous drip for her antibiotics was situated. I induced hypnosis with an arm-lowering induction and she reported the successful transfer of the pins and needles feeling into her hand when she rested it on her foot but she did not follow the suggestions to touch her ear to transfer the pins and needles feeling there declining with a decisive "I don't want to!" Nonetheless, she sat still and let me cut the retaining suture and withdraw the tube a few millimetres as I had wanted. About 15 seconds later CW complained of some mild discomfort and requested some paracetamol.

THE CONCRETE OPERATIONAL PERIOD (7-8 TO 12 YEARS)

Piaget regarded the concrete operational period as by far the most important in the child's overall cognitive development. It is the last of the transitional periods before mature operational intelligence emerges. Concrete operations constitute the first true logical thought. At this level, the child uses operational thought but the content is tied to concrete reality. The clearest indication that a child has reached the concrete level of reasoning is the presence of "conservation." Intuitive children can only reason successfully along a single dimension, while the concrete operational period child has a general logical structure which co-ordinates all the relations of the intuitive period into a reversible system which can compensate internally for the intuitive bias our perceptions can produce (e.g., plasticine ball test in which a child is asked which is bigger — a ball of plasticine or the same plasticine rolled into a snake; water in the jar test — water is poured into differently shaped containers and the child is asked which holds more). Conservation does not come all of a sudden and apply to all conceptual areas. It is typical to find a child able to conserve in one area and not in another. Progress towards conservation is gradual and the underlying logical structure is the same. Conservation of quantity generally precedes conservation of weight. Conservation of volume is realised towards the end of the concrete operational period. Piaget called this the concrete operational period because these children's thinking relates directly to objects and not yet to verbally stated hypotheses. The concrete operational child is concerned with organising and interpreting that which is immediately present and lacks a unified logical system which would allow them to systematically explore abstract relations, independent of content, concerned with the non-present or with hypothetical relationships.

The concrete operations period encompasses Erikson's stage IV: Industry vs Inferiority. It is a latency period before puberty. The child at this stage possesses the internal mental operations and the external physical performance skills to interact successfully — to develop mastery over the environment. The successful child learns to win recognition by producing things — going beyond pleasure at the function of limbs and developing a sense of industry. At this age the child is receiving some form of systematised instruction and, as they become more adept at learning, competency becomes a virtue. The successful child masters many skills valued in society. The danger is that the child may identify too strongly with work and come to see their worth in terms of their performance. During this period the therapist can tap the desire for mastery in these children.

In hypnosis, the aim is to give the child an experience of increased mastery using descriptions of concrete processes or images. These children can enter hypnosis with imaginative inductions but their metaphors should avoid abstractions lest they "go over the child's head." The imagery should be concrete with clear linkage to the desired effect. Induction techniques include arm rigidity, eye fixation, arm lowering, special places, listening to music, favourite activities, magic carpet, cloud car, etc . . .

Table 2 shows hypnotic induction strategies for children aged seven to 12 years (called the middle childhood years by Olness and Kohen (1996)).

A 10-year-old girl (PL), who requires regular removal of wax from her ears, was so frightened that the first treatment was done with a general anaesthetic. Now she is happy to have the wax removed while she distracts herself by reading without interruption. PL thought of this distraction approach herself — bringing a comic the first time she used this approach and the novel she was currently reading on subsequent occasions.

A 10-year-old boy (CL) was taught self-hypnosis in his father's presence. An arm lowering induction, linked to feelings of increasingly greater relaxation, was employed. CL responded very well and was clearly pleased by the recognition both his father and I gave him for his responsiveness. I believe that the sense of mastery CL experienced increased his motivation to practise his self-hypnosis at home.

THE FORMAL OPERATIONS STAGE (12-15 YEARS)

The formal operations stage deals with the possible, not just the real. Adolescents set up hypotheses which they subsequently test for either confirmation or denial. Thinking is propositional — the adolescent manipulates the assertions about data — not the actual data itself. These thinkers can follow the form an argument takes, independent of the concrete content. Thinking is combinatorial, in that the child is able to isolate all the variables inherent in a problem with all their possible combinations. This is also characteristic of hypothetico-deductive reasoning.

There are two major or categories of concrete operations:

- 1. Logico-arithmetic/digital/discrete which includes conservation, relations or ordering and classification.
- 2. Spatial/analogue/continuous which includes Euclidean geometry, projection (location and dimension), and topology.

Children in this age range comprehend the concepts of consequence and order, attributional and relational metaphors and voice intonation to determine emphasis and meaning — but still in a concrete domain.

Formal operations provide for truly abstract reasoning — the formal operations adolescent is able to think about thought and identity. Hypnotic techniques for this group are similar to those used with adults. Metaphors can be employed freely with many of the indirect techniques become feasible (refer Table 2).

16-year-old BG came into my consulting room to have some plastic splints removed from inside her nose after some nasal surgery several days earlier. She had worked herself up into a real state and was crying at the imagined pain she was experiencing before I had even started. In fact, the removal of the splints is generally easy. Part of her seemed embarrassed by her behaviour but she felt she could not help it. I believe that BG was already in a state of self-hypnosis. I offered her two alternatives - to go on feeling the pain that I was not causing or to get things done easily. She requested the latter. I asked her what her favourite activity was - she loved surfing. I suggested she imagine she was down at the beach. Frightened, she said she couldn't. I had to insist very convincingly, that she could take each of my suggestions and, in less than a couple of minutes, she was vividly imagining surfing at Byron Bay, involving all of her senses, which I had nominated one at a time, in her imagined experience. While I generally use a permissive, "maternal" approach, a more directive "paternal" approach was chosen here. While BG was "surfing," I told her I had to get ready to remove the splints. I then cut the securing nylon tie and removed the splints.

I included some post-hypnotic suggestions for continued rapid healing before asking her to return to normal awareness at the end of the wave she was on (because the splints were already out) and that she could be very proud of herself for concentrating so well. This intervention took all of three or four minutes after BG requested the "easy way" to have the splints come out. She was very pleased with herself and what could have been a very unpleasant experience was turned around.

To help me to understand a child's perception of their problem — conscious and unconscious — I often get them to draw a picture explaining what's going on. In children whose capacity for abstract verbal expression is not yet fully developed, the symbolic communication represented by drawing is a valuable addition to the child's verbal account. With this knowledge, I select both the content and the level of my intervention, so that there is in the child an acceptable balance of assimilation of my ideas into the child's pre-existing schemas and (hopefully therapeutic) accommodation of some of their existing schemas. The child's interest is maintained if this balance of accommodation and assimilation is acceptable — I aim to allow the child to experience a state of equilibrium as defined by Piaget.

For an individual to experience a chronic problem, he assimilates the relevant day-to-day experiences into one or more old established schemas which generate an undesirable experience. Accommodation of the "problem" schema/s does not occur. Therapy aims to free the individual from this habitual assimilation and hypnosis is a state in which modification of the problem schema/s to yield a different outcome is greatly facilitated. In hypnosis, the "critical factor" is bypassed. The "critical factor" seems to me to have a vested interest in maintaining the status quo — encouraging the individual to assimilate — rather than to accommodate to changed circumstances. The child's situation is improved if appropriate accommodative changes are realised in his formerly problem generating schemas.

CONCLUSION

Cognitive development follows the course outlined above at slightly different rates and to a slightly different extent in each of us. When confronted by a patient or client requesting help to change, the unique interplay of capacity (cognitive, physical, emotional) and experience require the therapist to customise the intervention to help the individual achieve the desired outcome.

An increased awareness of cognitive developmental issues has increased my efficacy and my confidence in offering hypnotic interventions to my patients. Similarly, knowledge of emotional developmental stages such as are proposed by Erikson is valuable. An understanding of developmental issues is not only especially important for practitioners working with children and adolescents, but also when working with adults. Some problems affecting adults arise from beliefs/schemas/ego states laid down when the full power of adult thinking was simply not there to be brought to bear on the problem. Here, an understanding of the cognitive capacities and emotional needs and resources available to children helps the therapist to formulate their intervention.

REFERENCES

- Beard, R. (1969). An outline of Piaget's developmental psychology. London: Routledge & Kegan
- Erikson, E. (1950). Childhood and society. New York: W.W. Norton.
- Erikson, E. (1978). Adulthood. New York: W.W. Norton.
- McNally, D. W. (1973). Piaget, education and teaching. Sydney: Angus and Robertson.
- Olness, K., & Gardner, G. G. (1988). Hypnosis and hypnotherapy with children (2nd ed). Philadelphia, PA: Grune and Stratton.
- Olness, K., & Kohen, D. (1996). Hypnosis and hypnotherapy with children (3rd ed.). New York: Guilford Press.
- Wall, V. (1991). Developmental considerations in the use of hypnosis with children. In W. Wester & D. O'Grady (Eds.). Clinical hypnosis with children (pp. 3-18). New York: Brunner/ Mazel.
- Watkins, J. G., & Watkins, H. H. (1997). Ego states, theory, and therapy. New York: W.W. Norton.
- Wester, W., & O'Grady. D. (1991). Clinical hypnosis with children. New York: Brunner/Mazel.

INDUCTION AND DEEPENING TECHNIQUES WITH CHILDREN

William C. Wester II

Children are usually great hypnotic subjects and respond to a variety of induction techniques. They come to the hypnotic experience with fewer preconceived notions about hypnosis and with very active imaginations. Preparing the child for hypnosis may depend largely on time. If there is time to prepare the child, as rapport develops, hypnosis typically is enhanced.

PREPARING THE CHILD

Conducting an interview with the child requires professional skill backed by training and experience. The initial interview allows time for a relationship to develop between the child and the therapist. The actual hypnotic process begins before the child ever sees the therapist. A referring colleague, a well-trained staff, a nurse, or a receptionist can set the stage for a receptive child. After the therapist obtains initial data, it is important to talk with the child about hypnosis and the child's expectation of this form of treatment.

Equally important is the preparation of the child's parents. The parents typically have more questions and need to have various myths and misconceptions clarified. It is important to have their support of the process and for them to know exactly what is expected from hypnotic-treatment approaches. This author has published a brochure entitled "Questions and Answers About Clinical Hypnosis" that can be sent to the parents prior to the first session. The brochure contains information on professional training, misconceptions about hypnosis, and a brief history of the therapeutic use of hypnosis (Wester, 1982).

One should take time to talk with the child's physician or the nursing staff if the child is being seen in the hospital. Good hypnotic work with a child can be undermined by an inappropriate or negative statement from a parent or another professional who should be part of a team in the specific treatment of the child.

There can be other factors to be evaluated by the therapist before utilising hypnosis. Crasilneck and Hall (1985) identify seven questions to be considered during the initial screening assessment:

- 1. Why does the patient (child) come for treatment at this time?
- 2. Who sent the patient (child)?
- 3. Is the patient (child) sufficiently motivated to give up the symptom?
- 4. Is the symptom being used to manipulate others?
- 5. Is the symptom organic or psychogenic?
- 6. What is the patient's (child's) degree of impulsivity and what is the patient's (child's) level of frustration?
- 7. What is the patient's (child's) general personality or history?

 If the professional does a good job in assessing the child, the hypnotic process

INDUCTION TECHNIQUES

The choice of an induction technique greatly depends on the personality and needs of the child, the child's preferences, such as sporting events and other interests, and, of course, on what the therapist feels comfortable using for a specific treatment goal. Olness and Gardner (1988) divide induction techniques into visual imagery, auditory imagery, movement imagery, storytelling, ideomotor, progressive relaxation, eye fixation, distraction, and utilisation (the use of video- and audiotapes or of the telephone). As can be seen from their list, there are many techniques available. The creative and experienced therapist also can invent a technique to fit the personality and age of the child. Olness and Gardner (1988) recommend specific induction techniques for certain age groups. A tactile technique, such as holding a stuffed animal, may be most appropriate for a 2-year-old. A 4-year-old may respond better to a rag-doll and a 6-year-old to a coin or television technique. Developmentally, a school child (7-11 years of age) may respond best to a favourite-place technique and an adolescent to sports imagery. As therapists gain more experience in working with children, their choice of technique will become somewhat automatic. Part of the fun with this work is being creative. If a good assessment is made, it should be easy to get started with the first induction.

This author has selected three techniques to provide the reader with specific verbalisations. Variations from these scripts are appropriate and can reflect the therapist's personality and experience.

Favourite-Place

The therapist proceeds by saying the following:

Just make yourself nice and comfortable in the chair. Now I would like you to put your hands on your lap and to use your eyes to find a spot on one of your hands on which you would like to focus all of your attention. It might be a wrinkle or a fingernail. Now that you have found that spot — that special spot on which you have chosen to focus all of your attention — let yourself really concentrate on that one spot; let yourself totally concentrate on that spot that was special for you, concentrate on it just as hard as you can. As you do that, you can still be aware of my voice and you can let all of your body become very relaxed and comfortable. Now in a little time — I'm not exactly sure when, but probably soon — your eyes will become so relaxed and comfortable that they will want to close.

You pick the time that feels just right for you. And when that happens, you can feel even more relaxed and comfortable than you are feeling right now. When that happens, when your eyes close, we can talk about some other very pleasant things that are relaxing and comfortable for you. [Reinforce as needed for eye closure.] That's it—so comfortable and peaceful from the top of your head all the way down to the bottom of your toes. And when you are feeling so relaxed and comfortable, like you feel right now, you might like to imagine that you are in your favourite place in

the whole world. Being there right now. Now, that favourite place might be a place you have really been to before, or a place you have only read about, or a place you have dreamed about. But everything about that favourite place is just the way you want it to be. You might be there by yourself or maybe with some very special friend. Of course, you are doing your favourite activities and everything about the day is just the way you would like it to be. I am not sure where your favourite place is -Iimagine it might be [information obtained from child in interview]. I know that you know where your favourite place is and that you are enjoying it right now. You can continue to enjoy your favourite place and all of the things you would like to do while we talk about special things you can do when you are relaxed and in your favourite place — things that can help you. [The therapist begins to work on treatment goals with appropriate suggestions and questioning with ideomotor signalling.]

Now you can continue to be in your favourite place for a moment longer. In the next minute or so, it will be time for you to return to the room here with me, feeling refreshed and relaxed and very good about what you have learned and what you can do when [reinforce therapeutic suggestions].

Just let yourself gradually return feeling refreshed and relaxed, ready to open your eyes and to be back here with me. You can go back to your favourite place any time that you want, [child's name]. Welcome back [child's name].

As with most techniques, it is always helpful to process with the child what the child experienced.

Television Imagination

In this technique, the therapist proceeds as follows:

I would like to show you and teach you how you can use your "make believe" ability in areas of your life to help yourself. Would you like to learn how you can help yourself with [child's presenting problem]? [Child responds Yes]. You already have your own imagination. I cannot give you any imagination. I can show you, however, how to use your imagination in a very special way. First, I would like you to get into a very comfortable position.

Just put your legs in front of you, with your hands resting comfortably in your lap. You might notice that, in this position, your whole body feels nicely supported, with every part of your body being held up by something. And now, I would like you to close your eyes — that's right — and with your eyes closed, you can enjoy the darkness and the quietness, the peacefulness, and the calmness. You can become more aware of your breathing. Just feel how cool your breath feels as it comes into your body, bringing with each breath energy and oxygen that spread to every corner of your body. With each breath out, you can feel warmth, and your body can just relax all of the muscles in your body. Every time you breathe out, you go deeper and deeper into relaxation and comfort.

As you relax deeper and deeper, I would like you to imagine that a TV screen has appeared before your eyes - a very special TV that would only be found in a very special place. This TV has been made especially for you. Just see the dials on the TV

and examine them very carefully and find the ON switch. Just turn on that TV and turn the dial around until you find the programme that seems just right for you. It may be a programme that you have already seen before, or one that you would only imagine that you would like to see. What is the programme that you are seeing right now [child's name]? [Get response from the child and then ask additional questions to increase and enhance image.] You can continue to enjoy that picture for a moment more and then I would like you to turn the dial until you reach a channel where you can see yourself on TV and you find yourself in [wherever the therapist wants the therapeutic environment to be] and you are the star in that programme. Have you found that channel? [Child responds.] Good. What are you doing right now in that picture on the TV? [Child responds.] Just continue to watch that programme because that is a special TV and you are in control of that *TV.* [Use therapeutic suggestions related to the presenting problem — stress achievements and positive feelings. Use a post-hypnotic suggestion that the child can go back to that special channel whenever the child wishes. The therapist can also ask the child to use "slow motion" suggestions at any time.]

Now turn your dial to any channel you would like to end with that gives you a nice feeling of being you and a nice feeling of being comfortable and peaceful, of being strong and wise, and knowing what is best for yourself and how to find it. You can thank yourself that you have this special TV in your mind and that you can use it any time you wish.

Now it's time for you to turn your set off and to let yourself gradually return to the room here with me, feeling refreshed and relaxed and ready for a nice day, -ready to OPEN your eyes NOW. That was very nice [child's name].

Eye Fixation with Imagery

The therapist begins, as usual, by developing rapport with the child.

[Child's name] I would like to teach you something very special that you can learn, and with practice, you can get better and better. The first thing I would like to do is to have you hold this coin [give the child a dollar coin] up here. [Therapist puts coin between the child's thumb and index finger and moves the arm and hand slightly above eye level.] I would like you to stare at the coin and concentrate all of your attention on some special part of that coin, and as you do, just let yourself get more and more relaxed. As you get more and more relaxed, the coin will get heavier and heavier. As the coin gets heavier and heavier, your arm will also get heavier and heavier. In a moment, the coin will drop from your fingers and your eyes will close and your arm will come back down to rest in your lap. [Wait for response, and reinforce statements if necessary] We can now talk about some other pleasant things that can help you to become even more relaxed and comfortable. I would like you to imagine yourself at a wonderful picnic. This is the best picnic you have ever attended - the sky is blue and clear, the clouds are just the way you like them, it's just as cool or as warm a day as you would like it; just let it be the kind of day you would want it to be.

You might want to be at this picnic by yourself or be sharing it with some of your favourite friends and playing some of your favourite games. Somebody at this picnic [child's name] has laid a very special blanket on the ground.

I would like you to sit down on that blanket by yourself or with a friend. You find out that this is a very special blanket because you can make that blanket fly. You can make it go as high as you wish or as low, as fast or as slow; you can make it turn left or right, you can do anything you want the blanket to do. You are the pilot and you are in control. You can fly anywhere you wish and see anything you want to see. It is a wonderful feeling to fly along on your blanket, enjoying the day and being in control. Just enjoy what you are doing on this beautiful day, and as you fly along, you might think for a moment [therapeutic suggestions and talk can occur here with the use of ideomotor signals].

[Continue to reinforce that the child is the pilot and in control.] *Anytime* you want to go to this very special picnic and to fly on your blanket, you can do it — always remembering that you are the pilot and are in control. Every, time you practise, it will get easier and easier to [therapeutic goal].

And now, [child's name], I would like you to land your blanket in a place that you like very much - a place back at the picnic where you feel comfortable and very relaxed and safe. When your blanket gently touches the ground, you can open your eyes, feeling refreshed, relaxed, and comfortable. That's right. You did a swell job [child's name]. [Spend a few moments processing the child's experience.]

TECHNIQUES FOR DEEPENING HYPNOSIS

In addition to standard induction, it is important to mention something about deepening the hypnotic state. There is some controversy about whether the "depth" of hypnosis has any relationship to the treatment outcome. Erickson (1980) suggested that depth was unimportant while emphasising that he rarely presented significant suggestions until after 20 minutes of deepening. Based on the author's experience, it does appear that more depth or time is needed to produce certain hypnotic phenomena. Hammond (1987) describes the following procedures to enhance the depth of the hypnotic state.

- 1. Fractionation. In this procedure, the patient (child) is alerted and re-hypnotised several times.
- 2. Downward movement. Movement such as walking down a staircase or moving down an escalator is often facilitative.
- 3. Interspersing patient motivation and needs. "And you are relaxing deeper and deeper because you . . ."
- 4. Contingent suggestions. "With every sound of my voice, you can drift deeper and deeper . . .," or "With every breath you take, your level of relaxation increases more and more . . . "
- 5. Breathing and counting. Counting backwards from 10 to 1 with interspersed suggestions, or focusing on breathing with deepening suggestion, can be included as a deepening technique.

SUMMARY

The induction technique used is only as effective as the receptiveness of the child and the experience of the therapist. Therapists should develop the techniques that work for them. Drawing on the techniques in this paper may be helpful when individualising the therapist's approach. By using one's creativity, one can look forward to rewarding times in working with children of various ages.

Reprinted from William C. Wester II and Donald J. O'Grady (1991)(Eds.) Clinical hypnosis with children (Ch. 3, pps. 34-40). New York: Brunner/Mazel. With permission of the publishers.

REFERENCES

- Crasilneck, H. B., & Hall, J. A. (1985). *Clinical hypnosis: Principles and applications* (2nd ed.). New York: Grune and Stratton.
- Erickson, M. H. (1980). In E. L. Rossi (Ed.). The collected papers of Milton H. Erickson, M.D. New York: Irvington.
- Hammond, C. (1987). Induction and deepening techniques. In W. C. Wester (Ed.). *Clinical hypnosis: A case management approach*. Cincinnati, OH: BSCI Publications.
- Olness, K., & Gardner, G. G. (1988). *Hypnosis and hypnotherapy with children*. Philadelphia: Grune and Stratton.
- Wester, W. C. (1982). Questions and answers about clinical hypnosis. Columbus, OH: Ohio Psychology Publishing.

SPECIAL CONSIDERATIONS FOR USING HYPNOSIS WITH YOUNG CHILDREN

Leora Kuttner

There is a surprising dearth of literature on the use of hypnosis with pre-school children, and even less published information about hypnosis with infants and toddlers. Despite this, most paediatric clinicians know about children's imaginary playmates, the pre-schooler's penchant for engaging in fantasy, the active toddler's ability to become "entranced" by a stranger, and the infant's capacity for being soothed by repetitive rhythmic rocking. All of these are hypnotic experiences for younger children, often quite fleeting and different from the adult hypnotic response.

The mode of interacting with the very young child tends to be primarily nonverbal. That may be part of the reason why few clinicians have ventured into this area of research. More recently, there has been a stronger need to address the hypnotic process and therapeutic applications with children under the age of six years. In part, this arose because the highest incidence of some childhood illnesses, such as leukemia, occur in the three- to five-year age group and, of necessity, clinicians began to explore and develop the powerful tool of hypnosis to address the therapeutic needs of these young and vulnerable children.

In this paper the theoretical foundations for working with children under six years of age are examined and some guidelines for therapeutic intervention are outlined.

FOUNDATIONS

Theoretical Considerations

Hilgard and Morgan (1978) have suggested that the term "hypnosis" cannot be applied to the trance-like states experienced by children under the age of six years. In their seminal paper they recommended that the term "protohypnosis" would more accurately describe the process that occurs when children four to six years of age become involved in an hypnotic experience.

. . . it is inappropriate to rely upon formal hypnotic procedures. These procedures involve two major elements: (a) the implied difference between voluntary and involuntary action, and (b) the expectation of distraction through self-controlled fantasy. Instead this group is more responsive to a kind of "protohypnosis," in which the distraction has at first been set up in the external situation, that is, the very young child is better able to be distracted by listening to a story or by participating in a verbal game with a friendly adult than by removing himself from the scene through his own fantasy or through reliving an earlier game or experience of his own. Gradually the context of the external situation can be altered in such a way that the child achieves the control. (p. 286)

Hilgard, a pioneer in the use of hypnosis with children, referred to the young child in this "protohypnotic state" as experiencing an "imaginative involvement." In her book *Personality and hypnosis: A study of imaginative involvement*, Hilgard (1979) explored through retrospective case studies the association between a child's imaginative involvement and his or her later adult hypnotic talent. She found that the greater the amount of imagination involvement type of activity the adult had as a child, the greater was that adult's hypnotic talent. Thus, childhood imaginative involvement seems to be a precursor of adult hypnotic ability.

Hypnosis, as it is experienced and observed in young children, seems to be a somewhat different phenomenon than hypnosis in adults (Hilgard & LeBaron, 1982; Hilgard & Morgan, 1978; Kuttner, 1988; Zeltzer & LeBaron, 1982). Because children under six years of age are in the process of gradually developing a sense of what is real and what is not, they can move easily between the states of fantasy and reality. They also demonstrate a flexible tolerance of the demands of these two very different states. For example, a 4-year-old girl becomes a cat called "Wendy," crawling on the floor and saying, "Meow!" But when she is called by her real name to come to dinner, she retorts, "Don't call me that!" She wants to maintain the integrity of her fantasy, slipping out of that fantasy to remind her parent and then promptly re-entering the fantasy. As in this example, the imaginative involvement or absorbed fantasy state (which is invariably played or acted out) is not readily sustained, partly, because of the child's developing attention span.

It is important to recognise that typical adult behaviours, such as physical relaxation, eye closure, and a visible alteration of state, that usually accompany hypnotic trance, are usually not characteristic of the young child's hypnotic process. Nevertheless, it is striking to observe children as young as three years of age who clearly demonstrate the ability to alter sensation, perception, and experience (Gardner, 1977; Kuttner, 1988; Olness, 1975, 1976, 1981; Olness & Gardner, 1988). These children can enter trance wide eyed and maintain a trance during involved physical activity that is directly related to the trance (Kuttner, 1988; Olness & Gardner, 1988).

IMAGINATIVE INVOLVEMENT

Imaginative involvement is an important concept in the use of hypnosis with young children, drawing attention to the way the child's experience differs from the hypnotic phenomenon in adults. Imaginative involvement suggests that the child is intensely absorbed in a "here-and-now" fantasy experience in which present reality is suspended in the interests of the current imaginative experience. It does not presuppose a dissociative ego state, as can occur in the adult hypnotic state. In these early years, the development of the sense of a defined self is not firm or as stable as in the school-aged child. The term also draws our attention to the imaginative components — a playfulness, a fanciful and fantasyful aspect — that is child centred. From infancy onward, the young child learns most easily

and effortlessly about the world through independent or interactive play. It is often only through play that the young child can be engaged in a hypnotic experience and sustained in that trance.

ASSESSMENT

Developmental Considerations

It is fundamental to successful work with children that developmental considerations are always attended to; that is, recognising that the 2-year-old will be functioning at a very different level than the 3-year-old or 4-year-old. For example, while a 2-year-old child is not capable of "remembering," some 3-yearolds, and most 4-year-olds, can recall significant experiences in the immediate and distant past with some ease.

Despite a few excellent published reports on work with the pre-school child (e.g., Olness, 1975, 1976, 1981) and a good review by Gardner (1977), there remain few well-controlled research studies to expand our understanding of the hypnotic process with the young child. The work on hypnotic responsivity (Morgan & Hilgard, 1978, 1979) suggests that the pre-school child may not be as responsive when compared with the older, school-aged child, and significantly, there are no clinical scales to test hypnotic talent that go below four years of age. Does this indicate that hypnotic ability then starts at around four years of age?

This seems unlikely. Gardner (1977) reviews clinical evidence that supports the notion that even in infancy and the toddler years, young children develop reliable ways to soothe and quiet themselves, such as rhythmically rocking. She notes parents who report that playing soothing music, stroking a part of the child's body, or turning on a vacuum cleaner or electric shaver will quiet a fretting infant.

Some authors believe that hypnotic ability is present at birth (Morgan, 1973; Ruch, 1975). My clinical experience suggests that the hypnotic modality (kinaesthetic, auditory, visual) may alter as a function of the age of the child although I can find no research or published literature to confirm it. The younger child (birth to two years of age) may be more receptive to repetitive kinaesthetic and auditory signals to induce a trance, such as lullabies, where as from two years of age onward, visual cues may become more central to trance induction. However, this is merely speculative, and there may also be wide individual differences across children. What is evident, however, is that there is a great deal we do not know about the hypnotic potential of the very young child, and consequently there is a need for research in this intriguing and neglected area.

Individual Considerations

When using hypnotherapy with the young child, it is not only the child's chronological age that needs to be considered. More important, the child's cognitive abilities and emotional development need to be noted, since these may not all correlate with age. For example, a 5-year-old boy recently was referred to me who was cognitively advanced, if not gifted, but who was emotionally inhibited and regressed. He was terrified at being in a hospital ward, and clung to his parents, refusing to allow them to talk directly to the hospital staff. I chose to engage with him via his strength, which was his intellect, and discovered that he was fascinated by dinosaurs. He fluently listed all the dinosaurs, using their Latin nomenclature, and described their characteristics. An imaginative involvement experience using dinosaurs that were worried about the destruction of their universe may have accurately reflected the child's fear of extinction.

The hypnotherapist's task, however, is to take the child's theme and transform it into a therapeutic metaphor to promote change. I therefore presented the dinosaurs as a metaphor of courage and created an imaginative involvement experience so that he was intellectually challenged and his regressed emotional needs could be addressed through suggestions for gradually increased coping. I began by asking him if he wanted to hear an interesting story about how some dinosaurs discovered a new land. He nodded. We were both sitting on his hospital bed.

At first the dinosaurs were frightened; after all, they had never ever been away from their home. They wondered if they would ever find their way back. But there were also so many interesting new forms of life here: new flying creatures, new weird trees, new food . . . The dinosaurs began to feel slightly stronger inside. It was all so curious and new. They began to explore a little further away from their home base and into this strange new territory, with these bigger trees and new life forms. They began slowly and carefully, because they knew that if they watched, they could learn quickly about this strange place and then would know what was safe and where the dangers were. They then could take care of themselves properly, without having to be nervous and watchful all the time. Now this was particularly true of Tyrannosaurus rex. He was the bravest of them all, as you well know. Nod your head when you can see him exploring this strange new territory. [He nods his head.] Good. Now, after he had one sleep, he discovered that there were some very curious and interesting plants that they could eat. Nod your head again when you can see these plants; some will be in bright blue and purple, others may be green and redyou may even see ones that I haven't mentioned. [The child is quiet, absorbed, with his eves open and fixed on me.] And then he discovered something that made him so happy — a big rock with nobbles on it that he could scratch his back on, because you know it's very hard for a dinosaur to scratch his own back.

INTERVENTION

Considerations for Induction

Given the young child's blurred boundaries between reality and fantasy and relative ease in entering, leaving, and re-entering a trance, I have found it often unnecessary to go through a lengthy induction with children under six years of age. It is often sufficient simply to say, "How about if we were to imagine that . . . and you can close your eyes, or if you want to keep them open, that is also okay."

Olness and Gardner (1988) have an excellent and comprehensive chapter on hypnotic induction techniques for children in their book *Hypnosis* and hypnotherapy with children — which remains the definitive text on hypnosis with children. I have found the following to be useful inductions for younger children: mighty oak tree, bouncing ball, television, and a floppy Raggedy Ann doll. Apart from using TV as an induction method, all the others are action-oriented inductions and as such are more appealing to the younger child than are the more internally oriented inductions. Likewise, the therapist must be comfortable with allowing the young child to play out the induction and, in the process, permitting the child to become more absorbed.

Therapeutic Considerations

Given the action-oriented nature of the preschool-aged child, and the distinctiveness of the child's hypnotic process, it is essential that the hypnotherapist adopt a highly flexible hypnotic style, allowing the child to move in and out of trance. With an ongoing sensitivity to the child's momentby-moment responses, the hypnotic context is then successfully sustained as the child enters, leaves, and re-enters the trance. An active absorbing participation then develops between therapist and child such that the therapist paces the child, absorbing his or her attention in an informal child-centred manner.

"Favourite stories" (Kuttner, 1988) is one of the therapeutic methods that has proved effective in easing the younger child's medically-induced pain and distress. In this method, the child's favourite story becomes the hypnotic vehicle to create a pleasant imaginative involvement that will, in turn, lead to a different interpretation of the noxious experience. The favourite story becomes both the mode of induction and the substance of the trance. Hypnotic suggestions and reframing take place within the framework of the story line. Information pertaining to the procedure, if needed or requested, can be interwoven with the story line, as well as direct and indirect suggestions for increased comfort, coping, and reduction of pain.

A controlled study (Kuttner, Bowman & Teasdale, 1988) with 25 children aged three to six years found that this hypnotic method, at first intervention, was significantly more effective in relieving distress associated with a painful invasive procedure than either behavioural distraction or standard medical practice. Imaginary involvement using a familiar story associated with comfort and security may promote a rapid absorption and narrowing of the child's attention and thus prove effective with the first intervention. This would be a useful method in a paediatric emergency room or in any crisis situation in which trust and rapport need to be quickly established.

With the pre-school child, parental dependency is still prevalent and normal. Often in the first few sessions, it is necessary and important to allow the parent to be present in the room since it enhances the young child's feelings of trust and safety. Sometimes, in therapeutically appropriate circumstances, the parent can be included in the hypnotherapeutic experience, as in the following example.

Case Example

Four-year-old Hilary had severe eczema that was marginally responsive to dermatological creams. Her dermatologist referred her, believing that anxiety was playing a large part in maintaining the child's acute state. Hilary presented as a small, quiet, and intelligent girl who seemed very sensitive to, and aware of, her world. She was accompanied by her mother, who appeared concerned, loving, and closely involved with Hilary. It was decided to use an imaginative involvement that could include the mother, since she was primarily responsible for applying the creams four times a day and there was a non-conflictual, loving relationship between the mother and daughter.

Here is a part of the first hypnotherapeutic session:

[Hilary is standing up and her mother and the therapist are kneeling on the carpet near her.]

Therapist: So let's take this lovely soft cloud, scoop it up, and put it on the

itchy parts so that it makes your skin feel so good, soft, smooth, and very calm [scooping up imaginary armfuls of cloud]. What

colour is this?

Hilary: [With eyes wide open, staring] It's pink.

Therapist: Let's pack it on the parts of your skin that need to feel better.

Show me where!

Hilary: [Points to the back of her knees, her hands, and her arms.]

Therapist: ["Packs" the pink cloud exactly where Hilary pointed without

touching the area directly, but coming within two inches of her arm.] Now this should be beginning to work. How does that

feel?

Hilary: Nice.

Therapist: Is it on thickly enough?

Hilary: [Quietly nods.]

Therapist: You'll notice that the soreness should be easing so that your skin

will begin to feel like it used to before you got the eczema. What

do you feel now?

Hilary: Its cool.

Therapist: That's excellent, Hilary! Your pink cloud is helping your skin

heal.

Hilary: [Quietly nods.]

Therapist: Now I wouldn't be surprised that after having the lovely pink

cloud, your skin will find it easier than ever before to take the good skin creams in, making the healing last even longer and keeping the redness and soreness away. Would you like Mom to

put some pink cloud on?

Hilary: Mum, here! [pointing to her dry red elbows].

Mom: Like this? Hilary: Yes, and there.

Mom: [Beginning to get into her stride] It's nice and cool like those

strawberry yogurt sticks, making you feel good!

Hilary and her mother were instructed to use this hypnotic ritual of packing the pink cloud on Hilary's excoriated skin under her direction, until she felt cool and pleasant, before any medication was applied.

ASSESSMENT OF EFFECTIVENESS

One could argue that Hilary was "playing along" with the therapist's instruction. It is difficult to dispute or to prove otherwise. However, in the clinical situation we have the added advantage of watching for the outcome, and when the outcome is positive — as it was for Hilary, whose eczema became less severe and more responsive to her dermatological creams — we can assume that something else apart from "playing along" had occurred.

Bowers and LeBaron (1986) note that many children find hypnotic suggestions to be as natural as play. That is precisely the challenge for the hypnotherapist who wants to work effectively with the pre-school child — the medium becomes play and the therapist's previous notions of relaxation, eye closure, and internalised process are suspended.

It would appear from clinical examples and the small amount of research to date that the younger child is very capable of responding to the hypnotic process with both direct and indirect suggestions. However, further study, naturalistic observations, and controlled investigations are necessary before we can be more categorical about the younger child's hypnotic talent and the therapist's approach to maximise therapeutic change. At this point, it is clear that the therapist who is playful, creative, spontaneous, and flexible will be rewarded to the full when working hypnotherapeutically with children under six years of age.

Reprinted from William C. Wester II and Donald J. O'Grady (1991)(Eds.) Clinical hypnosis with children (Ch. 4, pps. 41-49). New York: Brunner/Mazel. With permission of the publishers.

REFERENCES

- Bowers, K. S., & LeBaron, S. L. (1986). Hypnosis and hypnotizability: Implications for clinical intervention. Hospital Community Psychiatry, 37, 456-467.
- Gardner, G. G. (1977). Hypnosis with infants and preschool children. American Journal of Clinical Hypnosis, 19, 158–162.
- Hilgard, J. R. (1 979). Personality and hypnosis: A study of imaginative involvement (2nd ed.). Chicago: University of Chicago Press.
- Hilgard, J. R., & LeBaron, S. L. (1982). Relief of anxiety and pain in children and adolescents with cancer: Quantitative measures and clinical observations. International Journal of Clinical and Experimental Hypnosis, 30, 417-442.

- Hilgard, J. R., & Morgan, A. H. (1978). Treatment of anxiety and pain in childhood cancer through hypnosis. In F. H. Frankel & H. S. Zamansky (Eds.). Hypnosis at its bicentennial: Selected papers. New York: Plenum.
- Kuttner, L. (1988). Favorite stories: A hypnotic pain-reduction technique for children in acute pain. *American Journal of Clinical Hypnosis*, 30, 289–294.
- Kuttner, L., Bowman, M., & Teasdale, J. M. (1988). Psychological treatment of distress, pain and anxiety for young children with cancer. *Journal of Developmental and Behavioral Pediatrics*, 9, 374–381.
- Morgan, A. H. (1973). The heritability of hypnotic susceptibility in twins. *Journal Of Abnormal Psychology*, 82, 55–61.
- Morgan, A., & Hilgard, J. (1978,1979). The Stanford Hypnotic Clinical Scale for Children. *American Journal of Clinical Hypnosis*, 21, 148–155.
- Olness, K. (1975). The use of self-hypnosis in the treatment of childhood nocturnal enuresis: A report on 40 patients. *Clinical Pediatrics*, 14, 273–279.
- Olness, K. (1976). Autohypnosis in functional megacolon in children. American Journal of Clinical Hypnosis, 19, 28–32.
- Olness, K. (1981). Imagery (self-hypnosis) as adjunct therapy in childhood cancer: Clinical experience with 25 patients. *Journal of Paediatric Hematological Oncology*, 3, 313–321.
- Olness, K., & Gardner, G. G. (1988). Hypnosis and hypnotherapy with children (2nd ed.). New York: Grune and Stratton.
- Ruch, J. C. (1975). Self-hypnosis: The result of heterohypnosis or vice-versa? *International Journal of Clinical and Experimental Hypnosis*, 23, 282–304.
- Zeltzer, L., & LeBaron, S. (1982). Hypnotic and non-hypnotic techniques for the reduction of pain and anxiety during painful procedures in children and adolescents with cancer. Behavioral Pediatrics, 10, 1032–1035.

THE USE OF HYPNOSIS WITH CHILDREN AND ADOLESCENTS

Chrissi Hart Queensway Business Centre

Barry B. Hart Queensway Business Centre

This paper discusses the many applications of hypnosis for use with children and adolescents. The authors review the relationships between age, imaginative involvement, and hypnosis, then discuss general principles in the application of hypnosis with children and adolescents. They provide a good introduction to induction techniques and the range of hypnoanalytic processes which follow. The paper concludes with a case history.

Although the use of hypnosis with children dates from mesmeric practices and "cures" in the eighteenth century, its popularity has waxed and waned alongside the chequered history of hypnosis in general. After Mesmer's theory of animal magnetism was discredited in 1784, there was only a flurry of interest in the subject in the late nineteenth century, followed by a decline for 50 years before the burgeoning literature on hypnosis with children in the 1960s and 1970s in the USA. In Britain, interest appeared to grow following the formation of the British Society of Experimental and Clinical Hypnosis (BSECH) in 1978 by a small group of academic and applied psychologists. Another notable landmark was the publication in 1981 of Gardner and Olness's *Hypnosis and Hypnotherapy with Children*, the first important textbook on the subject, which has now completed its second revision (Olness & Gardner, 1988). Other reviews on the subject include a chapter in Gibson and Heap (1991) and Ioannou (1991).

Hypnosis is used with children and adolescents largely because this age group is the most highly hypnotisable and thus very responsive to therapeutic suggestion. Treatment can therefore be significantly briefer, although most of the evidence for this is anecdotal. However, children engage in much make-believe and enjoy a rich fantasy life and it is this "creative imagination" that probably accounts for the fact that hypnotisability peaks around the ages 8 to 12 years (Olness & Gardner, 1988). It is also this aspect of the child's personality that is so useful during the induction of hypnosis and the therapeutic use of guided imagery.

Children enjoy the hypnotic experience, there are few complications with the procedure, response to treatment tends to be rapid; and increased self-confidence, independence, and mastery are encouraged. It is also our contention that hypnosis facilitates and mobilises the common factors in all successful psychotherapy (Garfield, 1992). That is, hypnosis appears to help develop the therapeutic relationship, creates hope and positive expectancy for change, offers explanations and interpretations that are acceptable to clients, encourages new

behaviours, and helps to change dysfunctional thinking. Hypnosis is not a therapy in itself, but rather a very useful context in which a variety of psychotherapeutic approaches can be applied.

IMAGINATIVE INVOLVEMENT

Children respond readily to hypnosis owing to their capacity to become absorbed and involved in fantasy (Gardner, 1974). They enter hypnosis naturally and frequently when playing an imaginary game or interacting with an imaginary friend. The therapist utilises the child's ability to enter a make-believe world for therapeutic purposes. These precursors of hypnotic behaviour whereby children pretend or engage in make-believe play, begin around age two or three years and are referred to as "protohypnosis"' (Hilgard & LeBaron, 1984).

Children's talent for hypnosis appears to relate to several aspects of cognitive and emotional development, described by Gardner (1974) as follows:

- a capacity for focused attention, immersion and absorption;
- concrete literal thinking;
- a love of magic, limited reality testing and readiness to alternate between fantasy and reality;
- intensity of feeling states; and
- an openness to new ideas and experiences.

The term "responsiveness" is used rather than susceptibility, to indicate that the capacity to experience hypnosis is a talent of the child and not the therapist.

Hilgard (1979) also established a positive relationship between imaginative involvement and hypnotisability in adults. She found that highly hypnotisable young adults enjoyed imaginative experiences in childhood and that their parents reinforced fantasy or did not interfere with it. There is also evidence of greater imaginative involvement among single and first-born children, and adults previously subjected to a moderate amount of parental punishment are more responsive to hypnosis, probably owing to the tendency to dissociate in both situations (Hilgard, 1979; Nash, Lynn, & Givens, 1984; Rhue, Lynn, & Sandberg, 1995).

Although correlates of hypnotic responsiveness based on theories of child development research and clinical observations have been discussed in the literature (Olness & Gardner, 1988), a cohesive theory is lacking. Predictors of high hypnotic responsiveness include a high motivation for achievement, children's generally trusting attitude towards adults, and lack of anxiety over control. There is also some evidence for a genetic contribution to hypnotisability, although environmental influences and their interaction are important as well, and as with adults, hypnotic responsiveness is correlated with a positive attitude to hypnosis on the part of the child (Plotnick, Payne, & O'Grady, 1991). In their review of hypnotic susceptibility in children, Olness and Gardner (1988) note that all the studies have found no sex differences in hypnotic responsiveness in children.

The decline in hypnotic responsiveness with age has been explained in terms of a decline in imaginative skills and perhaps as a result of socialisation demands to become more rational and realistic (Morgan & Hilgard, 1979).

Hypnotic responsiveness in children can be assessed with the Stanford Hypnotic Clinical Scale for Children (Morgan & Hilgard, 1979). This brief scale includes a modified form for young children aged 4 to 8 years and includes suggestions for arm heaviness, rigidity, visual and auditory hallucinations, age regression, dream induction, and post-hypnotic suggestion. Assessing hypnotisability can be useful in helping the clinician select appropriate hypnotic methods; in demonstrating to the child how responsive he or she is; and in determining how the child's responsiveness might be related to therapeutic outcome. The therapist can then assess whether progress is due to hypnosis or other aspects of treatment and the assessment of hypnotisability is particularly important for research purposes. Fortunately, it is not necessary for children to be highly hypnotisable when being treated for many problems, with the possible exception of acute pain, skin disorders and asthma, where an association between hypnotic responsiveness and clinical outcome has been shown (Wadden & Anderton, 1982). In practice, most clinicians do not often use hypnotisability scales because of the belief that they are time-consuming or irrelevant.

HYPNOTHERAPEUTIC APPROACHES

The choice of hypnotherapeutic techniques depends on a number of considerations including: the child's problem; child characteristics such as age, intelligence, and the presence of handicaps; the therapist's theoretical orientation and situational variables. The decision to use hypnosis with a particular problem is also partly based on a consideration of indications and contraindications, reviewed below.

Although many childhood disorders are amenable to clinical hypnosis, it is not a panacea. Expectations that it will magically eliminate problems are not uncommon among parents and need to be clarified. However, hypnosis is underused with children and is often used as a last resort when more traditional treatment methods have failed, whereas it can be the treatment of choice on many occasions. Parents may refuse hypnosis for the child, however, because of misconceptions formed from stage hypnotism or on religious grounds.

Factors which compromise or contraindicate hypnosis include:

- misconceptions about hypnosis;
- negative attitudes of significant adults such as parents, medical staff, and teachers; situational variables such as extreme pain or anxiety, which interfere with the child's attention;
- the indication of an alternative treatment approach (e.g., medical or surgical);
- lack of motivation to change on the child's part, for example, because of secondary gain; and
- masking by the symptom of severe anxiety, depression or psychopathology,

such that removal of the symptom would result in more emotional problems or severe pathology (Olness & Gardner, 1988).

GENERAL PRINCIPLES

After assessing the presenting problem, the therapist must establish rapport with the child and inquire about interests and favourite activities, the child's and the parents' attitudes to hypnosis, the child's motivation for change, and finally any misconceptions about hypnosis. Hypnosis can be described to children differently according to their age or developmental level. For example, children under six years can be invited to play a game of make-believe or to "go to fairyland"; children in the middle years can be asked to use their imagination to solve problems; and adolescents can be given adult explanations about the procedures.

Children respond to hypnosis differently to adults. This is particularly noticeable in pre-school children who may appear not to be hypnotised. They tend to be distractible, fidget, open and close their eyes, or do not close them at all. Responding actively is common as they cannot easily internalise images and fantasies. It is possible to observe whether children are responding or not by their narrowed, focused attention and absorption in the images and fantasies. Children's imaginative involvement can be assessed by inquiring whether the experience felt real or whether they simply thought about it.

The use of appropriate language by the therapist is important as children accept words literally. Avoiding words such as "sleep," which may have negative connotations, is important. A further consideration is the presence of a parent or chaperone. Some therapists believe this is a sensible precaution, especially when working with adolescents. In our practice, however, we have never experienced any practical or ethical dilemmas in treating children or adolescents without the presence of a parent or chaperone. Asking the child or adolescent about his or her preference is important, however, and providing parents with a rationale of the treatment plan is helpful in establishing trust and cooperation.

INDUCTION METHODS

Formal ritualistic inductions involving eye closure are not necessary with children. Indeed, inductions that focus on eye closure have been found to be the most difficult ones for children (London & Cooper, 1969), but suggesting it may be easier to imagine some things with the eyes closed can overcome this difficulty. Induction methods with children tend to be permissive rather than authoritarian and encourage active participation, involvement, and mastery. A conversational approach may be used whereby the child is invited to play a game of imagination or make-believe.

Therapeutic suggestions for well-being, relaxation, and comfort, or for the resolution of a problem, can all be made. Suggestions may be direct (e.g., "You will feel more confident about exams") or indirect (e.g., by interspersing suggestions in a story). Inductions can be mechanical (e.g., focusing on a coin or

thumbnail), may involve imagery (e.g., watching a TV show), fantasy (e.g., imagining riding on a magic carpet), or storytelling.

Induction methods need to be adapted according to the child's age and cognitive and social development. Olness and Gardner (1988) list techniques according to age although certain techniques (e.g., storytelling) can be used across the age range. Children enjoy inductions which capture their imagination and attention. Their sense of adventure, curiosity and challenge can also be utilised. Focusing on the sensory aspects of the imagery helps to increase absorption and dissociation (e.g., from an unpleasant medical procedure). Preschool children respond best to active play-oriented inductions such as those using soap bubbles, toys, or puppets, which all require the child's eyes to be open. Inductions are described in detail elsewhere in the literature (e.g., Hilgard & LeBaron, 1984; Ioannou, 1991; Karle & Boys, 1987; Gibson & Heap, 1991; Olness & Gardner, 1988).

HYPNOANALYTIC TECHNIQUES

These help uncover repressed or forgotten material from the child's past and can help in the resolution of unconscious conflicts. Techniques include dream induction, age regression, watching scenes on an imaginary television or on stage, and play therapy.

Self-Hypnosis

Self hypnosis is important for gaining a sense of mastery and control and reinforcing therapeutic suggestions, especially in frequently occurring disorders (e.g., migraine headaches, enuresis, and stammering). Children can practise selfhypnosis by listening to an audio tape of a recorded therapy session or to a personalised story, or by learning a simple procedure taught by the therapist such as eye fixation on a special coin followed by relaxing imagery. Children tend to discontinue self-hypnosis, however, after about six weeks owing to boredom or forgetting to practise.

Clinical applications

Diagnostic indications for clinical hypnosis include:

- acute and chronic pain;
- anxiety disorders (e.g., phobic reactions, exam anxiety);
- sleep disorders (e.g., nightmares and night terrors, sleep-walking);
- habit disorders (e.g., enuresis, tics, speech problems, hair-pulling, nailbiting, and thumb-sucking);
- paediatric medical problems (e.g., asthma, dermatological problems, headaches and migraine, nausea and vomiting associated with chemotherapy);
- paediatric surgery and emergencies (e.g., burns, dentistry, orthopaedics, and with the terminally ill child).

The use of clinical hypnosis for these problems is discussed in detail by Olness and Gardner (1988).

Clinical hypnosis with children and adolescents may involve any mode of treatment depending on the therapist's theoretical orientation. It is of more importance that the therapist is initially trained and qualified to work with children and is only secondly a hypnotherapist. Hypnosis is not a therapy in itself but an adjunct to medical treatment, family therapy or individual therapy. Hypnotherapeutic methods may involve one or a combination of the following: problem solving methods; supportive ego-enhancing methods which increase the child's self-esteem and confidence, and promote mastery and autonomy; symptom-oriented methods which focus on the removal of specific physical or emotional symptoms; and dynamic insight-oriented methods which aim to resolve difficulties using hypnoanalytic methods.

Kohen, Olness, Colwell, and Heimel (1984) demonstrated the clinical value of clinical hypnosis in 505 children and adolescents treated over a period of one year and followed up from four months to two years later. Problems included acute and chronic pain, bed-wetting, soiling, asthma, habit disorders, obesity, and anxiety. Results indicated that 51% of the subjects achieved complete resolution of their problem, 32% improved significantly, 9% had initial or some improvement, and 7% showed no change. The average number of treatment sessions was four, improvements being noted within one or two clinic visits for over half of the children and adolescents.

Ioannou and Hart (1990) surveyed the BSECH membership regarding the use of hypnosis with children in Britain and found the main applications to be with anxiety disorders, paediatric medical problems, pain, learning problems, habit disorders, and behavioural and psychogenic disorders, in that order. There was less application to paediatric surgery and terminal illness.

In the U.K., Benson (1984) has developed a hypnosis treatment package for delinquent and acting-out adolescents, although it is also applicable to a wide range of childhood problems. The protocol uses indirect suggestion and guided imagery with the following aims: reduction of anxiety, problem solving, forming goals for the future, and ego-strengthening. The method has thus far only been evaluated using individual case studies.

PHYSIOLOGICAL PROCESSES

Research has shown that children can control physiological processes once believed to be under autonomic control and that this ability is easier for children than for adults (Olness, 1986). Using self-hypnosis, children can control peripheral blood flow, auditory evoked potential, transcutaneous oxygen flow, bronchial dilation, sphincter responses, cardiac rate, and immunological activity such as salivary immunoglobulin A and neutrophil adherence (see Ioannou, 1991 for a review of this literature). Research in this area has important implications for both diagnosis and treatment, in that children's ability to control physiological processes may be applied clinically in the management of

many disorders such as asthma, migraine, warts, faecal soiling, and sickle-cell anaemia.

Case Example

An example (Hart & Alden, 1994) of the beneficial use of hypnosis and selfhypnosis is that of a 13-year-old Ryan who had suffered with frequent tension headaches for three years and had not responded to analgesic medication. History taking revealed that he enjoyed flying when on holiday and that coolness applied to his head usually eased the pain. Following an eye-roll induction (elevated eye-fixation followed by eye-closure on release of a deep breath [Spiegel & Spiegel, 1987]), he was asked to imagine enjoying being on a plane. Once he had indicated that he was there, he was reminded of the "no smoking" seats on the plane, and he confirmed he knew about these. He was then asked to walk around the plane to find the "no headache" seats, and to ask the stewardess for help if necessary. Once Ryan indicated he was sitting in a no headache seat, he was asked to reach above his head and to turn on the airconditioning by twisting the appropriate knob. It was suggested that as Ryan did this, cool air would come out of it and blow across his forehead and remove any discomfort. These suggestions had an immediately beneficial effect on him and he was asked to practise this technique daily until next seen. One week later, Ryan was pleased to report that the imagery had been successful in aborting his headaches. He was instructed to use the imagery in a preventative way, and when seen at one- and three-month follow-up sessions, reported he had suffered with significantly fewer headaches and felt more able to control a headache if one arose.

First published in full in The Psychologist: The Bulletin of the British Psychological Society Volume 9, November 1996. Reproduced with permission. Reprinted from the Australian Journal of Clinical and Experimental Hypnosis, 1997, 25, 118-126.

REFERENCES

- Benson, G. (1984). Short-term hypnotherapy with delinquent and acting out adolescents. British Journal of Experimental and Clinical Hypnosis, 1, 19–27.
- Gardner, G. G. (1974). Hypnosis with children. International Journal of Clinical and Experimental Hypnosis, 22, 20-38.
- Garfield, S. (1992). Common factors in successful psychotherapy. Paper presented at the American Psychological Association Convention, Washington, DC.
- Gibson, H. B., & Heap, M. (1991). Hypnosis in therapy. London: Lawrence Erlbaum Associates.
- Hart, B. B., & Alden, P. A. (1994). Hypnotic techniques on the control of pain. In H. B. Gibson (Ed.). Psychology, pain, and anaesthesia (pp.120-145). London: Chapman & Hall.
- Hilgard, J. R. (1979). Personality and hypnosis: A study of imaginative involvement. Chicago: University of Chicago Press.
- Hilgard, J. R., & LeBaron, S. (1984). Hypnotherapy of pain in children with cancer. Los Altos: CA: William Kaufman.
- Ioannou, C. (1991). Hypnotherapy with children. In M. Heap, & W. Dryden (Eds.). Hypnotherapy: A handbook (pp. 164–183). Milton Keynes: Open University Press.

- Ioannou, C., & Hart, B. B. (1990). [Survey of BSECH members' use of hypnosis.] Unpublished research.
- Karle, H. W. A., & Boys, J. H. (1987). Hypnotherapy: A practical handbook. London: Free Association Books.
- Kohen, D. K., Olness, K., Colwell, S. O., & Heimel, A. (1984). The use of relaxation-mental imagery (self hypnosis) in the management of 505 pediatric behavioural encounters. *Developmental and Behavioural Pediatrics*, 5, 21–25.
- London, P., & Cooper, L. (1969). Norms of hypnotic susceptibility in children. Developmental Psychology, 1, 113–124.
- Morgan, A. H., & Hilgard, J. R. (1979). Stanford Hypnotic Clinical Scale for Children. *American Journal of Clinical Hypnosis*, 21, 155–169.
- Nash, M. R., Lynn, S. J., & Givens, D. L. (1984). Adult hypnotic susceptibility, childhood punishment and child abuse: A brief communication. *International Journal of Clinical and Experimental Hypnosis*, 32, 6–11.
- Olness, K. (1986). Hypnotherapy with children: New approach to solving common pediatric problems. *Postgraduate Medicine*, 79, 95–105.
- Olness, K., & Gardner, G. (1988). *Hypnosis and hypnotherapy with children*. New York: Grune and Stratton.
- Plotnick, A. B., Payne, P. A., & O'Grady, D. J. (1991). Correlates of hypnotisability in children; absorption, vividness of imagery, fantasy play and social desirability. *American Journal of Clinical Hypnosis*, 34, 51–58.
- Rhue, J. W., Lynn, S. J., & Sandberg, D. (1995). Dissociation, fantasy and imagination in childhood: A comparison of physically abused, and non-abused children. *Contemporary Hypnosis*, 12, 131–136.
- Spiegel, H., & Spiegel, D. (1987). Trance and treatment: Clinical uses of hypnosis. Washington DC: American Psychiatric Press.
- Wadden, T. A., & Anderton, C. H. (1982). The clinical use of hypnosis. *Psychological Bulletin*, 91, 215–243.

REVISITING THE QUESTION, WHAT IS ERICKSONIAN HYPNOSIS?

Michael. D. Yapko Milton H. Erickson Institute of San Diego

In 1986, I had a chapter titled with the question, "What is Ericksonian Hypnosis?" published in the book, *Hypnosis: Questions and Answers* (edited by Zilbergeld, Edelstein, and Araoz). As a well-structured collection of chapters on a wide variety of topics in the realm of hypnosis written by respected clinicians and researchers, the book provided numerous insights into many important aspects of the skilled utilisation of hypnosis.

Now, a dozen years later, I have been asked to update and expand that original chapter in which I took on the huge task of attempting to give some structure to the modality known as "Ericksonian Hypnosis." The task has grown even more complicated because in 1986, although the innovative work of Milton H. Erickson was already quite popular, it was still in its infancy in terms of the depth of understanding of his contributions to clinical practice. Much of the Ericksonian philosophy and methodology had not yet been articulated, and very little had been done in the way of researching Erickson's underlying assumptions and the efficacy of his methods. Even now, although the relevant clinical and research literatures continue to grow, much remains to be better understood about those diverse methods that have come to be termed "Ericksonian." However, I will attempt — once again — to provide a succinct overview of Ericksonian hypnosis in this paper. In so doing, I will also attempt to reduce some of the common misconceptions about Ericksonian approaches.

OVERVIEW

Milton H. Erickson, M.D., (1902–1980), was a gifted clinician who evolved unique perspectives about and highly creative applications of clinical hypnosis and strategic psychotherapies. At a time in the early history of psychotherapy when most psychotherapists were practising relatively crude hypnotic rituals and long-term psychodynamic therapies, Erickson was developing and practising a style of treatment that differed radically both in its aims and methods. He thought therapy should be brief, results-oriented, multi-dimensional, and tailored to the needs of the individual rather than bound to some elaborate theory the clinician just happens to favour. Erickson's work has inspired a whole new generation of clinicians to become interested in hypnosis and the valuable applications it may have in various clinical contexts (Haley, 1985, 1996).

The Milton H. Erickson Foundation, established in Phoenix, Arizona (USA) in 1979, was organised to advance an awareness of Erickson's pioneering methods through clinical training and research, The Foundation holds tri-annual meetings in which the latest developments in Ericksonian approaches are presented. These meetings are enormously popular: each is typically attended by more than

2000 professionals, making them the largest meetings ever held on the subject of clinical hypnosis. (The next one will take place December 8–12, 1999, celebrating the Foundation's 20th anniversary.) The interest and appreciation of Erickson's influence on the fields of hypnosis and psychotherapy is truly remarkable. Consider comments about Erickson from colleagues he inspired, each considered a major contributor to the field in his own right:

Jay Haley: "The contemporaries of Erickson thought of him as the best among equals. I thought of him as a man who knew his business as a therapist. He worked at it, he practised it, he experimented with it, and he innovated remarkable procedures." (personal communication, 1988: see Haley, 1996; Yapko, 1990).

William Kroger: "Erickson was a very modest man: he was never looking for self-aggrandisement. I attribute the success of his techniques to a profound knowledge of human nature, a solid eclectic psychology on the nature of everyday living. He could take a patient into his heart: that was his secret, the patient could feel the empathy." (personal communication, 1987: see Yapko, 1990).

André Weitzenhoffer: "The really skilled people — good hypnotists — are quite skilled. They have skills that are other than just giving a suggestion. They have skills in interpersonal relations, ability to empathise, to establish rapport . . . Milton Erickson was marvellous at those things and that is why he was so good. He had some real skills." (personal communication, 1988: see Yapko, 1990).

Jeffrey K. Zeig: "There was something extraordinary about Erickson: perhaps his profound effect was due to his acute sensitivity, respect for the individual, intensity, verve, uniqueness, and joie de vivre in the face of adversity. I saw his struggle to bring out the best in himself and it inspired me to want to do the same." (Zeig, 1985, p. 167).

What is it about Erickson's work that has generated so much controversy and inspired so much interest in and devotion to a less traditional style of clinical practice? The answer to this seemingly simple question is actually very complex. Scores of books have now been written about Erickson the man, Erickson the innovative theorist (who, paradoxically, advocated a theory about the reasons not to have theories), and Erickson the creative genius of remarkable clinical interventions. Thus, it is well beyond the scope of this paper to provide an in-depth analysis of Erickson or his legacy. Instead, I will focus on several basic Ericksonian principles and elaborate on the relevant issues and techniques.

THE NATURALISTIC PERSPECTIVE

Arguably, the most influential contribution Erickson made to the field of clinical hypnosis was his emphasis on what he termed the "everyday trance." What made this contribution radical at the time was the prevailing wisdom in the field that held hypnosis out to be a "special state" of consciousness, separate and unique in its attributes from "ordinary" states of consciousness. Traditionalists hated the idea of an "everyday trance," an idea that some still continue to dislike for its lack of a precise definition. (See Weitzenhoffer's comments about this issue in Yapko, 1990).

Erickson's ability to observe and demonstrate hypnotic phenomena in people who had not undergone a formal ritual of hypnotic induction became a powerful catalyst for many key developments in the field, including these:

- 1. Research into the state/non-state nature of hypnosis (Chaves, 1997; Coe, 1992; Kihlstrom, 1992; McConkey, 1986; Spanos & Chaves, 1989);
- 2. Research into the relative value of direct suggestions in comparison to indirect suggestions (Kihlstrom, 1987; Lynn, Weekes, Matyi, & Neufeld, 1988; Matthews & Mosher, 1988; Yapko, 1983, 1990);
- 3. Research into the broad range of individual differences between people in response to hypnotic suggestion (Bates, 1993; Council, Kirsch, & Grant, 1996; Evans, 1991; Oakman, Woody, & Bowers, 1996; Orne & Dinges, 1989);
- 4. Research into the role of contextual influences on hypnotic responsiveness (Council & Kirsch, 1996; Kirsch & Council, 1992; Nadon, Hoyt, Register, & Kihlstrom, 1991; Spanos, Arango, & de Groot, 1993).

These fruitful areas of research have led to resolution (in a relative, not absolute, sense, of course) of some issues, but not others. In general, Erickson's ideas have fared quite well in the research literature. For example, it is now widely agreed upon that hypnosis is both an interpersonal and intrapersonal phenomenon, and that relationship and contextual variables are significant determinants of hypnotic responsiveness, just as Erickson claimed (Lynn & Rhue, 1991). Furthermore, it is now widely accepted that a formal ritual of induction need not take place in order for hypnotic responsivity to occur. Hypnotic phenomena can and do arise spontaneously in a variety of contexts, even complex hypnotic phenomena such as analgesia (Chaves, 1993; Coe, 1992; Matthews & Edgette, 1997). Although the global term "everyday trance" is fairly criticised for its lack of defining boundaries, it is clear that Erickson's broader views of hypnotic phenomena were appropriate.

Subject to greater uncertainty is the notion of hypnotisability as a malleable trait, as Erickson seemed to believe. Research has been mixed on the issue, generating some support both for hypnotisability as a fixed trait (Banyai, 1991; Hilgard, 1991) and as a modifiable trait (Bertrand, 1989; Gfeller, 1993). Despite some researchers' doubts that hypnotisability can be modified, many other prominent researchers and clinicians have reported greater responsiveness with individualised and flexible approaches that emphasise positive and realistic expectations of hypnosis (Alman & Lambrou, 1992; Chaves, 1993; Barber, 1991; Spanos, 1986; Spanos, Arango, & de Groot, 1993).

Finally, a major contribution of Erickson's was the possibility of using indirect suggestion as a complement to, or even instead of, direct suggestions. Many people have created an erroneous perspective about Erickson's work on this topic by suggesting he was <u>always</u> indirect and metaphorical in his therapies and teachings. This is flatly untrue, and there is no better source to illustrate how direct and even authoritarian Erickson could be than to read his own case descriptions and therapy transcripts (Grodner, 1986; Rossi, 1980; Zeig, 1980b).

The issue has never been, as some have incorrectly stated, whether direct suggestions are more or less powerful in their effect than indirect suggestions. On the basis of this unfortunate dichotomous thinking, there evolved an arbitrary and unnecessary polarisation in the field of hypnosis; practitioners actually "chose sides" by emphasising either exclusively direct or indirect approaches in their teachings and writings. Thus, there evolved an artificial and inhibiting schism separating "Ericksonians" from "traditionalists." There are differences in assumptions and methods between model of hypnosis, as I suggest in Table 1, but what has now emerged with clarity is that all types of suggestions are valuable someplace with someone. Competent practice involves adapting one's methods to the unique characteristics of one's client, and not about what style or approach one just happens to prefer (Bloom, 1997; Grodner, 1986). Thus, a skilled clinician would be capable of communicating relevant information and perspectives in a range of structures and styles (Yapko, 1984). This concept represents a cornerstone of Ericksonian approaches called "utilisation." Jeffrey K. Zeig, Ph.D., Founder and Director of The Milton H. Erickson Foundation, succinctly defined utilisation this way: "Utilisation is the therapist's posture of readiness to respond strategically to any and all aspects of the client or the client's environment" (1997, p. 164).

THE UTILISATION APPROACH OF ERICKSON

Ericksonian hypnosis is based on a number of principles, all of which are implicit in this formula guiding Ericksonian interventions: "Accept and utilise." This is the essence of Ericksonian approaches, collectively known as the "utilisation approach" (Erickson & Rossi, 1979). A succinct comparison between Erickon's approaches and those of traditional and standardised models of hypnosis is found in Table 1. The "accept and utilise" formula and its associated principles are described in the remainder of this section.

- 1. Each person is unique. While all clinicians acknowledge this in principle (Grodner, 1986), the scripting of hypnotic approaches (i.e., the use of the same approach with different clients) precludes this recognition at the level of practice. Ericksonian approaches demand spontaneity and utilisation of the client's unique resources, personal history, and specific responses to the clinician (Yapko, 1985, 1990, 1995). Thus, prepared scripts that are "Ericksonian" are impossible to create.
- 2. *The client's experience is valid for him or her.* Through the acceptance of the individual's experience as a valid product of personal choices, both conscious and unconscious, "resistance" can be utilised in the process.
- 3. Each person relates to ongoing experience from his or her own frame of reference. All people routinely project meaning onto current experiences based on their own range of knowledge and past experiences. Thus, idiosyncratic responses to hypnosis and psychotherapy are not only allowed, but are expected and

considered integral to the treatment process. The client's unique subjective associations are the focal point of treatment; disrupting undesirable associations and building new, positive associations are the goals of the clinician. Erickson was quite right, subsequent research has shown, that it is not hypnosis that is therapeutic, rather it is the new associations in the client that are generated during hypnosis (Lankton & Lankton, 1983; Fromm & Nash, 1992).

- 4. *Join the client at his or her frame of reference.* One way the "accept and utilise" formula is manifested is in the clinician's accepting the client's views and experiences and utilising them in the therapy. Using the language of the client is another such manifestation.
- 5. The unconscious mind has utilisable resources, is capable of generating positive responses, and is patterned from experience. Unlike those views that characterise the unconscious as negative, random, and in need of healing, Erickson characterised the unconscious as a storehouse of valuable life-learnings that could be beneficial to a person when properly mobilised (Zeig, 1980b). Thus, he optimistically (and I personally believe too optimistically) assumed that each person already had within him or her the necessary resources for meaningful change (Grodner, 1986). Erickson placed great faith in the unconscious mind to meaningfully guide one's life path, regulate the flow of information according to what one could effectively handle, and otherwise help manage one's life. Erickson was confident that useful information made available to the unconscious through hypnosis could be integrated in goaloriented ways, particularly when the information stimulated the appropriate internal association, i.e., the most meaningful thoughts and feelings, including memories, values, and so forth (Bloom, 1997; Edgette & Edgette, 1995).

ERICKSONIAN HYPNOSIS

It is difficult to understand Ericksonian hypnosis without considering the larger patterns of Ericksonian psychotherapy that provide the context for their utility. This discussion, however, will focus only on Erickson's use of hypnosis.

Erickson's hypnotic methods have often been described as indirect. In fact, as discussed earlier, many of Erickson's methods were indirect, but not exclusively so. Erickson could be, and often was, very direct and authoritarian in his manner, particularly when his clients were open and responsive with him (Yapko, 1983, 1990, 1995). In general, however, Erickson's methods tended to be less direct because his typical goal was simply to allow for the possibility of a response rather than directly demanding one (Zeig, 1980b). Thus, he would suggest ways the client might meaningfully respond, and then accept and utilise whatever they offered as responses (Erickson & Rossi, 1979, 1981).

Ericksonian approaches to hypnosis have been characterised as "naturalistic," i.e., conversational. In employing this approach, there is no need for overtly identifying the onset of hypnotic procedure; rather, the clinician simply may involve the client in an interaction that is absorbing, helping them build an

Table 1: General Principles Contrasting the Views of the Major Models of Hypnosis

Variable	Traditional	Standardised	Ericksonian (Utilisation)
Individualised approach?	No	No	Yes
Naturalistic concept of hypnosis?	No	No	Yes
Naturalistic techniques?	No	No	Yes
Hypnotist's demeanor?	Authoritarian	Authoritarian or permissive	Authoritarian or permissive
Suggestion style used?	Direct	Direct	Direct or indirect
Degree of compliance demanded?	High	High	Low
How is power in the relationship distributed?	Unequally in favour of the hypnotist	Unequally in favour of the client	Equally
Content or process oriented?	Content	Content	Either or both
Who can experience hypnosis meaningfully	Some	Some	All
Source of resistance?	Intrapersonal	Intrapersonal	Intra- or interpersonal
Reaction to resistance?	Confrontation or interpretation	Confrontation or interpretation	Utilisation
Emphasises hypnotic depth?	Yes	Yes	No
Makes use of formal suggestibility tests?	Yes	Yes	No
Structure of process?	Linear	Linear	Mosiac
Relative value of insights?	Low	Low	Low
View of the symptoms' intentions?	Negative	Negative	Negative
Aetiology of symptoms?	Intrapersonal	Intrapersonal	Inter- or intrapersonal
Symptomatic vs. dynamic approach?	Either or both	Symptomatic	Either or both
Recognition of secondary gains?	No	No	Yes
Characterisation of the unconscious?	Negative	Negative	Neutral (capable of + or –)
Role of the unconscious?	Reactive	Reactive	Active

internal focus on his or her potentials, resources, and whatever subjective associations happen to arise during the process. This is the phase of hypnotic induction, with underlying goals of facilitating less reliance on conscious processes (thereby altering one's usual frame of reference) and building further hypnotic responsiveness. Strategically guiding the client's experience in therapeutic ways through the deliberate and careful introduction of new information, new viewpoints, and other pattern-interrupting methods becomes

the therapy phase, or hypnotic utilisation phase (Erickson & Rossi, 1979, 1981). In actual clinical practice, the phases of hypnotic interaction are much less clearly defined than in more traditional, structured approaches (Haley, 1973; Yapko, 1990, 1995, 1996).

Evident in most of Erickson's hypnotic patterns is the facilitation of both the hypnotic state and the various hypnotic phenomena through this naturalistic method. In terms of actual technique, this involves describing interesting yet routine contexts in which hypnotic responses may typically arise without the client having previously thought about them in that way. The clinician using a conversational approach to induction might simply but meaningfully describe a situation in which one spontaneously enters hypnosis. Concurrent with the verbalisations, the clinician can nonverbally emphasise certain ideas (a process known as the "marking" or "embedding" of suggestions) through the use of gestures or changes in rhythm or tonality. As an example, the entrancing qualities of watching a fire are described in the following conversational induction process:

. . . This past winter was such a cold one . . . and I often found myself so grateful for the simple pleasure of having a fireplace . . . fireplaces are so soothing in the wintertime . . . you may know that from your own experience ... for you can feel so warm and so comfortable ... when you take time to just sit quietly and know that you can relax deeply . . . and be so comfortable . . . and you know how to feel good, . . . and a fire can be so beautiful to watch . . . and watching for hours can seem like minutes . . . because the colours are so absorbing . . . and the patterns of the wood burning at different rates in different spots is so soothing to watch . . .

Building an internal focus and an increased responsiveness to the clinician's guidance are primary goals of the hypnotic induction. These may be accomplished through a variety of methods, such as:

- 1. The revivification of previous <u>informal</u> hypnotic experiences, as in the above fireplace example;
- The revivification of previous <u>formal</u> hypnotic experiences ("You can recall in vivid detail what your most satisfying experience with hypnosis was like ... how you were sitting, which relaxing images you saw," etc.); and,
- 3. The use of negative suggestions when wanting to utilise the resistance of a client responding in a contrary manner ("you don't have to sit comfortably. . . and you don't even need to think about allowing yourself the soothing experience of closing your eyes and letting your mind drift," etc.) (Yapko,

To facilitate a particular hypnotic phenomenon, one might simply describe a natural context in which the desired type of response occurs, creating the possibility of that response in the client as he or she is encouraged to experientially relate to the description (Edgette & Edgette, 1995; Zeig, 1980a, 1980b, 1982), To facilitate age regression, for example, one might offer the client the following:

. . . Recently, I had the experience of visiting the town I grew up in . . . and it was so very interesting to go back in time and re-experience important memories from childhood . . . memories that had been long forgotten drifted into awareness . . . and it was such a good feeling to remember happy experiences ... an early birthday party ... a friend in school ... an important event that had a big impact on the kind of person I am today . . . and you can experience what that must be like . . .

In this example suggesting the possibility of an age regression, the client is gently oriented to past experience in a way that is not personally threatening, thus reducing or eliminating the need for defensive reactions. The possibility is created that the client may think of early childhood memories. Which specific memory then becomes a specific focal point for interaction is a product of personal choice that is derived from a combination of personal, interpersonal, and situational factors (Yapko, 1990, 1995). The client's choice is accepted, and the information is utilised in whatever ways the clinician sees fit.

As a general strategy for acquiring skills in doing Ericksonian hypnosis, recognising hypnotic phenomena as they arise in the course of daily living will provide numerous possibilities for naturalistically facilitating such phenomena with clients (Edgette & Edgette, 1995). Absorbing descriptions of the sensory details of the context in which the hypnotic response is evident can stimulate the unconscious associations in the client, allowing him or her to relate to the experience in a personal and experiential way (Watzlawick, 1978; Zeig, 1980b). Erickson was an advocate of the notion that people have many valuable resources within them if they could just be "connected" to them. Hypnosis is a strategic means for facilitating this process (Bloom, 1997; Grodner, 1986; Lankton, 1986; Lankton & Lankton, 1989).

The primary vehicle for Erickson's indirect methods is the anecdote, commonly addressed in the literature on Erickson as the "therapeutic metaphor." Evident in the previous sample induction and utilisation, the anecdotal method involves the telling of a story that can contain meaningful messages on multiple levels of awareness (Barker, 1985). Erickson observed that when clients present their problems to clinicians, they inevitably communicate on multiple levels; there is the surface meaning of their chosen words, but there is also an underlying reality concerning what the client "really" means or what the symptom "really" symbolises (Zeig, 1980a, 1980b).

Erickson believed that instead of solely attempting to promote awareness for the deeper level meanings of communications, thereby restricting oneself to only one level (and, in his view, the most limited level) of the individual, the clinician can also communicate on multiple levels, including some outside of conscious awareness (Zeig, 1980b). This is the conceptual basis for Erickson's anecdotal methods. Furthermore, the use of anecdotes to make a point allows the client to absorb the point experientially, by placing the relevant learning in an interesting and usually realistic context of human experience. This can make the point far more real and emotionally significant for the client. Emotionally significant learnings afford one a greater opportunity of integration of information than do less significant ones (Lankton, 1986).

Anecdotes:

- 1. Encourage the client to actively identify with the story since it is introduced in a way that suggests it is relevant to the client's needs;
- 2. Encourage the client to actively learn from others' experiences;
- 3. May diminish resistance because the client is encouraged to respond to the anecdote in whatever way is desired without the demand for a specific response; and,
- 4. Provide a memorable and meaningful way to integrate new learnings (Barker, 1985; Lankton & Lankton, 1989; Zeig, 1980b).

Anecdotes can be used to induce hypnosis, facilitate specific hypnotic phenomena, suggest resolutions to problems, address a problem's unconscious underlying dynamics without necessarily encouraging or promoting insight, and for a variety of other meaningful applications. Lankton (1986) encouraged the use of metaphors to restructure attitudes, encourage affective release and greater emotional flexibility, and to facilitate behaviour change. He likewise described the use of open-ended suggestions to create possibilities rather than closed-ended suggestions which may be unnecessarily restrictive.

While the indirect, anecdotal method is certainly one of Erickson's key contributions to hypnotic procedure, there are other uniquely Ericksonian hypnotic patterns that are also worthy of brief consideration. These include the interspersal approach and confusion methods.

The interspersal approach involves the use of specific words or phrases in the larger context of a routine conversation or therapeutic metaphor that, through repetition, are designed to facilitate the building of new associations within the client (Erickson, 1966; Erickson & Rossi, 1979, 1981; Otani, 1990). If, for example, a clinician would want to facilitate an expectation of positive changes ("building expectancy"), the clinician can intersperse suggestions leading the client in that direction, as in the following:

. . . You came here hoping that I might say or do something that would . . . make it possible to feel better . . . and you'd like to and you can look forward to feeling better . . . and having things improve surprisingly soon . . . and you didn't know just what I would say . . . or what I would do . . . and you forgot that you have already gone through so many positive changes you're capable of remembering and change is inevitable . . . and you can't stop progress . . . you know you have changed . . . and you can expect more changes . . . without even working at it . . . you have a change of mind . . . a change of heart . . . a change of luck . . . and changes on even deeper levels . . .

Interspersed in this example are multiple references to the possibility and probability of change, attempting to build a therapeutic momentum based on positive expectations. Evident in this example are other verbal strategies, such as presupposition, dissociation, indirect post-hypnotic suggestions, truisms, open-ended suggestions, and others (Erickson & Rossi, 1979, 1981; Yapko, 1990). Such strategies are typical of the Ericksonian approach which emphasises creative use of verbal as well as nonverbal patterns. Nonverbal patterns include the "marking" of suggestions, modeling (the clinician behaving in the manner desired of hypnotised client, e.g., unmoving, fixed attention, the deliberate matching or mismatching of client nonverbals, etc.), and the use of varied voice dynamics to facilitate the integration of verbal messages (Yapko, 1990, 1995).

The confusion methods are designed to disrupt the client's usual patterns for processing experience (Erickson & Rossi, 1979; Gilligan, 1987). It is well-known that when one is certain about something, it is very difficult to induce a change of attitude. Confusion methods are designed to create a state of uncertainty in the client as a means for introducing the possibility of change (Erickson, 1964). Confusion methods may involve the use of sensory overload (i.e., the use of multiple, complex ideas or sources of input that overwhelm the client's ability to consciously sort through it all), or pattern interruption (introducing a new behaviour or idea that disrupts the client's usual sequence of responding, making it difficult or impossible for the person to attain his or her usual, undesirable outcome). Confusion methods typically disorient the person, facilitating an inward search (thus their utility in either hypnotic induction or hypnotic utilisation) in an attempt to make meaning of presumably meaningful yet confusing ideas or demands (Gilligan, 1987). As the client focuses on the language of the clinician the deeper meanings of embedded suggestions can take effect. The clinician can intersperse meaningful suggestions throughout the confusing ramblings, giving those more important suggestions greater clarity and significance by creating a contrast with their confusing background. In the following example, a confusion method is employed for the purpose of facilitating a structure of hypnotic amnesia:

... and after learning what you've learned about yourself today ... you have an opportunity to decide at a deeper level . . . how much you'd like to remember . . . and your conscious mind can know at one level . . . and your unconscious can know at a deeper level . . . and you can remember what you'd like to remember . . . and remember to forget what you'd like to . . . and when you remember to forget what you'd like to forget to remember . . . you can remember to forget what you've forgotten to forget when you realise deeply that remembering to remember to forget that no one has to remember to learn what they came here to learn by forgetting to remember the memory of insignificant and forgotten learnings that can mean a lot . . .

As the client attempts to sort through the confusing suggestions surrounding remembering and forgetting, those very processes are accessed. The client can choose what degree of remembering and forgetting will be the most beneficial for him or her. And, as the research shows quite clearly, spontaneous amnesia is an uncommon response, suggesting people can and do remember their hypnotic experiences if they choose to (Simon & Salzberg, 1985).

CONCLUSION

Erickson did not promote a specific and detailed theoretical model of personality or clinical intervention. His view was an atheoretical one emphasising the need to respond to the uniqueness of each individual. Thus, "Ericksonian hypnosis" as a style may be more easily characterised by the flexibility of the general "accept and utilise" formula than by any specific hypnotic or psychotherapeutic approach.

In this paper's description of Erickson's work, emphasis has been placed on the clinician assuming a flexible yet active role in guiding the course of treatment in a solution-oriented direction even when indirect methods are judged to be the most likely to succeed. The broad range of Ericksonian patterns of hypnosis involve a sophisticated use of linguistic and cognitive structures which are increasingly well-described in the clinical and research literature. This literature requires an open-minded and careful analysis by the serious practitioner of clinical hypnosis.

The creative verbal and nonverbal strategies modern clinicians use that are derived from Erickson's work, and his many insights about hypnotic phenomena that paved the way for our greater current understanding of hypnosis, provide lasting evidence of Erickson's importance to the entire field.

REFERENCES

- Alman, B., & Lambrou, P. (1992). Self-hypnosis: The complete manual for health and self-change (2nd ed.). New York: Brunner/Mazel.
- Banyai, E. (1991). Toward a social-psychobiologial model of hypnosis. In S. Lynn & J. Rhue (Eds.). Theories of hypnosis: Current models and perspectives (pp. 564-598). New York:
- Barber, J. (1991). The locksmith model: Accessing hypnotic responsiveness. In S. Lynn & H. J. Rhue (Eds.). Theories of hypnosis: Current models and perspectives (pp. 241-274). New York:
- Barker, P. (1985). *Using metaphors in psychotherapy*. New York: Brunner/Mazel.
- Bates, B. (1993). Individual differences in response to hypnosis. In J. Rhue, S. Lynn, & I. Kirsch (Eds.). Handbook of clinical hypnosis (pp. 23-54). Washington, D.C.: American Psychological Association.
- Bertrand, L. (1989). The assessment and modification of hypnotic susceptibility. In N. Spanos & J. Chaves (Eds.). Hypnosis: The cognitive-behavioural perspective (pp. 18-31) Buffalo, NY: Prometheus.
- Bloom, P. (1997). How does a non-Ericksonian integrate Ericksonian techniques without becoming an Ericksonian? In W. Matthews & J. Edgette (Eds.). Current thinking and research in brief therapy: Solutions, strategies, narratives (pp. 65-77). New York: Brunner/Mazel.
- Chaves, J. (1993). Hypnosis in pain management. In J. Rhue, S. Lynn & I. Kirsch (Eds.). Handbook of clinical hypnosis (pp. 511-532). Washington, D.C.: American Psychological Association.
- Chaves, J. (1997). The state of the "State" debate in hypnosis: A view from the cognitivebehavioural perspective. International Journal of Clinical and Experimental Hypnosis, 45, 251-265.
- Coe, W. (1992). Hypnosis: Wherefore art thou? International Journal of Clinical and Experimental Hypnosis, 40, 219-237.

- Council, J., & Kirsch, I. (1996). Explaining context effects: Expectancy and consistency. Contemporary Hypnosis, 13, 29-32.
- Council, J., Kirsch, I., & Grant, D. (1966). Expectancy, imagination, and hypnotic susceptibility. In R. Kunzendorf, B. Wallace, & N. Spanos (Eds.). Imagination and hypnosis (pp. 41-65). Amityville, NY: Baywood.
- Edgette, I., & Edgette, J. (1995). The handbook of hypnotic phenomena in psychotherapy. New York: Brunner/Mazel.
- Erickson, M. (1964). The confusion technique in hypnosis. American Journal of Clinical Hypnosis, 6, 183-207.
- Erickson, M. (1966). The interspersal hypnotic technique for symptom correction and pain control. American Journal of Clinical Hypnosis, 8, 198–209.
- Erickson, M., & Rossi, E. (1979). Hypnotherapy: An exploratory casebook. New York: Irvington.
- Erickson, M., & Rossi, E. (1981). Experiencing hypnosis: Therapeutic approaches to altered states. New York: Irvington.
- Evans, F. (1991). Hypnotizability: Individual differences in dissociation and the flexible control of psychological processes. In S. Lynn & J. Rhue (Eds.). Theories of hypnosis: Current models and perspectives (pp. 144-168). New York: Guilford.
- Fromm, E., & Nash, M. (Eds.) (1992). Contemporary hypnosis research. New York: Guilford.
- Gfeller, J. (1993). Enhancing hypnotizability and treatment responsiveness. In J. Rhue, S. Lynn, & I. Kirsch (Eds.), Handbook of clinical hypnosis (pp. 235–249). Washington, D.C.: American Psychological Association.
- Gilligan, S. (1987). Therapeutic trances: The cooperation principle in Ericksonian hypnotherapy. New York: Brunner/Mazel.
- Grodner, B. (1986). Learning Erickson's methods. In B. Zilbergeld, M. Edelstein & D. Araoz (Eds.). Hypnosis: Questions and answers (pp. 248–251). New York: Norton.
- Haley, J. (1973). Uncommon therapy. New York: Norton.
- Haley, J. (1985). Conversations with Milton H. Erickson, M.D. (Vols. I-III). New York: Triangle Press.
- Haley, J. (1996). Jay Haley on Milton H. Erickson. New York: Brunner/Mazel.
- Hilgard, E. (1991). A neodissociation interpretation of hypnosis. In S. Lynn & J. Rhue (Eds.). Theories of hypnosis: Current models and perspectives. (pp. 235-249). Washington, D.C.: American Psychological Association.
- Kihlstrom, J. (1987). The cognitive unconscious. Science, 237, 1445-1452.
- Kihlstrom, J. (1992). Hypnosis: A sesquicentennial essay. International Journal of Clinical Hypnosis, 40, 301-314.
- Kirsch, I., & Council, J. (1992). Situational and personality correlates of hypnotic susceptibility. In E. Fromm & M. Nash (Eds.). Contemporary hypnosis research (pp. 267–291). New York: Guilford.
- Lankton, S. (1986). Choosing the right metaphors for particular clients. In B. Zilbergeld, M. Edelstein, & D. Araoz (Eds.). Hypnosis: Questions and answers (pp. 261-267). New York: Norton.
- Lankton, C., & Lankton, S. (1983). The answer within: A clinical frame of Ericksonian hypnotherapy. New York: Brunner/Mazel.
- Lankton, C., & Lankton, S. (1989). Tales of enchantment: Goal-oriented metaphors for adults and children in therapy. New York: Brunner/Mazel.
- Lynn, S., & Rhue, J. (Eds.) (1991). Theories of hypnosis: Current models and perspectives. New York: Guilford.

- Lynn, S., Weekes, J., Matyi, C., & Neufeld, V. (1988). Direct versus indirect suggestions, archaic involvement, and hypnotic experience. Journal of Abnormal Psychology, 97, 296–301.
- Matthews, W., & Edgette, J. (Eds.) (1997). Current thinking and research in brief therapy: Solutions, strategies, narratives. New York: Brunner/Mazel.
- Matthews, W., & Mosher, D. (1988). Direct and indirect hypnotic suggestion in a laboratory setting. British Journal of Experimental and Clinical Hypnosis, 5, 63–71.
- McConkey, K. (1986). Opinions about hypnosis and self-hypnosis before and after hypnotic testing. International Journal of Clinical and Experimental Hypnosis, 34, 311–319.
- Otani, A. (1990). Structural characteristics and thematic patterns of interspersal techniques of Milton H. Erickson: A quantitative analysis of the Case of Joe. In S. Lankton (Ed.). Ericksonian monographs, No. 7: The broader implications of Ericksonian therapy (pp. 40-50) New York: Brunner/Mazel.
- Nadon, R., Hoyt, I., Register, P., & Kihlstrom, J. (1991). Absorption and hypnotizability: Context effects re-examined. Journal of Personality and Social Psychology, 60, 144–153.
- Oakman, J., Woody, E., & Bowers, K. (1996). Contextual influences on the relationship between absorption and hypnotic ability. Contemporary Hypnosis, 13, 19–28.
- Orne, M., & Dinges, D. (1989). Hypnosis. In H. Kaplan & B. Sadock (Eds.). Comprehensive textbook of psychiatry (5th ed) (pp. 1501–1516) Baltimore, MD: Williams & Wilkins.
- Rossi, E. (Ed.) (1980). The collected papers of Milton H. Erickson on hypnosis (Vols. I-V). New York: Irvington.
- Simon, M., & Salzberg, H. (1985). The effect of manipulated expectancies on posthypnotic amnesia. International Journal of Clinical and Experimental Hypnosis, 33, 40–51.
- Spanos, N. (1986). Hypnosis and the modifications of hypnotic susceptibility: A socialpsychological perspective. In P. Naish (Ed.). What is hypnosis? Current theories and research (pp. 85–120). Milton Keynes, England: Open University Press.
- Spanos, N., Arango, M., & de Groot, H. (1993). Context as a moderator in relationships between attributed variables and hypnotizability. Personality and Social Psychology Bulletin, 19, 71–77.
- Spanos, N., & Chaves, J. (1989). Hypnotic analgesia, surgery and reports of nonvolitional pain reduction. British Journal of Experimental and Clinical Hypnosis, 6, 131–139.
- Watzlawick, P. (1978). The language of change. New York: Basic Books.
- Yapko, M. (1983). A comparative analysis of direct and indirect hypnotic communication styles. American Journal of Clinical Hypnosis, 25, 270-276.
- Yapko, M (1984). Implications of the Ericksonian and Neurolinguistic Programming approaches to responsibility of therapeutic outcomes. American Journal of Clinical Hypnosis, 27, 137-143.
- Yapko, M. (1985). The Erickson hook: Values in Ericksonian approaches. In J. Zeig (Ed.). Ericksonian psychotherapy, Vol. 1: Structures (pp. 266–281). New York: Brunner/Mazel.
- Yapko, M. (1986). What is Ericksonian hypnosis? In B. Zilbergeld, M. Edelstein, & D. Araoz (Eds.). Hypnosis: Questions and answers (pp. 223-231). New York: Norton.
- Yapko, M. (1990). Trancework: An introduction to the practice of clinical hypnosis (2nd ed.) New York: Brunner/Mazel.
- Yapko, M. (1995). The essentials of hypnosis. New York: Brunner/Mazel.
- Yapko, M. (1996). Hypnosis: Treatment in a trance. Encyclopedia Britannica Medical and Health Annual, 366-370.
- Zeig, J. (1980a). Symptom prescription and Ericksonian principles of hypnosis and psychotherapy. American Journal of Clinical Hypnosis, 23, 16–22.

- Zeig, J. (Ed.)(1980b). A teaching seminar with Milton H. Erickson. New York: Brunner/Mazel.
- Zeig, J. (Ed.)(1982). Ericksonian approaches to hypnosis and psychotherapy. New York: Brunner/ Mazel.
- Zeig, J. (1985). Experiencing Erickson: An introduction to the man and his work. New York: Brunner/Mazel.
- Zeig, J. (1997). Experiential approaches to clinician development. In J. Zeig (Ed.). The evolution of psychotherapy: The third conference (pp.161–177). New York: Brunner/Mazel.

ERICKSONIAN HYPNOSIS: A PERSPECTIVE ON DIRECT AND INDIRECT METHODS

Jeffrey K. Zeig¹ Milton H. Erickson Foundation

The primary purpose of this paper is to emphasise the essential role of indirection in hypnosis. The second purpose is to compare and contrast the nature of direct versus indirect suggestions. Some experts (cf. Lynn, Neufeld, & Mare, 1993) have examined the question, "Are indirect suggestions better than direct suggestions?" but that query has limited applicability. I propose a forceful position on the nature of hypnotic suggestion: All suggestions in hypnosis are necessarily indirect. This is due to the injunctive nature of the hypnotic frame which modifies the manner in which suggestions — direct and indirect — are understood.

The greatest thing by far is to have a command of metaphor. (Aristotle)

Ericksonian hypnotherapy essentially entails experiential methods, in which reliance on indirect methods facilitates a client's increased personal effectiveness. This paper presents an abridged model of Ericksonian methods, which illustrates the role of indirection in hypnotic induction, where it serves as a precursor for indirection in therapy.

Communication will be described as both injunctive and indicative, and this distinction will be used to study the implicit context of hypnosis in order to explicate the claim that all suggestions in hypnosis are superordinately indirect. Direct and indirect suggestions will be discussed in the contexts of traditional hypnosis and Ericksonian hypnosis, respectively. Distinctions between traditional and Ericksonian hypnosis will be drawn regarding induction methods.

However, before proceeding, I will exert my prerogative as an Ericksonian and tell a story: I was having dinner with a female friend in Phoenix, Arizona, when a stunning woman walked into the restaurant wearing extraordinarily seductive and revealing clothing. I turned to my friend and said "What do you make of that?" She replied "Power packaging." I like the concept of "power packaging." It has relevance to psychotherapy.

POWER LOST

When clients present their problems for psychotherapy, they reveal impasses in living where they perceive deficits of ability. Structurally, symptoms can be considered indirect messages that indicate a loss of effective power. Individuals' "stuck spots" are often cued (and, perhaps to some extent, induced and maintained) by words such as "Can't," "Always," and "Never," and phrases such as "I should," "If he/she just," "Yes, but," "If only," and "What if." For example, clients complain, "I can't change my depression;" "I always overeat;" "I never can have a good relationship;" "I should have a better attitude;" "If he/she just would talk to me;" "Yes, I know it would be good to exercise, but I don't

do it;" "If only I had chosen differently;" and "What if something bad happens?" In stating their problems, they communicate "I don't have power to be effective." They believe they lack an essential ability either to change or to cope. They are involuntary slaves to their difficulties.

Therapy is about power — it is about countering the perceived power deficit of the client. Hypnosis is a context in which power can be regained, in which power is "packaged" back to the client. There is a difference, however, between power packaging in Ericksonian (indirect) and traditional (direct) varieties of hypnosis. Traditional hypnosis is often like medicine: The power seems to be derived from the tonic (suggestion) imbibed by a patient. Indirect Ericksonian methods strive to elicit power from within the client and to the client's credit.

Essentially, Ericksonian hypnotherapy establishes a "social vacuum," where the client is drawn into an experiential recognition of personal effectiveness. The therapist creates the vacuum by guiding associations which then stimulate energetic action from the person. The difference between direct and indirect suggestion is the difference between Renaissance art, which is like a photograph, and impressionist art. In the latter, the viewer of the art creates a percept, based on subtle cues provided by the artist.

Before developing these assumptions about traditional methods, I will present an Ericksonian position and a perspective on Ericksonian methods.

POWER REGAINED: THE ERICKSONIAN POSITION

A therapist who subscribes to the Ericksonian tradition believes each person possesses sufficient inherent resources to live more effectively. The task of psychotherapy is to identify, develop, and harness those inherent, but often unrecognised, potentials. The therapist seeks to guide associations to stimulate energetic action in the client who actualises the unaccessed resources.

Clients who present their deficits have, indeed, lost awareness of internal resources. For example, every person who feels "stuck" in a feeling state has a history of being able to modify emotion; the addicted client has many life experiences of being comfortable and competent without relying on an addiction; and every client who feels plagued by "bad" relationships, has a history of relating effectively in some instances. Consider the pilot who seeks consultation, complaining of an inability to engage in public speaking. Contrast his conundrum to the public speaker who complains of an inability to relax on an airplane. Each has an ability to be comfortable in a situation that many people might construe as difficult (flying, public speaking), but each has been unable to use that resource (comfort) to combat the respective problem.

A primary task of psychotherapy, therefore, is how to activate dormant power, to elicit recall, and foster the development of unrecognised abilities. If clients present themselves as powerless victims, how will therapists help them access and use dormant powers? From an Ericksonian perspective, the therapist sets up situations that allow clients, to their own credit, to realise underlying potentials. The therapist engages in "power packaging." The product marketed to clients is

the proposition that they have the power to accomplish things that serve their best interests (Zeig & Rennick, 1991). The therapist creates significant emotional experiences (Massey, 1979) that enables clients to self-discover the ability to be effective.

Therapeutic experiences can be established by using direct and/or indirect methods. But if a therapist wants client-based change, indirect messages are best. Before considering direct and indirect suggestions in hypnosis, I will present a meta-model of Ericksonian intervention in order to understand the use of indirect techniques in therapy.

AN ABRIDGED VERSION OF THE ERICKSONIAN METHOD

In essence, Ericksonian therapists create meaningful and dramatic therapeutic experiences by triangulating five factors. What follows is an abridged version of what I call an Ericksonian approach. (Additional information about this approach is contained in Zeig, 1992). Each of the five factors will be described in turn.

The Position of the Therapist

Each therapist has a personal and a professional position. These consist of characteristics such as compassion, perceptiveness, clinical skills, intellect, and curiosity. The position of the therapist is invariably projected into the therapy and it influences treatment outcomes. This factor accounts for much of the outcome of therapy and greatly influences the other four aspects. The position of the therapist is not set in stone; it can be modified to effect specific goals. However, because it does not directly relate to the central ideas regarding indirection in this paper, the therapist's posture will not be developed further here.

Goal Setting

The goal consists of the ideas the therapist decides to communicate to the client. The main therapy goal usually overlaps with the client's own wishes (e.g., to stop overeating, or to have a good relationship). However, the therapist might modify the overall goal. For example, a goal can be divided into manageable steps, each a subgoal to communicate to the client. To illustrate, if the person suffers depression, the therapist might want to communicate "Be happy." The overall goal of "being happy" can be divided into a number of corresponding subgoals (e.g., being active, having flexibility in mood, being oriented to the future, and being positive about oneself and others). Each component is a subgoal that can be elicited and developed within the client, and his/her social system, thereby constructing the larger goal.

Gift Wrapping

The therapist decides how to communicate the goal or subgoal. This can entail being indirect. It is usually not enough to directly specify the goal to the client. It is generally preferable to package the goal within a therapeutic technique; for example, within hypnosis, a metaphor, a symbol, or a confusion technique. Couching the goal indirectly within a technique makes it more likely the client can elicit the desired effect to his/her own credit. The client must strive to understand the therapist's message and, in the process, can energise unrecognised potentials and access personal power. I call this method of presenting the therapy goal (or subgoal) within a technique, gift wrapping. Any gift-wrapped message is indirect by its very nature, because it is one step removed from its direct presentation (Zeig, 1985).

Further, it should be remembered that psychotherapy techniques do not cure people like an antibiotic may cure an infection. Techniques are merely indirect methods of presenting information. Actually, this is a polite process. The client "gift wraps" the problem within a symptom. The therapist returns a giftwrapped solution within a technique. (See Ritterman, (1983) who describes therapy as an exchange of gifts.)

Tailoring

The therapist ascertains the client's values, the position the person takes (Fisch, Weakland, & Segal, 1982), in order to speak that person's experiential language. This is essentially a method within a therapeutic anecdote. If the client has an essential position of being "adventuresome," the therapeutic story could be tailored to feature an adventuresome protagonist. If the person is shy, the protagonist could be "secretly" active. Tailoring, like gift wrapping, elicits personal power and decreases resistance.

Processing

The therapist presents the tailored and packaged goal within a dramatic process, which usually entails a three-step procedure: moving in small strategic Steps; Intervening; and Following Through. This procedure has been labelled "SIFT" (Zeig, 1985). The SIFT process makes the process of therapy somewhat akin to farming. There is a valuable seed (client resource or therapist goal). It may exist in a dormant state within the client. At first glance, it seems the existent ground is not a sufficiently fertile medium for the seed to develop. Therefore, the therapist methodically works with the person to disrupt some of the earth which has hardened. This restores the malleability and fertility that is inherent in the soil. Subsequently, the seed is ceremoniously replanted. The client/therapist team then ensures adequate follow-up by continuing to nurture the seed. Throughout the process, autonomy is subtly encouraged: it is the client who does the work and takes credit.

It is not enough to merely present the tailored and gift-wrapped goal. Suggestions must be sequenced. The therapist starts by pacing the client, then

works to disrupt rigid sets and resistances. This helps to promote responsiveness. Initiating change by moving in small steps, the therapist begins to present goals and subgoals and follow through on them.

The step of building responsiveness could be called "inducing hypnosis." A euphemism for hypnosis is eliciting collaborative responsiveness. During the induction process, the Ericksonian therapist presents injunctions to the client and builds a set whereby the person responds to those minimal cues (also called "indirect suggestions"). In the induction, the Ericksonian therapist obscures messages and makes them indirect. The effect of indirection is that responses become more autonomously generated. For example, if the therapist says to the client during the hypnotic induction, "You can . . . step forward . . . into a comfortable state," and the person moves a foot forward in a more or less dissociative (automatic) response to the implied command, that is judged to be a cooperative response to a minimal cue. Before proceeding to present giftwrapped and tailored goals, Erickson worked with his client to establish to the best of the mutual ability of both Erickson and the person, responsiveness to minimal cues.

The purpose of indirect methods varies as one shifts from the induction to the therapy process. In induction, the goal is to elicit responsiveness to indirect suggestions. For therapy, indirect (gift-wrapped) techniques are used to stimulate resources into action. I call this the R & R of Ericksonian methods (Zeig & Rennick, 1991). If the therapist intends to use indirect techniques to help clients activate dormant resources, responsiveness to indirect methods should be garnered first. This is a primary purpose of induction in Ericksonian practice. Indirect induction is not used merely to elicit dissociative processes. It is also used to develop responsiveness. If the therapist is going to use indirect techniques in therapy (e.g., in the form of anecdotes, symbols, and metaphors), then he/she ought to work in the initial stages of the process (i.e., during induction) to develop client responsiveness to that type of communication. Indirect induction lights the way for the indirect therapy that follows.

Having offered some fundamentals of an Ericksonian approach, I will comment both on the injunctive aspect of hypnosis and on the nature of direct and indirect suggestion.

INJUNCTIVE COMMUNICATION

In order to define direct and indirect suggestion, it is valuable to analyse the understructure of communication. Such an analysis will illuminate my hypothesis about the impossibility of direct suggestion during hypnosis. Injunctions are the cornerstone of multiple level communication (Zeig, 1985). Understanding the injunctive aspects of communication can be traced to Gregory Bateson, who described communication as consisting of a report and a command (Bateson & Ruesch, 1951, pp. 179–231). Information (the report) is contained in any message. But there also is a covert directive (command) about the nature of the relationship between the sender and the receiver. The command frames the presented information. For example, the explicit message (report) could be the directive "Please, come here," but the implicit command communicated paraverbally that frames the message could be "This is play!" "This is work!" or "This is intimacy!"

A similar view of communication was formulated by Eric Berne (1966, p. 227), who maintained that communication is composed of both social and psychological levels. Berne posited that the outcome of communication was determined on the psychological level. An example can be seen in a seduction scene in which one partner asks "Will you come up and see my butterfly collection?" In Berne's Transactional Analysis parlance, the ostensible Adult-to-Adult message (about the butterfly collection) differs from the Child-to-Child message (flirting). Multiple level messages are part of all communications.

A somewhat analogous description to the analyses of Bateson and Berne can be found in the work of the linguist, Noam Chomsky, who discussed rules of grammar in terms of surface structure and deep structure (see Bandler & Grinder, 1975). It is the extracted deep structure meaning that guides action.

Paul Watzlawick (1985) described denotation in language as indicative and connotation as injunctive. The injunctive part of a message is covert and asks the recipient to "do something."

It is the therapeutic injunction, not the overt content, that is most influential in promoting change.

Watzlawick's distinction between indicative and injunctive forms is helpful in understanding the difference between direct and indirect suggestions.

DEFINING "DIRECTION" AND "INDIRECTION"

We have arrived at the point where indirect and direct suggestions can be defined. Indirect communications have a rich injunctive component. Direct suggestions are indicative and the injunction is absent or minimal. Indirect suggestions have a "hidden" or covert message; direct suggestions do not.

In reality, it is difficult to minimise the injunctive aspect of communication. This is because communication is more than the words that are said. The action around the covert context frames the message and modifies its essential character. For example, a person can state "Here is a table."

On the surface, it seems to be a direct statement. But modifications in gestures, tone, and context change the meaning of the direct statement. If a carpenter proudly holds out his arms and exclaims "Here is a table," the injunctive aspect of the communication is evident. If a chef in a fine restaurant proudly proclaims "Here is a table," the meaning of the message is modified.

Paraverbal and contextual markers change the meaning of communication.

Now, let's consider direct suggestion. Two typical direct therapeutic suggestions to an obese person are "Eat your food slowly. Put your fork down on the table between each bite." These direct suggestions can be modified and made more injunctive. For instance, paraverbal messages of the therapist might subtly indicate how these suggestions are to be carried out (with enthusiasm,

with diligence, etc.). The messages also could be placed in a new context; for example, they could be delivered during hypnosis.

Direct suggestions are modified by the introduction of hypnosis. If an obese client comes into a consulting room and is given the direct instruction "Eat slowly," there is little chance of compliance. However, if the person is induced into trance, and then told "Eat slowly," the possibility of a favourable response improves. This is because hypnosis per se is a paraverbal marker that frames the message. Once a message is presented within the frame of hypnosis, an injunction is "tagged" onto the stated message. The injunction indicates "This communication must be realised "hypnotically;" that is, "Because of hypnosis you will now be able to change your behaviour and it will happen more easily, perhaps automatically." The meaning of "hypnotically," however, depends on the therapist's underlying design, which varies according to the theory of hypnosis to which the practitioner subscribes and according to the subject's preconceptions about hypnosis. But, in every case, hypnosis makes presented suggestions indirect because adding an injunctive element changes the way in which the direct statement is to be understood. Therefore, indirection is part and parcel of all hypnosis.

To review, indirection is essential to hypnosis, both Ericksonian or traditional, whether or not the therapist realises it. Direct suggestions only exist in vitro. In vivo, especially under hypnosis, there are no direct suggestions. Direct suggestions are like Escher prints; they are impossible in real life. They only exist when a dimension is removed. Only when the frame is removed can a direct suggestion exist. A systemic point of view; that is, one that examines the frame and interpersonal nature of the phenomenon of hypnosis, makes it clear that direct suggestions do not exist during either Ericksonian or traditional hypnosis.

I want to momentarily diverge to offer a clinical caveat: Therapeutic communication must be judged by the response to it, not by its overt content and structure. Direct or indirect messages are unimportant per se. The effective response to the message is of principal value in psychotherapy.

In the next section, several covert definitions of hypnosis are offered to further describe the function of induction in hypnotic methods.

DEFINING HYPNOSIS

One can be either objective or subjective when defining hypnosis. Moreover, a phenomenon such as hypnosis can be defined according to its appearance, its function, its aetiology, its history, its process, in terms of its relationship to other phenomena, or a something that happens among individuals. Definitions are neither benign nor neutral. On the contrary, they influence and focus subsequent thinking. For example, a therapist's definition of hypnosis will influence treatment. Therapists who take an objective approach to hypnosis, commonly use pre-set scripts for induction and direct suggestions as a method of therapy. Psychological phenomena, such as hypnosis, are usually defined from the perspective of a pre-existing theory. Traditionally, this has been a theory of individual psychology, such as behaviourism or psychoanalysis. In current literature, there are eight definitions of hypnosis (Zeig & Rennick, 1991).

- 1. Janet (Weitzenhoffer, 1989), near the turn of the century, and more recently Ernest Hilgard (1977), defined hypnosis in terms of dissociation ("automatisms" according to Janet).
- 2. Social psychologists Sarbin and Coe (1972) described hypnosis in terms of role theory. In their view, hypnosis is a role that people play; they act "as if" they are hypnotised.
- 3. T. X. Barber (1969) defined hypnosis in terms of non-hypnotic behavioural parameters, such as task motivation and labelling the situation as hypnosis.
- 4. In his early writings, Weitzenhoffer (1953) conceptualised hypnosis as a state of enhanced suggestibility. More recently, he defined hypnotism as "a form of influence by one person exerted on another through the medium or agency of suggestion" (1989, Vol.1, p.13).
- 5. Gill and Brenman (1959) described hypnosis as a function of using the psychoanalytic concept of "regression in the service of the ego."
- 6. Edmonston (1981) opined that the operative variable in hypnosis is relaxation.
- 7. Spiegel and Spiegel (1978) have implied that hypnosis is tied to a biological capacity.
- 8. Erickson (Erickson, Rossi, & Rossi, 1976) was a proponent of the position that hypnosis is a special, inner-directed, altered state of functioning.

Erickson did not have one definition of hypnosis. At times, he defined it interactionally; for example "The warmth of one person directed to another" (Marion Moore, personal communication). Sometimes he defined it intrapsychically; for example, as "The evocation and utilisation of unconscious learning" (Sidney Rosen, personal communication). At other times, he was more functional in his definition: "Hypnosis is a tool" (Theodore Sarbin, personal communication).

Personally, I do not believe it is necessary to have one capsule definition for a phenomenon as complex as hypnosis. Different definitions shed light on different facets of the process. By using a client-based definition, additional understanding of the importance of indirect suggestions can be ascertained.

A CLIENT-BASED VIEW OF HYPNOSIS

Hypnosis can be defined from the perspective of the client as an experience in which some combination of the following processes exist: (1) altered intensity; (2) modified awareness; (3) avolitional experience, and (4) avolitional response in, (5) a situation defined as hypnosis. Phenomenologically, clients may report the presence of trance when there is an alteration of intensity (e.g., in relaxation or vividness of imagery); when there is modified awareness (e.g., internal directedness or extraordinarily narrow focus of attention); and when there is avolitional activity — something "just happens" (e.g., the client has a spontaneous

perceptional alteration, a spontaneous amnesia, or there is a dissociated response to suggestion without realising the exact nature of the response or the suggestion which stimulated the response.

Some clients need all of the above facets present in order to report the existence of trance. Others report trance merely when the situation is defined as "hypnosis." This is another reason why techniques must be varied for the individual, why the therapist must discover the method that best elicits the response "I'm hypnotised" from within the client.

Three of the above facets of hypnotic phenomenology can be easily induced directly. For example, the client can be told "This is hypnosis . . . Relax . . . Focus your attention inward." The situation is thereby defined as hypnosis and altered intensity and modified awareness are encouraged. However, it is difficult to elicit avolitional activity or responsiveness with direct suggestion. If arm levitation is suggested and the client is told "Lift your hand," there must be an implication to indicate that a modification of volition is necessary. If the client volitionally lifts his/her hand, that is not a hypnotic response, either to the subject or the observer. A client can be given an indirect suggestion; for example "You don't know how easily your hand can begin to lift now." Defining the situation as hypnosis also implies that involuntary behaviour will follow.

Though dissociation (or avolitional experience) is an injunction of the hypnotic frame, this effect can be maximised or minimised by the therapist's implication. Many things can be induced in the name of "hypnosis." Induction can be used to foster relaxation and passive receptivity, which is the case in much traditional hypnosis. Such effects are a function of the implication of the therapist and the predilection of the client to respond to that implication. The implication of altered volition occurs in hypnotic induction, whether traditional or Ericksonian. The context of hypnosis can intimate other things, depending upon the emphasis of the hypnotist/communicator and the expectation of the hypnotised person. According to the theoretical perspective of the hypnotist, the frame could be "By virtue of this experience, you will relax," or "You will go into an altered state." Commonly, though, the application of hypnosis implies to the client that volition is altered and things will "just happen." (It can be noted that hypnosis is structurally similar to symptoms that also "just happen." However, the hypnosis that "just happens" is a positive state, whereas the symptom that "just happens" is negative [for a description of similarities between hypnosis and symptoms, see Zeig, 1988].)

Perhaps this is why there are so many definitions of hypnosis. Experts who contend that hypnosis is relaxation induce relaxation in their work and conclude that relaxation is essential. Clinicians who define hypnosis as regression emphasise those effects and so on.

Some therapists and researchers maintain that hypnotic induction is invariant, that no matter what induction technique is employed, the effect will be the same. This does not make intuitive sense. One could say that food is an "induction" of satiation, but the ingestion of fast food creates a different "state" than dinner at a gourmet restaurant.

In Ericksonian induction, the therapist elicits responsiveness to minimal cues (indirect suggestions) to maximise response to injunction. The therapist works to develop the client's ability to respond to minimal cues. In Ericksonian induction, the client is encouraged to respond to the covert frame more than the overt content. In fact, Ericksonian methods might be considered the technology of harnessing injunctive communication. I think Erickson recognised, perhaps intuitively, that hypnosis is predicted on indirection. In his work, he naturally gravitated to indirect techniques because they were an essential part of hypnosis. He brought to the forefront an inherent aspect of hypnosis that was previously unrecognised. Erickson used indirect suggestions because they are essential to eliciting the phenomenon of avolition, which can be an important part of trance.

In summary, if hypnotists want to help their clients achieve avolitional experience, they will use indirect suggestion. It is impossible to create the experience of avolition by using direct suggestion. Dissociation is not merely a state within a client. It also is an implication of the therapist that can be maximised or minimised, depending on the technique employed. Again, there is no direct suggestion under hypnosis because the frame of hypnosis itself indirectly influences the way in which a "direct suggestion" is understood. To develop this idea further, let's examine the nature of traditional hypnosis.

TRADITIONAL HYPNOSIS

In many forms of traditional hypnosis, induction consists of a pre-set script. The induction often is based on fascination and relaxation. Fascination may be directed to a spot on the wall, and suggestions of relaxation may be progressive: "Relax your head," "Relax your neck," "Relax your shoulders," and so on. Eventually, there is a minor challenge suggestion. For example, in a eye fixation induction, the hypnotist might suggest that the subject's eyelids will close, implying that they will do so avolitionally. Subsequent to the induction, there is a period of deepening, sometimes using a technique such as the staircase method, in which imagery and suggestions are combined to intensify the experience. At the end of the deepening period, a more complex, major challenge suggestion is usually presented, perhaps in the form of an hypnotic phenomenon. For example, the client is challenged to experience levitation through the direct suggestion: "Your arm will lift up to your face." Alternatively, arm immobility can be suggested as a direct challenge: "No matter how hard you try you will be unable to lift your arm." Once the challenge has been met, direct therapeutic suggestions can be applied.

Direct suggestions derive power from the hypnotic frame. The frame of hypnosis also modifies the manner in which challenge suggestions are understood. It indicates to the hypnotised person that responding to the challenge should be different than if the same commands were presented without a preceding induction.

Remember that the totality of hypnosis includes the implication of involuntariness that customarily surrounds the challenge and direct therapeutic suggestions. The traditional frame implies to the client "Your responses now are not customary. They can be avolitional. They can come from your unconscious mind." The frame may imply that the hypnotist is in control and that the subject is responding to the hypnotist's power. Again, if the frame of hypnosis was not supplied, direct suggestions would seem ludicrous. Imagine if a client walked into an office and was merely told "You will be comfortable without cigarettes," or "Cigarette smoke will smell bad." The frame of hypnosis implies that suggestions given while the client is in trance will be empowered.

CONTRASTING ERICKSONIAN AND TRADITIONAL APPROACHES

In the Ericksonian approach, rather than using challenge suggestions, the therapist offers minimal cues or indirect suggestions. By responding to minimal cues, the client implicitly indicates to the therapist "I am open to your influence." Once the client starts responding to the injunctions, the induction is over and the phase of trance utilisation begins.

Erickson recognised that a formal induction is not needed to develop responsiveness to minimal cues. Erickson often worked naturalistically, building responsiveness to minimal cues without overtly defining the situation as hypnosis. Such techniques can be helpful, especially when countering entrenched resistances. Once the client responds to minimal cues in the formal or informal induction, the therapist can proceed with more confidence to use indirect techniques.²

SUMMARY AND CONCLUSIONS

Hypnosis can be conceived as a specialised form of responsiveness to minimal cues. Hypnosis also is a frame. It is a paraverbal marker that indicates how communication contained therein is to be perceived and how responses should be made. It invites avolition.

To reiterate in an abridged form, the Ericksonian approach uses induction as a way of garnering responsiveness to minimal cues so that the subsequent utilisation period can harness that responsiveness to uncover resources. Both responsiveness and resources are developed by using injunction (indirect suggestion); this maximises the possibility for autonomous action from the client.

In communication, it is not so much what is said as how, and in what context it is said, that determines the message. What is most interesting to therapists, as purveyors of power, is the response to implication.

Milton Erickson used indirect suggestions as a way of presenting ideas to stimulate client-based change. Erickson recognised that people respond to injunction. He realised, perhaps intuitively, that hypnosis is a powerful injunction. Erickson developed the use of injunction. If injunction is essential to hypnosis, one should not try to eliminate it by attempting to make suggestions direct. Direct suggestion only can happen in vitro. Within hypnosis, all suggestions are indirect because they are modified by the hypnotic frame. Therefore, we should not limit the use of injunction in hypnosis. We should learn how to harness it. This is a lesson one learns when studying the work of Milton Erickson.

Edited from Zeig, J. K. (1995). Ericksonian hypnosis: A perspective on direct and indirect methods. In M. Kleinhauz et al., (Eds.). *Jerusalem lectures on hypnosis and hypnotherapy: Hypnosis International Monographs Number 1* (pp. 17–30). Munich: M.E.G.-Stiftung. Reproduced with permission of the Editors.

This paper was presented at the July 1992 Scientific Meeting of the International Society of Hypnosis held in Israel. An earlier version was presented in September 1991 at a conference on "Direct and indirect techniques in hypnosis and psychotherapy," organised by Camillo Loriedo MD, in Rome.

REFERENCES

Bandler, R., & Grinder, J. (1975). *Patterns of the hypnotic techniques of Milton H. Erickson, M. D.* (Vol.1). Cupertino, CA: Meta Publications.

Barber, T. X. (1969) *Hypnosis: A scientific approach*. New York: Brunner/Mazel.

Bateson, G., & Ruesch, J. (1951). Communication: The social matrix of psychiatry. New York: Norton.

Berne, E. (1966). Principles of group treatment. New York: Grove Press.

Edmonston, W. E., Jr. (1981). Hypnosis and relaxation: Modern verification of an old equation. New York: Wiley.

Erickson, M. H., Rossi, E., & Rossi, S., (1976). Hypnotic realities. New York: Irvington.

Fisch, R., Weakland, J., & Segal, L. (1982). Tactics of change. San Francisco: Jossey-Bass.

Gill, M. M., & Brenman, M. (1959). *Hypnosis and related states: Psychoanalytic studies in regression*. New York: International Universities Press.

Hilgard, E. R. (1977). Divided consciousness: Multiple controls in human thought and action. New York: Wiley.

Lynn, S. J., Neufeld, V., & Mare, C. (1993). Direct versus indirect suggestions: A conceptual and methodological review. *International Journal of Clinical and Experimental Hypnosis*, LXI, 124– 152

Massey, M. (1979). The people puzzle: Understanding yourself and others. Reston, VA: Reston Publishing.

Ritterman, M. K. (1983). Using hypnosis in family therapy. San Francisco: Jossey-Bass.

Sarbin, T. R., & Coe, W. C. (1972). Hypnosis: A social psychological analysis of influence communication. New York: Holt, Rinehart & Winston.

Spiegel, H., & Spiegel, D. (1978). *Trance and treatment: Clinical uses of hypnosis*. New York: Basic Books.

Watzlawick, P. (1985). Hypnosis without trance. In J. K. Zeig (Ed.). *Ericksonian psychotherapy: Vol. 1. Structure* (pp. 5–14). New York: Brunner/Mazel.

Weitzenhoffer, A. M. (1953). Hypnotism: An objective study of suggestibility. New York: Wiley.

Weitzenhoffer, A. M. (1989). The practice of hypnotism (2 vols.). New York: Wiley.

Zeig, J. K. (1985). Experiencing Erickson: An introduction to the man and his work. New York: Brunner/Mazel.

This paper borrows liberally from the author's previous work, including:

Zeig, J. K. (Ed.)(1987). The evolution of psychotherapy. New York: Brunner/Mazel.

Zeig, J. K. (1988). An Ericksonian phenomenological approach to therapeutic hypnotic induction and symptom utilisation. In J. K. Zeig & S. R. Lankton (Eds.). *Developing Ericksonian therapy: State of the art* (pp.353–375). New York: Brunner/Mazel.

- Zeig, J. K. (1990). Ericksonian therapy. In J. K. Zeig & W. M. Munion (Eds.). What is psychotherapy? San Francisco: Jossey-Bass.
- Zeig, J. K. (1992). The virtues of our faults: A key concept of Ericksonian therapy. In J. K. Zeig (Ed.). The evolution of psychotherapy: The second conference (pp. 252–69). New York: Brunner/ Mazel.
- Zeig, J. K., & Rennick, P. (1991). Ericksonian hypnotherapy, a communications approach to hypnosis. In S. Lynn & J. Rhue (Eds.). Theories of hypnosis (pp. 275-300). New York: Guilford.

Sections also are included from a work in progress:

Zeig, J. K. (in progress). Choice points: A model of Ericksonian hypnotherapy.

- 1 The author is grateful to Brent Geary, Ph.D., and Julia Rubens for their editorial assistance.
- One additional caveat: This paper is a philosophical position statement; it does not purport to be an academic dissertation or a scholarly review of previous work about the nature of suggestion per se. Moreover, it is not meant as a polemic to argue that Ericksonian methods are better than direct suggestions. Actually, such polarisation has little value. Again, the question "Are indirect suggestions better than direct suggestions?" has little utility. Rather, the purpose of this paper is to prod clinicians into a better understanding of implication in hypnosis.

Erickson demonstrated throughout his career how people respond constructively to implication — how such guiding of associates can elicit constructive mental and physical responses. This aspect of human behaviour remains unchecked — there is still much to be learned. Erickson pioneered an approach whereby implication and response could be fostered. Thinking about direct or indirect suggestion is not productive in the consulting room. Rather, it behooves the therapist to study the injunction in his communication and in its large context. What differentiates an Ericksonian approach is not the use of forms of suggestion per se — be they "direct" or "indirect" — (clearly Erickson used both); rather it is an orientation of the Ericksonian clinician of being especially alive to constructive use of implication and response to injunction.

CLINICAL APPLICATIONS OF HYPNOTIC ASSESSMENT

Kathleen A. Moore *Deakin University*

Vicky Powlett Psychologist in Private Practice

This paper reviews the extensive range of scales and tests available for the assessment of hypnotisability and related phenomena. To provide for an evaluation of the effectiveness of these, the paper first discusses the concepts of reliability, consistency, and validity — the markers of a "good" test. A brief review of ethical and legal issues in assessment is also provided. There follows a description and analysis of available hypnotisability and other scales. The paper concludes with an examination of assessment issues within the context of clinical work.

If the practice of hypnosis and hypnotherapy is to be based on scientific findings . . . appropriate investigations in the context of the clinic should be conducted, following the same rules of evidence which apply to laboratory investigations. (Hilgard, 1982, p. 394-395)

Hypnosis is an important therapeutic modality which, when used alone or in conjunction with cognitive-behavioural or pharmacological treatments, has high rates of success across a diverse range of psychological and medical areas. However, just as people vary across a range of physical, emotional, and intellectual domains so too do they vary on their level of hypnotisability.

Typically, the operationalisation of a construct is based upon definitional terms which, in turn, derive from a conceptualisation of the relevant phenomena. With regard to hypnosis, these conceptualisations and definitions are diverse, however the operationalisation of assessment is, somewhat surprisingly, rather homogeneous across a limited range of phenomena. This paper stresses the importance of context and ethical practice in the role of clinical assessment, and provides an overview of some of the major tests of hypnotisability and its known correlates, and relevant psychometric principles.

THE PROPERTIES OF A GOOD TEST

The operationalisation (ability to measure) of any phenomenon is based upon a valid definition of the construct and a reliable and valid measurement device. The most widely used devices in assessing hypnotisability are observer- (and clinician-) rated scales, although there are some self-report instruments. Each instrument must demonstrate reliability and validity and it is important to understand what is meant by these terms.

30**2** 10

Reliability

Reliability refers to the consistency of the test; that is the extent to which items on the test measure the same construct. There are several different types of reliability. *Internal reliability* (e.g., Cronbach alpha, Kuder-Richardson 19 or Kuder Richardson 20, split-half reliability) refers to the consistency of the test across all items; that is, is each question assessing the same construct? *Test-retest reliability* (usually based upon Pearson Product Moment Correlations) assesses whether the subject's performance or score on the same test is consistent when measured at different points across time. In order to overcome learning or practice effects, test-retest reliability is often better assessed using *alternate forms*

of the same test. Obviously, these alternate forms would need to assess the same construct and be equivalent in all aspects (e.g., length, style of presentation, level of difficulty, and method of scoring). In order to assess "how reliable is the test statistic," it is important to understand the range of a correlation (alpha), the concepts of measurement error (often termed residual), and amount of variance

explained (for a full review see Anastasi, 1990, Murphy & Davidshofer, 1994). The term *measurement error* (residual) refers to the amount of inaccuracy attributable to the measuring device at any one time. This leads to the concept of *real limits*. For example, suppose we were to measure your weight in kilograms: your bathroom scales record your weight at 72 kilos but you know (hope) they weigh heavy by about two kilos, so this reduces you to 70 kg (the 2 kgs is a measurement error). Our bathroom scales weigh you in at 69.9kg and (lucky for you) we think they are reasonably accurate. The scales at our clinic, which we think are accurate, show you as 70.1 kg (sorry!). So, how much do you weigh?

While we would probably record you as weighing 70 kg, in reality we can never know exactly what you weigh, as all scales have some variation. But we could say that the real limits (allowing for a reasonable amount of variation) of your weight are between 69.5 and 70.5 kgs. You have probably noticed that measurement error can be either plus or minus. All measurements, particularly those subject to human judgment (and subject performance) such as involved in the assessment of hypnotisability contain measurement error — the trick is, to keep this as low as possible. The test developer should attempt to do this but it is also important for clinicians to review data on tests they consider using and disregard any test which appers to have poor psychometric properties.

The correlation statistic (r) has a range of \pm 1, where 0 indicates no relationship or co-variation between the measures or items and 1 indicates a perfect relationship. A positive sign merely indicates that both measures covary in the same direction (e.g., high scores on both arithmetic and on spelling) while a negative sign indicates covariation in opposite directions (e.g., fast on an arithmetic test and high on accuracy).

If a test is stable over time, the two measures will be positively correlated. Because there will also be some level of measurement error (a generally unknown amount) the correlation between testing at Time 1 and Time 2 will not be 1.0, but in order to say that the test is temporally reliable this coefficient needs to be

close to 1.0. Numerous authors have debated "what is close to 1.0" and the consensus seems to be ≥.70 (Anastasi, 1990). But what does a correlation of .70 mean? Here we come to the concept of shared variance and another statistic the coefficient of determination, which is simply the correlation value squared.

In the example above, if r = .70 then $r^2 = 49\%$: this means that nearly half the variance in one score is explained by the variance in the other (and vice versa with only two scores). While at first glance this may seem satisfactory, one needs to ask: what about the other 51% of unexplained variance? Naturally, some of that will be measurement error: the instruments were not exactly the same, people were more tired this time than last, it was too hot on Time 1, etc., but there is also a component of "unreliability," that is, the same construct is not being assessed at both times. It is up to the user to decide how much of this is tolerable and this will, of course, be governed largely by the availability of better testing alternatives and by the purpose for which testing is undertaken. For instance, in some circumstances, either clinical or research-based, there is little tolerance for error and low reliability, while in other perhaps less threatening situations, more variation can be accepted. Of course, the higher the correlation, the more reliable or stable the instrument over time, where the recommended interval between testing generally should not exceed six months (Anastasi, 1990).

Internal Consistency

Evaluation of the homogeneity of test items is obtained through a measure of internal consistency. The most commonly reported of these statistics is Cronbach's alpha (α) which is typically best applied when participants answer the test question using a Likert format (e.g., 0 = Never to 5 = Always), although the Kuder-Richardson formula is more applicable to items rated as right or wrong or some other all-or-none scoring system. Despite these differences, the interpretation of the statistic is essentially the same: the higher the figure (again generally accepted as \geq .70) the more homogeneous the items assessed. Of course, the tests items may, by their very nature, be heterogeneous. For example, while tests of hypnotisability typically yield one score (hence one reliability score) it must be queried whether the hypnotic abilities typically tested, such as age regression, cognitive distortion or hallucination, selective amnesia, or body movement or rigidity are, in fact, homogeneous. These and other phenomena exhibited during hypnosis may form "clusters" of abilities which need to be considered within such a framework, thus potentially increasing reliability for each cluster (or factor) while reducing it if assessed globally.

Validity

Validity simply refers to how valid or truthful this test is in assessing the construct under investigation. It is possible for a test to be reliable (consistent across items and/or across time) but not valid. For example, people can be tested on their ability to spell words but even if they score high on spelling this is not an indicator of reading comprehension even though it is probably likely that performance on the two abilities would be correlated.

There are several types of validity. Content validity is an examination of the test content to ascertain if it covers a representative sample of the abilities or behaviours to be assessed. Although this may appear similar to face validity, the latter is concerned not with what the test measures, but with what it appears to measure, especially to those taking the test. Criterion validity refers to whether test scores are actually able to predict the ability they are said to test; while construct validity relates to the degree to which the test actually measures what it purports to measure, that is, how well does a test of hypnotisability actually measure level of hypnotisability. There are numerous other types of validity, and we shall refer to just two more: *convergent validity* where scores on the particular measure converge (or correlate) with another test known to measure the same construct and, divergent validity, where the test scores diverge (or fail to correlate) with a test known not to measure the same construct.

The most commonly reported validity coefficients are factor coefficients which relate to the clusters (or factors) of abilities referred to above (for a fuller discussion see Anastasi, 1990; Murphy & Davidshofer, 1994) and correlations between any two tests. For a test to be valid it needs to correlate highly with other tests assessing the same or similar constructs and/or it needs to correlate with the particular behaviour or ability it purports to measure. Conversely, correlations between the particular test and those assessing different constructs should yield low correlations.

Having reviewed the basic elements of reliability and validity, we move now to a brief analysis of some of the ethical and legal issues involved in testing, both in a formal experimental setting, and in the clinic (see your own professional code for a complete guide).

ETHICAL ISSUES

Before commencing testing, participants should be fully informed about the nature of, and reasons for the testing and, in cases where the results may be used for research purposes, informed consent must be obtained. Naturally an appropriate setting must be provided and participants should be assured of the anonymity and confidentiality of their results. The persons undertaking the testing will be appropriately qualified and in the case of testing for hypnotisability, the participants will have been appropriately screened for contraindications such as depression or psychosis.

Although these criteria have always been part of good clinical practice, following the Rogers v Whitaker (175 CLR 479) decision in Australia in 1992 there is now a precedent for legal challenge. Since this case, there has been a shift from the English tradition of emphasing duty of care, to American law in which the patient's rights are the central issue in patient-therapist interactions. This case highlighted that an essential component of consent is the discussion of risks and, for this, a good history is necessary.

In the process of obtaining the history and discussing potential risks, documentation of the discussion is essential and this needs to meet two goals. First, that both therapist and client have the same understanding of what is expected from the hypnosis sessions, in terms of benefits, and in terms of risks and costs. The second goal is that consent is documented in such a way that a third party (such as a juror) can decide what was said and understood (put simply, "no notes equals no defence, poor records equals poor defence") (extracted with permission from White, 1997).

MEASURING HYPNOTISABILITY

Interest in the assessment of hypnotisability and measures of hypnotisability are relatively recent phenomena, with most scales having been developed since the 1970s (Horne & Powlett, 1988; Ledford, Brazleton, & Shannon, 1995).

The measurement of hypnosis typically, though not always, involves a standardised induction technique. Spiegel and Spiegel (1988) suggested inductions follow one of three major styles: coercive; seductive; and guiding. Once trance has been induced, the subject being assessed is asked to engage in the elicitation of a number of hypnotic phenomena. Their ability to perform these is rated, to provide an overall level of hypnotisability. Most scales include both behavioural and cognitive items, including hand lowering/raising, age regression, and hypnotic amnesia. The more items passed, on what are said to be graded levels of difficulty, the more susceptible the subject is said to be (Hilgard, 1965).

SCALES

Not all tests presented below require an induction procedure, but some have argued it is not possible to assess hypnotic susceptibility unless the Harvard or Stanford (or equivalent) induction procedures are administered prior to testing (Hand, Pekala, & Kumar, 1995). Given this is a somewhat circular process, researchers and clinicians now tend to focus on assessment of the specific phenomena of hypnosis (e.g., time distortion, movement) as indicators of hypnotic ability rather than global scores of hypnotisability.

Stanford Hypnotic Susceptibility Scales, Forms A and B (SHSS: A & B) (Weitzenhoffer & Hilgard, 1959, 1962)

These are alternate forms of same scale which are individually administered over a 50-minute period. The SHSS (A & B) are designed to screen subjects into low, medium, and high susceptibility. They each comprise 12 items with an emphasis on motors items (e.g., postural sway, eye closure, hand lowering) rather than cognitive (e.g., fly hallucination, post-hypnotic suggestion, amnesia). Horne and Powlett (1988) suggested that, because of their focus on motor behaviour, these scales do not sample widely enough from the range of hypnotic behaviours.

Form C of the Stanford Hypnotic Susceptibility Scale (SHSS:C)

The SHSS:C was designed to overcome the limitations of the SHSS (A & B) and includes more cognitive items dealing with age regression, dreaming, and positive and negative hallucinations across a number of sensory modalities (visual, auditory, gustatory, and olfactory). The test still requires hypnotic induction and takes some 45-50 minutes to administer on an individual basis. Forms A, B and C of the SHSS have been further supplemented by Profile Forms I and II which are generally only administered to individuals achieving a certain score on any of Forms A, B, or C. These profiles reveal subjects' particular areas of hypnotic susceptibility and are useful in matching hypnotic abilities to research and therapy.

Harvard Group Scale of Hypnotisability (Shor & Orne, 1962, 1963)

The HGSH is a modified version of the Stanford Susceptibility Scale, Form A, developed to assess a large number of subjects within a group setting. Subjects receive a standardised group induction process and, in trance, are asked to report on a 12-item scale about their experience. Those scoring 0-4 on the 12-point scale are said to be of low susceptibility, those 5-7 are moderate, and those 8-12 are regarded are highly susceptible (Pettinati, Kogan, & Evans, 1990). Ledford et al. (1995) reported high internal consistency (.91, n = 280). The Harvard scale also takes some 50 minutes to administer, plus the time necessary for highly trained personal to establish rapport with, and debrief subjects. While the literature does not appear to contain any account of participants, especially more than one simultaneously, experiencing an abreaction during group testing, the possibility of this negative consequence and the implications for all participants in the session, cannot be ignored.

Horne and Powlett (1988) suggested the Harvard also contains more motor items than cognitive ones. This bias, together with its basis from the SHSS:A, explains its moderate to high correlation with that Stanford Scale (r = .59 (Evans & Schmeidler, 1966); r = .81, (Ledford et al., 1995)).

Hypnotic Induction Profile (HIP) (Spiegel & Bridges, 1970; Spiegel & Spiegel, 1978)

The HIP purportedly taps the individual's basic trance capacity as well as their ability to use hypnosis. The authors argue its clinical use is enhanced by brevity of administration (approximately ten minutes) and its sensitivity to the hypnotic process itself.

The HIP has 12-items, four of which involve eye movement: upward gaze, roll, squint. The rater then scores for eye-roll sign, which is a composite of scores from the eye roll and squint; arm levitation, tingle, dissociation, control differential, cut-off, amnesia to cut-off, and floating sensation. For the dissociation score, the subject is asked whether this arm is "as much a part of your body as the other arm." For control differential score, the subject is asked to differentiate between the amount of control in one arm (not levitated) and the other arm

(levitated). The cut-off score relates to the resumption of "normality," while the amnesia to cut-off score is established by asking if the subject is aware that differential control is now gone and why this is so. The floating sensation score is rated on the subject's perception of lightness during levitation.

A detailed administration and scoring system is provided and includes an instruction to monitor the time and amount of reinforcers used throughout the testing. While test-retest reliability reported by the authors is good (.76 for a group of 75 psychiatric patients), unless administrators are highly-trained and adhere strictly to the instructions and scoring, results may be less consistent.

The Barber Suggestibility Scale (Barber, 1969)

This scale was devised to test hypnotic behaviours with or without the induction of hypnosis. The scale may be administered under imagination or motivational conditions, as well as under hypnosis. Such a comparison (imagination versus hypnosis) supposedly makes it possible to measure the increase in hypnotic responsiveness due to the hypnotic induction. The principle of change or gain scores has also been advocated by Weizenhoffer (1980) in relation to the Stanford Scales, although Hilgard has rebutted this approach.

More so than other scales, the Barber scale takes into account the experiences of the subject in the objective scoring of responses. The test takes, on average, 12 minutes to administer (not including instructions prior to induction and debriefing). There are eight items: arm lowering, arm levitation, hand lock, thirst hallucination, verbal inhibition, body immobility, post-hypnotic-like response, and selective amnesia. Test-retest reliabilities of the scale have ranged from r.80 to r.88 (Barber, 1969).

Creative Imagination Scale (CIS) (Wilson & Barber, 1976)

The CIS can be administered individually or to a group with or without a prior hypnotic induction procedure. It consists of ten items (test suggestions), the aim of which are to get subjects to produce the suggested experiences by their own thinking and creative imagination rather than the instruction of the hypnotist. Test administration takes about 18 minutes. Subjects are asked to close their eyes and keep them closed during administration. In order of presentation, test suggestions are: arm heaviness (imagine left-arm extended and three heavy dictionaries are placed on the hand making it heavy); hand levitation (right arm extended and water from garden hose is directed onto palm and pushing arm upwards); finger anaesthesia (imagine novocaine injected into side of hand and numbness spreading through fingers); water hallucination (drinking a cup of cool mountain water); olfactory-gustatory hallucination (imagining the smell of an orange); music hallucination (guiding the subject to re-experience some wonderful music); temperature hallucination (imagine sun shining on hand and making it feel hot); time distortion (time slowing down); age regression (feeling and experiences as a child in primary school); and mind-body relaxation (lying relaxed in the sun on the beach). Subjects indicate their responses on a written questionnaire with each response evaluated on a five-point scale (0 = "Not at all)the same" to 4 = "Almost exactly the same as if real.").

Wilson and Barber (1976) reported the CIS was unifactorial using principal components analyses with 217 subjects, test-retest on twenty-two subjects was r.82 (p<.01), and split-half reliability was r.89 (p<.001). These authors cited an earlier unpublished study by Kiddoo (1977) wherein the CIS and the Barber Suggestibility Scale correlated moderately at .60 suggesting convergence of content. Myers (1983) tested 1302 children on their responsiveness to the CIS and concluded that it is stable for children from 9 years onwards. She does, however, suggest that it be individually administered to children between 12 and 15 years to avoid possible peer pressure.

The Diagnostic Rating Scale (Orne & O Connor, 1967)

The DRS was devised for the purpose of quantifying hypnotic susceptibility on the basis of clinical data, as judged by experienced hypnotists. It is said to have the advantage of producing a rating based upon an evaluation of the subject using hypnotic techniques best suited to them as individuals, rather than restricting the hypnotist to a standard set of items which would not allow the therapist to maximise the effect for a particular subject. One disadvantage is that it can only be used by highly trained staff and because it is not standardised, there may be little or no inter-rater reliability, thus precluding an objective score.

The Stanford Hypnotic Clinical Scale (SHCS) (Morgan & Hilgard, 1975)

The SHCS was developed for patients in a clinical setting and takes 20 minutes to administer, including an hypnotic induction. The authors maintain that it does not tire patients, is adaptable to patients with restricted mobility, and taps the kind of processes most likely to be used in therapy. It has five items modified from the earlier Stanford Scales. A subject who passes four of the five items is considered to be highly hypnotisable. Morgan and Hilgard (1975) found a product-moment correlation of .72 between the total score on the SHCS and the total score on the SHSS (Form C). The corresponding correlation between the four items common to both of these scales was .81.

Carleton University Responsiveness to Suggestion Scale (CURSS) (Spanos, Radtke, Hodgins, Stam, & Bertrand, 1983)

The CURSS is a seven-item scale designed to assess responsiveness to suggestions associated with hypnotic susceptibility. It includes two ideo-motor items (arm levitation, arms moving apart), two motor-challenge items (arm rigidity, arm immobility), and three cognitive items (auditory hallucination, visual hallucination, amnesia). Subjects receive two scores: a CURSS-O or observer rating and their CURSS-S, which is the subject's own subjective rating of their performance following hypnotic induction. It is unclear what any *gap* represents. Spanos, Radtke, Hodgins, Bertrand, Stam, and Dubreuil (1983) reported a coefficient of reproducibility of .86 for objective scoring.

Other more specific observer-rated scales have been developed (e.g., *University* of Tennessee Hypnotic Susceptibility Scale for the Deaf (Repka & Nash, 1995) and the Children's Hypnotic Susceptibility Scale (London, 1963), for children, with each requiring highly trained staff and time to administer them.

ASSESSING SELF-HYPNOSIS

There is considerable controversy concerning the level of hypnosis or depth of hypnotic trance which can be attained with self-hypnosis.

The Inventory of Self-Hypnosis (ISH) (Shor & Easton, 1973)

This test was developed to compare self-hypnosis and hetero-hypnosis as measured by the Harvard Group Scale of Hypnotisability, Form A (Shor & Orne, 1962). Shor and Easton's data suggest that the ISH and HGSH:A measure different phenomena but Johnson and Weight (1976) found that, in general, selfand hetero-hypnosis were phenomenologically and behaviourally similar. Responsiveness to individual items that were comparable on both scales, however, varied according to the scale used. Fromm (1977) also compared ISH and HGSH: A and found more hypnotisable subjects reported phenomenological differences between the two experiences. These subjects experienced more ego splits, visual imagery, and idiosyncratic fantasy during self-hypnosis than during hetero-hypnosis.

SELF-REPORT ASSESSMENT

The Extended North Carolina Scale (ECNS) (Tart, 1978)

This is a self-report scale of hypnotic depth. It has been criticised because estimates made by subjects are not really spontaneous, as specified in the instructions, but are tied to their success or failure in eliciting the immediately preceding hypnotic phenomena. Kahn, Fromm, Lombard, and Sossi (1989) reported a correlation of r.61 (n = 22, p = .002) between the ENCS and hypnotisability, as measured by the Stanford Profile Scale of Hypnotic Susceptibility (Form I), devised for highly hypnotisable subjects and concluded this result lent validity to the ECNS as a measure of self-hypnotic depth.

Page and Handley (1996) found that subjects' retrospective ratings of the reality of their experience of arm rigidity and eye catalepsy during the Harvard Group Scale of Hypnotic Susceptibility (Form A), together predicted hypnotisability on the HGSHS ($R^2 = 38\%$). This was of such significance that the authors argued the ECNS could be used as a brief, inexpensive, preliminary screening device. They acknowledged this method may mis-identify high or medium subjects as low, however, they also argued that, because their questions relate to the reality factor (i.e., compared to what you would have experienced if your arm/eyes were tightly glued, what you experienced was 0 = "Not at all the same" to 4 = "Almost exactly the same"), this removed the potential for

subjects to experience failure.

COMMONALITY AMONG SCALES

Several scales have been based upon the Stanford Scales and it is, therefore, not surprising that newer scales would converge on these or on other derivatives. What seems important to extract from the scales' content is the commonality among the phenomena assessed: cognitive items, motor items, and behavioural items. It follows that client performance in any or all of these domains may help, not only to indicate level of hypnotisability, but rather the specific areas in which the client is "proficient."

The clinical importance of this is clear. Those domains in which the client is proficient can be easily and effectively utilised within a therapeutic context for that particular client. At the same time, it may be possible and therapeutically effective to "train" clients in those domains in which they are not proficient. The reader is referred to authors who have successfully used the Carleton Skills Training Programme (e.g., Bates & Kraft, 1991; Robertson, McInnes, & St Jean, 1992).

RELATED ASSESSMENT

The Phenomenology of Consciousness Inventory (PCI) (Pekala, 1991, 1995a, 1995b; Pekala & Kumar, 1984)

The PCI has been used to predict hypnotic susceptibility as measured by the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne, 1962). It is a 53-item self-report inventory completed retrospectively in reference to a preceding stimulus condition. There are 12 major and 14 minor dimensions of consciousness that assess specific areas of phenomenological experience. These include: positive affect (joy, sexual excitement, love), negative affect (anger, fear, sadness), altered experience (body image, time sense, perception, unusual meanings), attention (direction, absorption) imagery (amount, vividness), internal dialogue, self-awareness, state of awareness, memory, rationality, volitional control, and arousal. The PCI has been shown to have adequate construct, discriminant, and predictive validity (Forbes & Pekala, 1993; Kumar & Pekala, 1988; Pekala & Kumar, 1984).

At first glance, the PCI seems to be a self-report indicator of hypnotisability, but it is not. The focus of the scale is actually embedded within the hypnotic trance and the subsequently obtained scores for both the PCI and either the Harvard or Stanford are used as predictor and outcome variables respectively. In other words, after the induction phase the hypnotist pauses part way through the assessment of either the Harvard or Stanford scales and asks people to experience a four-minute period during which they are told "to continue to experience the state you are in right now. For the next several minutes I m going to stop talking and I want you to continue to experience the same state you are in right now." These instructions are repeated once. Then silence for four minutes.

After de-induction, and writing reports of what they remembered from the Harvard (or observer ratings from the Stanford), subjects are asked to complete the PCI in relation to their thoughts and feelings during the four-minute interval. Pekala and colleagues stated this is a valid indicator of people's level of hypnotisability as the scores from the PCI predict scores on both the Harvard and the Stanford. Whilst this may be statistically true, the PCI is clearly not an a priori predictor of hypnotisability and, as such, is somewhat disappointing in its claims to predict a state it actually reflects upon and within.

Dissociation

The Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986)

The DES has three factors: absorption; amnesia; and depersonalisation (Frischolz, Braun, Sachs, Schwartz, Lewis et al., 1992). Internal reliability for each of the factors range from α .77 to .90, stable across normal and clinical samples. The first factor is said to represent normal dissociative experiences and correlates with the Tellegen Absorption Scale (TAS) between .40 to .82 (Frischolz, Braun, Sachs, Schwartz, Lewis, Shaeffer, Westergaard & Pasquotto, 1991; Nadon, Hoyt, Register & Kihlstrom, 1991).

Attempts to correlate the DES with measures of hypnotisability have yielded correlations between r.12 against the Harvard Group Scale of Hypnotic Susceptibility, and r.13 against self-ratings of hypnotisability. Although Frischolz et al. (1992) suggest these correlations are of a similiar magnitude to those obtained with the TAS, this appears not to be so (see below).

Absorption

Absorption is the degree to which people invest in imaginative activities such as daydreaming, novel reading, and poetry (Tellegen, 1979; Tellegen & Atkinson, 1974). It is a disposition for having episodes of "total" attention that fully engage one's representational (i.e., perceptual, enactive, imaginative, and ideational) resources (Tellegen & Atkinson, 1974, p. 268). In practical terms, absorption is one's ability to become immersed in thoughts, images, or tasks (Frischoltz, Spiegel, Trentalange, & Spiegel, 1987). Shor (1962) and Tellegen and Atkinson (1974) demonstrated that highly hypnotisable individuals report the occurrence of hypnotic-like experiences in everyday life, including a capacity for intense absorption in the subject at hand.

The Tellegen Absorption Scale (TAS) (Tellegen & Atkinson, 1974)

The most widely used absorption scale, the TAS is a 34-item true/false questionnaire for which a summated score is most frequently reported. It does, however, yield factors which load highest on: "reality absorption; fantasy absorption; dissociation; and openness to experience" (Tellegen & Atkinson, 1974, p. 271).

Research examining the relationship between hypnotisability and absorption, where the latter was viewed as "hypnotic-like" experiences occurring in everyday life (e.g., Glisky, Tataryn, Tobias, Kihlstrom, & McConkey, 1991; Hilgard, 1970; Kumar & Pekala, 1988; Radtke & Stam, 1991; Tellegen & Atkinson, 1974) have all, with the exception of Spanos, McPeake, and Churchill (1976), found significant positive correlations ranging from r=0.22 to r=0.43. Hoyt, Nadon, Register, Chorny, Fleeson, Grigorian, and Otto (1989) investigated absorption and daydreaming as correlates of hypnotisability and, while these two dimensions were themselves correlated (r.49 to r.66) only absorption as measured by the revised Tellegen Absorption Scale was correlated with hypnotisability (r.22 with HGSH:A and r.26 with SHSS:C, both p <. 001, n=955).

Despite the statistical significance of these correlations, it must be noted that the co-efficient of determination (r^2) which indicates the variance shared between measures of hypnotisability and absorption range from 5% to 18%. The obverse of this, is to acknowledge that between 82% and 95% of the variance in hypnotisability is explained by factors other than absorption.

This poor relationship may be explained in part by the typical use of summated scores from the TAS. Clearly, if a one-factor solution is used when in reality multiple factors exist then the true relationship with other variables may be truncated. Further attenuation may occur if, as Glisky et al., (1991) suggest, there are gender differences in the correlations between hypnotisability and absorption. However, even accounting for these possibilities and some level of measurement error, it is probable that these correlations will still fail to reach a practical level of significance.

Absorption, as measured by the TAS, appears to be unaffected by social desirability, locus of control, state-trait anxiety and is unrelated to extroversion and neuroticism, the two major dimensions running through most personality inventories. While originally defined as an openness to involving and self-altering experiences (Tellegen & Atkinson, 1974) absorption has also been described as "a state of receptivity or openness to experiencing in the sense of readiness to undergo whatever experiential events, sensory or imaginal, that may occur, with a tendency to dwell on, rather than go beyond, the experiences themselves and the objects they represent" (Tellegen, 1979, p. 222). In this sense, Glisky and Kihlstrom (1993) suggested that absorption may be conceptually related to *openness to experience* which is one of the personality dimensions from the currently widely accepted *big five* personality structure of Goldberg (1990).

Openness to Experience

This personality style has been defined as "rich fantasy life, aesthetic sensitivity, awareness of inner feelings, need for variety in actions, intellectual curiosity, and liberal value systems" (McCrae & Costa, 1984, p. 145). Correlations between openness to experience and absorption in the order of r.56 (n = 48 (McCrae & Costa, 1984) and r.62 (n = 186 (Radtke & Stam, 1991)) have been reported. Radtke

and Stam also investigated the relationship of these two factors to hypnotisability and while absorption demonstrated a typical level of relationship (r.22), openness to experience did not (r-.01).

However, Glisky et al. (1991) commented that openness to experience is itself heterogeneous, and therefore it should not be expected that all of its factors would be related to absorption, let alone to hypnotisability. They described two separate statistically derived constructs making up the personality dimension of openness: (a) relates to aesthetic sensitivity, unusual perceptions and associations, fantasy and dreams, unconventional views of reality, and awareness of inner feelings (openness) and (b) the liberalism factor measuring intellectual curiosity, openness to unusual ideas, need for orderly thought, variety in actions, and liberal values. They then reported that absorption (r.17) and openness to experience (r.16) correlated with hypnotisability while liberalism did not (r.10). However, it is clear that both absorption and openness explain less than 3% of shared variance with hypnotisability.

In an extension of this work, Kihlstrom, Glisky, and Trapnell's (1992) unpublished manuscript (cited in Glisky, Tataryn, Tobias, Kihlstrom & McConkey, 1991) used the 36-item measure of absorption, intellectance (openness) and liberalism, together with a tape-recorded version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor & Orne, 1962) and confirmed that while absorption and intellectance (openness) correlated with each other (r.41), absorption and hypnotisability correlated less so (r.15) and intellectance not at all (r.05). Before discrediting the theoretical proposition that the personality dimension of openness is related to hypnotisability, it is important to note that the 3-factor structure of the newly evolved questionnaire was not confirmed. It may be that poor structure contributed to an attenuation of the intercorrelations among openness, absorption, and hypnotisability. Despite the generally low correlations between hypnotisability and absorption each of these variables correlates at relatively the same, albeit higher, level with imagery vividness.

Imagery

Imagery is widely accepted as representing an important dimension of hypnosis. Heyneman (1990) suggested that visual imagery is usually experienced as a quasi-perceptual phenomenon somewhat akin to a limited resolution "mental picture," although this metaphor fails to take into consideration other types of auditory, cutaneous, and kinaesthetic imagery. Researchers have developed a number of assessment devices which attempt to assess the qualities of mental imagery such as vividness, controllability, or ease of creation of the mental image (e.g., Betts, 1909; Gordon, 1949; Sheehan, 1967).

One theory of the relationship between hypnosis and imagination argues that "imaginative involvement constitutes a generalised cognitive ability central to the performance of hypnotic tasks" (Spanos & McPeake, 1974, p. 689). Thus, Bowers (1992) says it is virtually *de rigueur* to invoke some relevant imagery or imagined state of affairs as part and parcel of a hypnotic suggestion. Certainly, the hypnotist uses the words *imagine your hand is* . . . (p. 255) which may promote visualisation of the scene or may, at a more concrete and perhaps exact level of instruction, access kinaesthetic imagery.

The relationships between absorption and imagery vividness (e.g., Bowers, 1978; Monteiro, MacDonald, & Hilgard, 1980; Pekala, Wenger, & Levine, 1985; Richardson, 1983) and between hypnotisability and imagery vividness (e.g., Priebe & Wallace, 1986; Sutcliffe, Perry & Sheehan, 1970) range between r = 0.34and r = 0.39, with the exception of Richardson (1983) who reported a correlation between the TAS and the Questionnaire upon Mental Imagery (QMI) (Betts, 1909; Sheehan, 1967) of r = 0.52, p<.05 for male, and r = 0.55, p<.001, for female samples. The effect of gender upon the relationship between imagery ability and hypnotisability is clearly not resolved as others, for example, Sutcliffe et al. (1970) found a significant relationship for men while Hilgard (1979) found an effect for females.

Using a different system, Lombard, Kahn and Fromm (1990) classified imagery as either reality-oriented or fantastic with primary process qualities. Over a 4-week period of self-hypnosis they found that, while levels of imagery remained constant for all subjects, females reported higher levels of imagery especially for fantastic imagery. Lombard et al. also found that fantastic or primary process imagery correlated with Impulse Expression (individuals' ability to tolerate and express their impulse life) (r.76) and with Outgoingness (which describes individuals who are forceful, dramatic, and enjoy risk-taking adventures) (r.61) for females only.

Bowers (1982) used the Vividness of Visual Imagery Questionnaire (VVIQ) of Marks (1973) and found it correlated .31 (n = 42) with the Harvard Group Scale and .37 with the Stanford as adapted for groups by Sanders and Schubot (1969, cited in Bowers, 1982). Dywan (1988) also used the VVIQ and found it correlated .17 (n = 54, p>.05) with the SHSS. Clearly the results produced using Mark's VVIQ, which incidentally draws some of its items from the QMI, are not comparable. It is interesting to speculate what the relationship with hypnotisability would be for the items common to the QMI and the VVIQ and those unique to each scale.

Parallel with Tellegen and Atkinson's (1974) term absorption to describe people's capacity for total involvement in a task or event, Spanos and Barber (1974) noted that *imaginative involvement* is the only personality trait consistently related to hypnotic susceptibility. Baum and Lynn (1981) and Fellows and Armstrong (1977) found that subjects who are more highly hypnotisable are also more engrossed in imaginative reading material than less hypnotisable subjects. Baum and Lynn also demonstrated that there was no difference between these groups when examined on non-imaginative material about deserts and biological clocks drawn from the World Book Encyclopaedia. It is, however, unclear what uniquely separates imaginative involvement and absorption either theoretically or empirically.

People who cannot use visual imagery may achieve comparatively low scores on the Creative Imagination Scale (Wilson & Barber, 1976), on the Stanford Hypnotic Clinical Scale (Morgan & Hilgard, 1975), and yet be capable of experiencing considerable trance depth and success on other items such as response to post-hypnotic suggestion. Similarly, Zamansky and Clark (1986) found that it was not necessary to be fully absorbed in the direct suggestions of the hypnotist to perform those suggestions successfully. Alternatively, Forbes and Pekala (1993) suggested that because of the ability of some individuals to elicit vivid imagery without an induction, hypnosis may not add a great deal to what they can experience by merely closing their eyes.

RELEVANCE OF RELATED PHENOMENA TO THE CLINICAL **SITUATION**

The phenomena of absorption, dissociation, openness to experience, and imagery can be used jointly or separately to help explain the phenomena of hypnotisability to clients. This can be facilitated by drawing upon "everyday" experiences, de-mystifying the process, and perhaps assisting the client to be more receptive to the effects of hypnosis. At a global level, client identification with any or all of these phenomena may be all that is available or possible in an emergency situation when other, more stringent testing is not feasible.

Despite the statistical, and it seems practical, links between hypnotisability and imaginative involvement, some researchers suggest that this link may be mediated by context-based expectancies. Council, Kirsch, and Hafner (1986), for example, found that when an hypnotic scale and the TAS were administered in the same testing context, correlations were substantial. However, when the testing contexts were separate, the measures failed to correlate. Even if this explanation is robust, we do not believe that it is not necessarily detrimental to effective treatment using hypnosis.

Suggestibility

Weitzenhoffer (1980) argued the classic suggestion effect in hypnosis required two criteria: (a) there must be a response to a suggestion; (b) which is experienced as nonvolitional.

How much of what is termed hypnotic response is non-volitional, and how much is influenced by the subject's suggestibility or, as has been the focus of much work, simulation? While it is outside the parameters of this paper to address such issues as simulation, it is important to address the issue of suggestibility. Gudjonsson and Clark (1986) defined interrogative suggestibility as "the extent to which, within a closed social interaction, people come to accept messages communicated during formal questioning, as the result of which their subsequent behavioural response is affected" (p.86).

Field (1973) surveyed words used during hypnotic induction and found a high frequency of the words will, as, and the verb to be. He suggests that the use of the word will may be explained in terms of the future tense involved in hypnotic induction and the creating of belief and expectations in the subject (e.g., in a moment, you will feel your hand . . .; you will see. . .).

Most studies attempting to assess levels of suggestibility use film, however Gudjonsson (1984) developed the Gudjonsson Suggestibility Scale (GSS) which uses a narrative paragraph about a fictious mugging which is read aloud to the subject. The subject is then asked to repeat all that is remembered about the story (immediate feedback) and then some 50 minutes later is again asked to recall the story. At the later time, negative feedback is provided and the subject once again is asked to answer the same questions. The objective of this testing is to assess the consistency or suggestibility of answers following the negative feedback. The GSS yields two factors: the extent to which subjects yield to subtly leading questions and secondly, the extent to which subjects shift their replies once interpersonal pressure is applied. A parallel version of the GSS (the GSS2) (Gudjonsson, 1987) also uses narrative which is confounded by subsequent negative feedback. However, this type of testing is both time consuming and not amenable to self-report surveys. And, although referring to eye witness testimony, Sheehan and Linton (1993) questioned whether subjects actually acquiesce to suggestions or are susceptible to suggestion.

Confounding Expectations and Suggestibility

Katsanis, Barnard, and Spanos (1988) developed the Carleton University Responsiveness to Suggestion Scale (CURSS) Self-Prediction Questionnaire, to be answered by subjects before completing the CURSS itself. The self-prediction scale gives a brief description of each CURSS item and then asks subjects to rate their future performance on each of the items. For example, following a description of the CURSS arm levitation suggestion, subjects are asked to state whether

- A My arm will have risen at least 6 inches.
- My arm will have risen less than 6 inches.

Respondents are rated Pass or Fail and the sum of responses ranges from 0 to 7 (None Passed to All Passed).

This situation is both linguistically and cognitively complex. How does one differentiate the motive behind answers to these questions: do the answers reflect self-expectations about future performance or, do they more accurately reflect a response bias based upon suggestibility provoked by the content of the questions? In both cases, answers may be further contaminated by subjects' prior knowledge of hypnosis which is frequently based upon erroneous accounts of others or even from observations of stage or television hypnosis.

Other studies have manipulated subjects by providing people with false feedback regarding personality inventories (e.g., Gregory & Diamond, 1973) and false reports about physiological or sensory feedback (e.g., Wickless & Kirsch, 1989) or both (e.g., Johnston, Chajkowaski, DuBreuil, & Spanos, 1989) which were also said to indicate subjects' level of hypnotisability. Perhaps it would be just as informative to have people rate their own level of (future) hypnotisability and ascertain if this self-report value, driven by subjects' own experiences, fears, and expectations, exerts any effect on outcome. Kirsch (1996, 1997) is among those who have pointed out these expectations may contribute to therapeutic outcome, albeit, via a placebo effect.

Hypnosis and Outcomes

Despite the mechanisms at work, (e.g., a placebo effect, client suggestibility) Kirsch and colleagues (Kirsch, 1990; Kirsh, 1996; Kirsch, Montgomery, & Sapirstein, 1995) have clearly demonstrated via a meta-analysis that cognitivebehavioural therapies were more effective than psychodynamic therapies and, that by adding hypnosis to either of these further increased their effectiveness by a substantial degree. The effect size for a combined cognitive-behavioural and hypnosis treatment averaged across meta-analyses was 2.55. Perhaps a more concrete illustration of this effect is to describe it as the degree of improvement in untreated people being surpassed by the typical client receiving CBT+hypnosis in 99.5% of cases. To counter the argument that it was not just relaxation that impacted upon these results Kirsh (1996) pointed out that:

- 1. The effect size for hypnosis is greater than for relaxation; and
- 2. Even an active-alert induction of hypnosis (see Banyai & Hilgard, 1976) demonstrates a similar positive effect.

It seems somewhat truculent to point out that these findings are only available because the authors used a scientific method which necessarily includes assessment and evaluation. Not only do these findings confirm results for these particular cohorts of patients but, again using scientific principles, they indicate that these results are generalisable to other clients with similar levels of hypnotic ability. Yet, despite demonstrations such as this of the efficacy of hypnosis as a therapetic modality and the availablility of a range of tests, it seems that many therapists fail to assess their clients' hypnotisability in any manner whatsoever.

CLINICIANS: USERS OF HYPNOTIC ASSESSMENT?

A survey of participants attending an American Society of Hypnosis workshop, of whom 47% were clinical psychologists, 34% physicians, and 18% dentists, revealed that 46% of the respondents had never used tests of hypnotisability in their clinical practice. These practitioners considered testing to be of no value in their practices and, furthermore, that the degree of hypnotisability did not correlate with their therapeutic results — their prime concern (Cohen, 1989). Of the other 54% of therapists who reported some use of tests of hypnotisability, 24% of this group reported having currently abandoned testing. In fact, only 30% of experienced therapists attending this workshop reported the ongoing use of hypnotic assessment. Cohen summarised this report by stating the "majority of experienced clinicians not only eschew formal testing, but many consider testing to be nontherapeutic and irrelevant" (p.7). It is, however, not clear from this article, how these particular therapists gauged the degree of hypnotisability, or indeed, their therapeutic outcomes, without some form of assessment. In fact, Hilgard (1982) described "this lack of research to support the claims of some clinicians as shocking" (p. 395).

This report stimulated a great deal of comment. On the side of "art not science," Diamond (1989) stated that, in the clinical domain, testing "either fails to enhance, or, worse yet, detracts from my clinical aims as a psychotherapist" (p. 11). Diamond's focus, he says, is on the interactive relationship with the client and facilitating dynamic change: he is not comfortable using his client for "research purposes." It is not clear how Diamond assesses such therapeutic change, if not by the most basic experimental/research design of pre-postevaluation. How he attributes causality to any or all of the therapies he employs is also unclear unless based upon scientific (albeit in a clinical context) observation. It might also be expected that, as a clinician, Diamond would extract from successful sessions and employ these techniques with other clients — a process quite valid for testing the robustness of the techniques or, in research terms, their generalisation.

Contrary to this perspective, Barber (1989) stated that a test of hypnotisability provides a probabilistic estimate of responsiveness; [although] it cannot tell us anything about an individual's actual capacity for responsiveness (p.10), as testing and therapeutic conditions may be quite different. Despite the possibility of this discrepancy, it is clear that Barber advocates testing. How else, he demands, can causality be attributed, therapists communicate with one another or with the scientific community about their results, and how else can hypnotic treatment become more reliable and efficient? Rather than focusing on the polarities suggested by each of these protagonists, it may be preferable to outline a clinician's perspective in relation to client interview, assessment, and treatment.

A CLINICIAN'S PERSPECTIVE

When clients present for treatment, it is the clinician's responsibility to obtain a full history in order to inform diagnosis and future treatment. Questions which arise from this premise are:

- 1. Is the diagnosis within your professional capacity?
- 2. Have you the skills to utilise the most appropriate treatment?
- 3. Is the client a suitable candidate for this particular therapy? Further referral or treatment alternatives depend upon these answers.

Let us assume that a diagnosis has been made, there are no contraindications and the use of hypnotheraphy is considered as a possible treatment adjunct. How does one know this (or any other treatment) will be effective with this client? First, good practice requires the client to be fully informed about the nature of the treatment (i.e., hypnosis) including any risks, and that informed consent for the treatment is obtained. Hilgard (1982) has been quick to point out that it is only through measurement and the scientific method that myths some clients hold about hypnosis have been able to be debunked. For instance, myths such as success in hypnotising relies on the skill of the therapist and conversely, that focus (e.g., on a thumbnail or place in space) is a satisfactory pathway into hypnosis and not the strain associated with some eye-roll techniques.

Following this step, we believe it is ethically and professionally essential to ascertain if the client has the potential to be responsive to the treatment (hypnosis) and this step requires an assessment of the client's hypnotisability. (We have deliberately used the word treatment with hypnosis in parentheses, as we believe the assessment of suitability for hypnosis is equivalent to the assessment required for any form of treatment (e.g., a demonstration of high blood pressure may preclude specific drugs).) Whilst a strong advocate of assessment, Hilgard (1982) says the choice lies between clinical judgment of responsiveness and more scientific measurement but, some level of assessment is required (and heeding the legal case presented above, this discussion must be clearly documented: and, it seems, you must support why and how you judge hypnosis would be of therapeutic value for this client).

Sacerdote (1982) also advocates the use of assessment in clinical applications of hypnosis, however, he cautions that most hypnotisability scales (because of their standardisation) miss the opportunity for non-verbal communication, for the qualitative differences in the character and level of hypnotic responsiveness. Sacerdote also cautions against their carte blanche use, citing the example of a patient with metastic cancer who, he believes, well may have benefited from the relaxation induction of the SHCS:Adult scale, but not from the time or energy devoted to the five assessment items. In fact, he believes that she probably would not have passed these and, therefore, be considered unhypnotisable. If, on the other hand, he had used the HIP, the effort involved with the eye-roll technique, might have seemed non-meaningful to her and again she may have been classified as unhypnotisable. To establish some level of assessment to inform both himself and his patient, Sacerdote used reverse hand levitation which, while avoiding distress for this patient, also enhanced their patientdoctor relationship. Clearly, good clinical practice prevailed: the patient's wellbeing was paramount yet, also relevant to her well-being was an assessment of responsiveness to future hypnotic treatment. This case provides an excellent example of balance between clinical experience, scientific method, and respect for the individual involved.

It is also important to realise that some clients' responses might be blocked by other phenomena. For example, the second author assessed one client who "failed" the amnesia test on the SCHS. Yet in discussion following the assessment, the client revealed there was a momentary blocking, but he had instructed himself not to forget. He was a physics teacher whose job entailed precise attention to detail and instant recall of formulae. Clearly, appropriate assessment involves not just testing but a thorough clinical understanding of the phenomena involved and the reactions of each particular client.

This example, together with that drawn from Sacerdote, reinforce the importance of clinical and personal contexts. Why are these clients presenting now, what are their expectations of the treatment, of the therapist, and indeed, what are the therapist's expectations? If we the therapists, are highly hypnotisable, if we can use imagery, it does not necessarily follow that our clients have the same capacities. There is a need to assess what these capacities are for each individual client and to tailor those capacities to therapy with, or without, the use of hypnosis.

SUMMARY AND CONCLUSIONS

Hypnotic techniques have demonstrated therapeutic efficacy over and above that achieved with cognitive-behavioural techniques. The attribution of causality across treatment is only possible because of the scientific evaluation of each treatment component: in the case of hypnosis, this relies on the assessment of people's hypnotisability. Numerous scales are available to test levels of hypnotisability from clinician-rated to self-report and many of these have been reviewed. It is important, as clinicians, that we not only keep abreast of the latest literature in our field, but that in doing so we also ascertain whether clients are suitable for specific treatment modalities based on the literature review and subsequent context-relevant clinical assessment of each client. It is our contention that the phenomena of good clinical practice and valid clinical assessment, in this instance, of hypnotisability, are not mutually exclusive. Barber (1989) was even more forceful in this regard, as he stated:

Those who do not register trance capacity, need and deserve help — but some other form of treatment like psychosocial supportive therapy, pharmacological control . . . They certainly should be spared the disappointment and demoralization of useless, time-wasting hypnotic rituals.

REFERENCES

- Anastasi, A. (1990). Psychological testing (6th Ed.). New York: Collier Macmillan Publishers.
- Banyai, E. I., & Hilgard, E. R. (1976). A comparison of active-alert hypnotic induction with traditional relaxation induction. Journal of Abnormal Psychology, 85, 218-224.
- Barber, T. X. (1969). Hypnosis: A scientific approach. New York: Van Nostrand Reinhold.
- Barber, J. (1989). Invited discussion of Cohen's clinical uses of measures of hypnotizability. American Journal of Clinical Hypnosis, 32, 10-11.
- Bates, B. L., & Kraft, P. M. (1991). The nature of hypnotic performance following administration of the Carleton Skills Training Program. International Journal of Clinical and Experimental Hypnosis, 39, 227-241.
- Baum, D., & Lynn, S. J. (1981). Hypnotic susceptibility level and reading involvement. International Journal of Clinical and Experimental Hypnosis, 24, 366-374.
- Bernstein, E. M., & Putnam, F.W. (1986). Development, reliability, and validity of a dissociation scale. Journal of Nervous and Mental Diseases, 174, 727-734.
- Betts, G. H. (1909). The distribution and function of mental imagery. New York: Columbia University Teachers College.
- Bowers, K. S. (1992). Imaginative and dissociative control in hypnotic responding. International *Journal of Clinical and Experimental Hypnosis*, 40, 253–275.
- Bowers, P. (1978). Hypnotizability, creativity and the role of effortless experiencing. International Journal of Clinical and Experimental Hypnosis, 26, 184–202.
- Bowers, P. (1982). The classic suggestion effect: Relationships with scales of hypnotizability, effortless experiencing, and imagery vividness. International Journal of Clinical and Experimental Hypnosis, 13, 270-279.
- Cohen, S. B. (1989). Clinical uses of measures of hypnotizability. American Journal of Clinical Hypnosis, 32, 1–9.
- Council, J. R., Kirsch, I., & Hafner, L. P. (1986). Expectancy versus absorption in the prediction

- of hypnotic responding. Journal of Personality and Social Psychology, 50, 182–189.
- Crasilneck, H. B., & Hall, J. A. (1959). Blood pressure and pulse rates in neutral hypnosis. International Journal of Clinical and Experimental Hypnosis. 8, 137–139.
- Diamond, M. J. (1989). Is hypnotherapy art or science? American Journal of Clinical Hyposis, 32, 11-12.
- Dywan, J. (1988). The imagery factor in hypnotic hypermnesia. International Journal of Clinical and Experimental Hypnosis, 36, 312–326.
- Evans, F. J., & Schmeidler, D. (1966). Relationship between the Harvard Group Scale of Hypnotic Susceptibility and the Stanford Hypnotic Susceptibility Scale: Form C. International Journal of Clinical and Experimental Hypnosis, 14, 333-343.
- Fellows, B. J., & Armstrong, V. (1977). An experimental investigation of the relationship between hypnotic susceptibility and reading involvement. American Journal of Clinical Hypnosis, 20, 101-105.
- Field, P. B. (1973). Humanistic aspects of hypnotic communication. In E. Fromm & R.E. Shor (Eds.). Hypnosis: Research developments and perspectives (pp. 481–493). London: Paul Elek.
- Forbes, E. J., & Pekala, R. J. (1993). Predicting hypnotic susceptibility via a phenomenological approach. Psychological Reports, 73, 1251–1256.
- Frischolz, E. J., Braun, B. G., Sachs, R. G., Schwartz, D. R., Lewis, J., Shaeffer, D., Westergaard, C., & Pasquotto, J. (1991). Construct validity of the Dissociative Experiences Scale (DES):1. The relation between the DES and other self-report measures of dissociation. Dissociation, 4, 185-188.
- Frischholz, E. J., Braun, B. G., Sachs, R. G., Schwartz, D. R., Lewis, J., Shaeffer, D., Westergaard, C., & Pasquotto, J. (1992). Construct validity of the Dissociative Experiences Scale: 11. Its relationship to hypnotisability. American Journal of Clinical Hypnosis, 35, 145–152.
- Frischholz, E. J., Spiegel, D., Trentalange, M., & Spiegel, H. (1987). The Hypnotic Induction Profile and absorption. *American Journal of Clinical Hypnosis*, 30, 87–93.
- Fromm, E. (1977). Altered states of consciousness and hypnosis: A discussion. International *Journal of Clinical and Experimental Hypnosis*, 25, 325–334.
- Glisky, M. L., & Kihlstrom, J. F. (1993). Hypnotizability and facets of openness. International Journal of Clinical and Experimental Hypnosis, 39, 112–123.
- Glisky, M. L., Tataryn, D. J., Tobias, B. A., Kihlstrom, J. F., & McConkey, K. M. (1991). Absorption, openness to experience, and hypnotizability. Journal of Personality and Social Psychology, 60, 263-272.
- Goldberg, L. R. (1990). An alternative description of personality: The big-five factor structure. Journal of Personality and Social Psychology, 59, 1216–1229.
- Gordon, R. (1949). An investigation into some of the factors that favour the performance of sterotyped images. British Journal of Psychology, 39, 156–167.
- Gregory, J., & Diamond, M. J. (1973). Increasing hypnotic susceptibility by means of positive expectancies and written instructions. Journal of Abnormal Psychology, 82, 362–367.
- Gudjonsson, G. H. (1984) A new scale of interrogative suggestibility. Personality and Individual Differences, 5, 303-314.
- Gudjonsson, G. H. (1987). A parallel form of the Gudjonsson Suggestibility Scale. British Journal of Clinical Psychology, 26, 215–221.
- Gudjonsson, G. H., & Clark, N. (1986). Suggestibility in police interrogation: A social psychological model. Social Behaviour, 1, 83–104.
- Hand, J., Pekala, R. J., & Kumar, V. K. (1995). Prediction of Harvard and Stanford Scale scores with a phenomenological instrument. Australian Journal of Clinical and Experimental Hypnosis, 23, 124-134.

- Heyneman, N. E. (1990). The role of imagery in hypnosis: An information processing approach. International Journal of Clinical and Experimental Hypnosis, 37, 39–59.
- Hilgard, E. R. (1965). The experience of hypnosis. New York: Harcourt, Brace & World.
- Hilgard, J. (1970). Personality and hypnosis: A study of imaginative involvement. Chicago: University of Chicago Press.
- Hilgard, J. R. (1979). Personality and hypnosis: A study of imaginative involvement (2nd ed). Chicago: University of Chicago Press.
- Hilgard, E. R. (1982). Hypnotic susceptibility and implications for measurement. *International* Journal of Clinical and Experimental Hypnosis, 30, 394-403.
- Horne, D. J., & Powlett, V. (1988). Hypnotizability and rating scales. In G.D. Burrows and L. Dennerstein (Eds.). *Handbook of hypnosis and psychosomatic medicine* (pp. 119–132). Amsterdam: Elsevier.
- Hoyt, I. P., Nadon, R., Register, P. A., Chorny, J., Fleeson, W., Grigorian, E. M., & Otto, L. (1989). Daydreaming, absorption and hypnotizability. International Journal of Clinical and Experimental Hypnosis, 37, 332-342.
- Johnston, J. S., Chajkowaski, J., DuBreuil, S. C., & Spanos, N. (1989). The effects of manipulated expectancies on behavioural and subjective indices of hypnotizability. Australian Journal of Clinical and Experimental Hypnosis, 17, 121–130.
- Johnson, L. S., & Weight, D. G., (1976). Self-hypnosis versus heterohypnosis: Experimental and behavioral comparisions. Journal of Abnormal Psychology, 85, 523-526.
- Kahn, S. P., Fromm, E., Lombard, L. S., & Sossi, M. (1989) The relation of self-reports of hypnotic depth in self-hypnosis to hypnotizability and imagery production. International Journal of Clinical and Experimental Hypnosis, 37, 290–304.
- 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, 63-77.
- Kirsch, I. (1990). Changing expectations: A key to effective psychotherapy. Pacific Grove, CA: Brooks/Cole.
- Kirsch, I. (1996). Hypnosis in psychotherapy: Efficacy and mechanisms. Contemporary Hypnosis, 13, 109-114.
- Kirsch, I. (1997). Suggestibility or hypnosis: What do our scales really measure? International Journal of Clinical and Experimental Hypnosis, 65, 212-225.
- Kirsch, I., Montgomery, G., & Sapirstein, G. (1995). Hypnosis enhances effectiveness of cognitive-behavioural treatment. Clinician's Research Digest, 13, 6.
- Kumar, V. K., & Pekala, R. J. (1988). Hypnotizability, absorption, and individual differences in phenomenological experience. International Journal of Clinical and Experimental Hypnosis, 6, 17-22.
- Ledford, B., Brazleton, E., & Shannon, D. (1995). A discriminant analysis of some factors related to hypnotic susceptibility. Australian Journal of Clinical and Experimental Hypnosis. 23, 93-101.
- Lombard, L. S., Kahn, S. P., & Fromm, E. (1990). The role of imagery in self-hypnosis: Its relationship to personality characteristics and gender. International Journal of Clinical and Experimental Hypnosis, 38, 25–38.
- London, P. (1963). The Children's Hypnotic Susceptibility Scale. Palo Alto, CA: Consulting Psychologists Press.
- McCrae, R. R., & Costa, P. T., (1984). Openness to experience. Perspectives on Personality, 1, 145-172.

- Marks, D. F. (1973). Visual imagery differences in the recall of pictures. British Journal of Psychology, 61, 17–24.
- Monteiro, K. P., MacDonald, H., & Hilgard, E. (1980). Imagery, absorption, and hypnosis: A factorial study. *Journal of Mental Imagery*, 4, 63–81.
- Morgan, A. H., & Hilgard, E. R. (1975). Stanford Hypnotic Clinical Scale and the revised Stanford Hypnotic Clinical Scale for Children. *American Journal of Clinical Hypnosis*, 21, 134–147.
- Murphy, K. R., & Davidshofer, C. O. (1994). *Psychological testing: Principles and applications* (3rd ed.). New Jersey: Prentice-Hall, Inc.
- Myers, S. A. (1983). The Creative Imagination Scale: Group norms for children and adolescents. *International Journal of Clinical and Experimental Hypnosis*, *31*, 28–36.
- Nadon, R., Hoyt, I. P., Register, P. A., & Kihlstrom, J. F. (1991). Absorption and hypnotizability: Context effects reexamined. *Journal of Personality and Social Psychology*, 60, 144–153.
- Orne, M. T., & O Connor, D. N. (1967). Diagnostic ratings of hypnotizability. *International Journal of Clinical and Experimental Hypnosis*, 15, 125–133.
- Page, R. A., & Handley, G. W. (1996). A short experiental scale of hypnosis. *Contemporary Hypnosis*, 13, 13–18.
- Pekala, R. J. (1991). The Phenomenology of Consciousness Inventory (PCI). West Chester, PA: Mid-Atlantic Educational Institute
- Pekala, R. J. (1995a). A short, unobtrusive hypnotic assessment procedure for assessing hypnotic level: 1. Development and research. *American Journal of Clinical Hypnosis*, 37, 271–282.
- Pekala, R. J. (1995b). A short, unobtrusive hypnotic assessment procedure for assessing hypnotic level: 11. Clinical case reports. *American Journal of Clinical Hypnosis*, 37, 284–293.
- Pekala, R. J., & Kumar, V. K. (1984). Predicting hypnotic susceptibility by a self-report phenomenological state instrument. *American Journal of Clinical Hypnosis*, 27, 114–121.
- Pekala, R. J., Wenger, C. F., & Levine, R. (1985). Individual differences in phenomenological experience: States of consciousness as a function of absorption. *Journal of Personality and Social Psychology*, 48, 125–132.
- Pettinati, H. M., Kogan, D. R., & Evans, R. A. (1990). Hypnotizability of psychiatric inpatients according to two different scales. *American Journal of Psychiatry*, 147, 67–75.
- Priebe, F. A., & Wallace, B. (1986). Hypnotizability, imaging ability, and the detection of embedded objects. *International Journal of Clinical and Experimental Hypnosis*, 34, 320–329.
- Radtke, H. L., & Stam, H. J. (1991). The relationship between absorption, openness to experience, anhedonia, and susceptibility. *International Journal of Clinical and Experimental Hypnosis*, 39, 39–56.
- Repka, R. J., & Nash, M. R. (1995). Hypnotic responsivity of the deaf: The development of the University of Tennessee Hypnotic Susceptibility Scale for the Deaf. *International Journal of Clinical and Experimental Hypnosis*, 43, 316–331.
- Richardson, A. (1983). Imagery: Definition and types. In A.A. Sheikh (Ed.). *Imagery: Current theory, research, and applications* (pp. 3–42). New York: John Wiley & Sons.
- Robertson, L., McInnis, K., & St Jean, R. (1992). Modifying hypnotic susceptibility with the Carleton Skills Training Program: A replication. *Contemporary Hypnosis*, 9, 97–104.
- Sacerdote, P. (1982). A non-statistical dissertation about hypnotizability scales and clinical goals: Comparison with individualized induction and deepening techniques. *International Journal of Clinical and Experimental Hypnosis*, 30, 351–376.
- Sheehan, P. W. (1967). A shortened form of Betts questionnaire upon mental imagery. *Journal of Clinical Psychology*, 23, 386–389.

- Sheehan, P. W., & Linton, C. P. (1993). Parameters influencing response to leading questions. Australian Journal of Clinical and Experimental Hypnosis, 21, 1–14.
- Shor, R. E. (1962). Three dimensions of hypnotic depth. International Journal of Clinical and Experimental Hypnosis, 10, 23–38.
- Shor, R. E., & Easton, E. C. (1973). A preliminary report on research comparing self- and heterohypnosis. American Journal of Clinical Hypnosis, 16, 37–44.
- Shor, R. E., & Orne, M. T. (1962). The Harvard Group Scale of Hypnotic Susceptibility, Form A. Palo Alto, CA: Consulting Psychologists Press.
- Shor, R. E., & Orne, M. T. (1963). Norms on the Harvard Group Scale of Hypnotic Susceptibility: Form A. International Journal of Clinical and Experimental Hypnosis, 11, 39–47.
- Spanos, N. P., & Barber, T. X. (1974). Toward a convergence in hypnosis research. American Psychologist, 29, 500-511.
- Spanos, N. P., & McPeake, J. D. (1974). Involvement in suggestion-related imaginings, experienced involuntariness, and credibility assigned to imaginings in hypnotic subjects. Journal of Abnormal Psychology, 83, 687-690.
- Spanos, N. P., McPeake, J. D., & Churchill, N. (1976). Relationships between imaginative ability variables and the Barber Suggestibility Scale. American Journal of Clinical Hypnosis, 19, 39-46.
- Spanos, N. P., Radtke, H. L., Hodgins, D. C., Stam, H., & Bertrand, L. D. (1983). The Carleton University Responsiveness to Suggestion Scale: Normative data and psychometric properties. Psychological Reports, 53, 523-535.
- Spanos, N. P., Radtke, H. L., Hodgins, D. C., Bertrand, L. D., Stam, H. J., & Dubreuil, D. L. (1983). The Carleton University Responsiveness to Suggestion Scale: Stability, reliability, and relationship with expectancy and "hypnotic experiences." Psychological Reports, 53, 723-734.
- Spiegel, H., & Bridges, A. A. (1970). A manual for the Hypnotic Induction Profile. New York: Soni Medic.
- Spiegel, H., & Spiegel, D. (1978). Trance and treatment: Clinical uses of hypnosis. New York: Basic Books.
- Spiegel, H., & Spiegel, D. (1988). Induction techniques. In G.D. Burrows and L. Dennerstein (Eds.). Handbook of hypnosis and psychosomatic medicine (pp. 133–147). Amsterdam: Elsevier.
- Sutcliffe, J. P., Perry, C. W., & Sheehan, P. W. (1970). Relation of some aspects of imagery and fantasy to hypnotic susceptibility. Journal of Abnormal Psychology, 76, 279–287.
- Tart, C. T. (1978). Quick and convenient assessment of hypnotic depth: Self-report scales. American Journal of Clinical Hypnosis, 21, 186-207.
- Tellegen, A. (1979). On measures and conceptions of hypnosis. American Journal of Clinical Hypnosis, 21, 219-237.
- Tellegen, A., & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. Journal of Abnormal Psychology, 83, 268-277.
- Weitzenhoffer, A. M. (1980). Hypnotic susceptibility revisited. American Journal of Clinical Hypnosis, 22, 130-146.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1959). Stanford Hypnotic Susceptibility Scale, Forms A and B. Palo Alto, CA: Consulting Psychologists Press.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1962). Stanford Profile Scales of Hypnotic Susceptibility, Forms 1 and 11. Palo Alto, CA.: Consulting Psychologists Press.
- White, J. (1997). Hypnosis and legal consent. Unpublished manuscript, the University of Melbourne.