

International Handbook of

Clinical Hypnosis



Edited by

Graham D Burrows AO

Robb O Stanley

Peter B Bloom

 WILEY

International Handbook of Clinical Hypnosis. Edited by G. D. Burrows, R. O. Stanley, P. B. Bloom
Copyright © 2001 John Wiley & Sons Ltd
ISBNs: 0-471-97009-3 (Hardback); 0-470-84640-2 (Electronic)

International Handbook of Clinical Hypnosis

International Handbook of Clinical Hypnosis

Edited by

Graham D. Burrows AO, KSJ

The University of Melbourne, Australia

Robb O. Stanley

The University of Melbourne, Australia

Peter B. Bloom

The University of Pennsylvania, USA

JOHN WILEY & SONS, LTD

Chichester · New York · Weinheim · Brisbane · Singapore · Toronto

Copyright © 2001 by John Wiley & Sons, Ltd.,
Baffins Lane, Chichester,
West Sussex PO19 1UD, UK

National 01243 779777
International (+44) 1243 779777
e-mail (for orders and customer service enquiries: cs-books@wiley.co.uk)
Visit our Home Page on: <http://www.wiley.co.uk> or <http://www.wiley.com>

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London W1P 0LP, UK, without the permission in writing of the publisher.

Other Wiley Editorial Offices

John Wiley & Sons, Inc., 605 Third Avenue,
New York, NY 10158-0012, USA

WILEY-VCH Verlag GmbH, Pappelallee 3,
D-69469 Weinheim, Germany

John Wiley & Sons Australia, Ltd., 33 Park Road, Milton,
Queensland 4064, Australia

John Wiley & Sons (Asia) Pte, Ltd., 2 Clementi Loop #02-01,
Jin Xing Distripark, Singapore 129809

John Wiley & Sons (Canada), Ltd., 22 Worcester Road,
Rexdale, Ontario M9W 1L1, Canada

Library of Congress Cataloging-in-Publication Data

International handbook of clinical hypnosis [edited by] / Graham D. Burrows, Robb O. Stanley,
Peter B. Bloom

p. ; cm.

Includes bibliographical references and index.

ISBN 0-471-97009-3 (cased)

1. Hypnotism. I. Burrows, Graham D. II. Stanley, Robb O. III. Bloom, Peter B.

[DNLM: 1. Hypnosis. WM 415 H23551 2001]

RC495 .H357 2001

616.89'162—dc21

2001024254

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN 0-471-97009-3

Typeset in 10/12pt Times from the author's disks by Keytec

Printed and bound in Great Britain by Antony Rowe Ltd, Chippenham

This book is printed on acid-free paper responsibly manufactured from sustainable forestry,
in which at least two trees are planted for each one used for paper production.

Contents

List of Contributors	ix
Preface	xi
PART I THE NATURE OF HYPNOSIS	
1 Introduction to Clinical Hypnosis and the Hypnotic Phenomena	3
<i>Graham D. Burrows and Robb O. Stanley</i>	
2 Training in Hypnosis	19
<i>Peter B. Bloom</i>	
PART II GENERAL CLINICAL CONSIDERATIONS	
3 Patient Selection: Assessment and Preparation, Indications and Contraindications	35
<i>Julie H. Linden</i>	
4 Memory and Hypnosis—General Considerations	49
<i>Peter W. Sheehan</i>	
5 Neuropsychophysiology of Hypnosis: Towards an Understanding of How Hypnotic Interventions Work.	61
<i>Helen J. Crawford</i>	
PART III THE PSYCHOTHERAPIES	
6 Injunctive Communication and Relational Dynamics: An Interactional Perspective	85
<i>Jeffrey K. Zeig</i>	

PART IV SPECIFIC DISORDERS AND APPLICATIONS

7	Hypnosis and Recovered Memory: Evidence-Based Practice.	97
	<i>Kevin M. McConkey</i>	
8	Hypnosis in the Management of Stress and Anxiety Disorders.	113
	<i>Robb O. Stanley, Trevor R. Norman and Graham D. Burrows</i>	
9	Hypnosis and Depression	129
	<i>Graham D. Burrows and Sandra G. Boughton</i>	
10	Hypnosis, Dissociation and Trauma	143
	<i>David Spiegel</i>	
11	Conversion Disorders	159
	<i>C. A. L. Hoogduin and Karin Roelofs</i>	
12	Personality and Psychotic Disorders.	171
	<i>Joan Murray-Jobsis</i>	
13	Dissociative Disorders	187
	<i>Richard P. Kluff</i>	
14	Eating Disorders—Anorexia and Bulimia.	205
	<i>Moshe S. Toem</i>	
15	Hypnotherapy in Obesity	221
	<i>Johan Vanderlinden</i>	
16	Hypnotic Interventions in the Treatment of Sexual Dysfunctions. . .	233
	<i>Robb O. Stanley and Graham D. Burrows</i>	
17	Hypnosis in Chronic Pain Management	247
	<i>Frederick J. Evans</i>	
18	Hypnosis and Pain	261
	<i>Leonard Rose</i>	
19	The Use of Hypnosis in the Treatment of Burn Patients	273
	<i>Dabney M. Ewin</i>	

CONTENTS	vii
20 Hypnosis in Dentistry	285
<i>Dov Glazer</i>	
21 Dental Anxiety Disorders, Phobias and Hypnotizability	299
<i>Jack A. Gerschman</i>	
22 Applications of Clinical Hypnosis with Children	309
<i>Daniel P. Kohen</i>	
23 The Negative Consequences of Hypnosis Inappropriately or Ineptly Applied	327
<i>Robb O. Stanley and Graham D. Burrows</i>	
Index	335

Contributors

Peter B. Bloom, MD Department of Psychiatry, University of Pennsylvania, School of Medicine, c/o 416 Riverview Avenue, Swarthmore, PA 19081-1221, USA.

Sandra G. Boughton, DipClinPsych Department of Psychiatry and Behavioural Science, University of Western Australia, Perth, Western Australia 6009, Australia.

Graham D. Burrows, AO KSJ MD Department of Psychiatry, University of Melbourne, Austin and Repatriation Medical Centre, Heidelberg, Victoria 3084, Australia.

Helen J. Crawford, PhD Department of Psychology, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061-0436, USA.

Frederick J. Evans, PhD Pathfinders: Consultants in Human Behavior, 736 Lawrence Road, Lawrenceville, NJ 08648-0412, USA.

Dabney M. Ewin, MD Departments of Surgery and Psychiatry, Tulane University, c/o 318 Baronne Street, New Orleans, LA 70112-1606, USA.

Jack A. Gerschman, BDS, PhD School of Dental Science, University of Melbourne, c/o Suite 5, 3rd Floor, 517 St. Kilda Road, Melbourne, Victoria, 3004, Australia.

Dov Glazer, DDS Louisiana State University School of Dentistry, 3525 Prytania Street, Suite #312, New Orleans, LA 70115-3566, USA.

C.A.L. Hoogduin, MD, PhD Department of Psychology and Personality, University of Nijmegen, PO Box 9104, NL-6500 HE Nijmegen, The Netherlands.

Richard P. Kluff, MD Department of Psychiatry, Temple University, c/o 111 Presidential Boulevard, Suite 231, Bala Cynwyd, PA 19004-1004, USA.

Daniel P. Kohen, MD Behavioral Pediatrics Program, Department of Pediatrics – University of Minnesota, Gateway Center – Suite 160, 200 Oak Street SE, Minneapolis, MN 55455-2002, USA.

Julie H. Linden, PhD Private Practice, 227 East Gowen Avenue, Philadelphia, PA 19119-1021, USA.

Kevin M. McConkey, PhD School of Psychology, University of New South Wales, Sydney, New South Wales 2052, Australia.

Joan Murray-Jobsis, PhD Human Resource Consultants, 100 Europa Center, Suite 260, Chapel Hill, NC 27514-2357, USA.

Trevor R. Norman, PhD Department of Psychiatry, University of Melbourne, Austin and Repatriation Medical Centre, Heidelberg, Victoria 3084, Australia.

Karin Roelofs, MA Department of Psychology and Personality, University of Nijmegen, PO Box 9104, NL-6500 HE Nijmegen, The Netherlands.

Leonard Rose, MBBS Melbourne Pain Management Clinic, 96 Grattan Street, Suite 14, Carlton, Victoria 3053, Australia.

Peter W. Sheehan, PhD, AO Vice-Chancellor, Australian Catholic University, PO Box 968, North Sydney, New South Wales 2059, Australia.

David Spiegel, MD Department of Psychiatry & Behavioral Sciences, Stanford University School of Medicine, 401 Quarry Road, Office 2325, Stanford, CA 94305-5718, USA.

Robb O. Stanley, DCLinPsych Department of Psychiatry, University of Melbourne, Austin and Repatriation Medical Centre, Heidelberg, Victoria 3084, Australia.

Moshe S. Torem, MD Center for Mind-Body Medicine, Northeastern Ohio Universities, College of Medicine, 4125 Medina Road, Suite 209, Akron, OH 44333-4514, USA.

Johan Vanderlinden, PhD Department of Behavior Therapy, University Centre St-Josef, B-3070 Kortenberg, Belgium.

Jeffrey K. Zeig, PhD The Milton H. Erickson Foundation, 3606 North 24th Street, Phoenix, AZ 85016-6500, USA.

Preface

The editors of this volume, the *International Handbook of Clinical Hypnosis*, first met to discuss the idea for it during the 13th International Congress of Hypnosis held in Melbourne, Australia, in 1994. During the Congress, sponsored on behalf of the International Society of Hypnosis by the Australian Society of Hypnosis and the Department of Psychiatry of the University of Melbourne, the presidency of the International Society of Hypnosis was passed from Graham D. Burrows AO to Peter B. Bloom, while Robb O. Stanley continued as secretary treasurer.

From that vantage point and following the publication of *Contemporary International Hypnosis*, the proceedings of the 13th Congress, we realized the need for a handbook authored by senior clinicians and researchers, who could present topics in greater length and depth that would substantially contribute to the field of hypnosis and its applications.

We hope that interested readers from many and varied disciplines who seek more definitive knowledge on how clinical hypnosis is used in a variety of medical, dental and psychological conditions will benefit from reading this volume. We also hope that health care professionals from many disciplines, whether they are experienced or inexperienced with the principles of clinical hypnosis, will find ways to better serve their patients or clients in the future.

The editors wish to thank our colleagues for their contributions to this handbook. Our contributors are experts in their fields and come with broad experience in medicine, dentistry, and psychology. Most are professors at major universities, some are chairman of their departments, and all are members of the leading hypnosis societies in their own countries. These societies, of which most of our authors have served as president, promote clinical training and research in the understanding of this immensely useful modality in the healing arts.

We sincerely thank Mrs Gertrude Rubinstein for her excellent editorial assistance; and we are grateful to our publisher, John Wiley & Sons, who has consistently helped us to shape these endeavors to the benefit of us all.

Graham D. Burrows, AO KSJ MD, *Australia*

Robb O. Stanley, DCLinPsych, *Australia*

Peter B. Bloom, MD, *USA*

International Handbook of Clinical Hypnosis. Edited by G. D. Burrows, R. O. Stanley, P. B. Bloom
Copyright © 2001 John Wiley & Sons Ltd
ISBNs: 0-471-97009-3 (Hardback); 0-470-84640-2 (Electronic)

PART I

The Nature of Hypnosis

Introduction to Clinical Hypnosis and the Hypnotic Phenomena

GRAHAM D. BURROWS and ROBB O. STANLEY
University of Melbourne, Australia

This volume presents a collection of brief monographs by specialists in various applications of hypnosis to the alleviation of chronic debilitating conditions. Hypnosis has an established role as an adjunct to the healing professions. The many societies and associations of hypnosis practitioners worldwide provide standards of training that enhance the learning, accreditation, and public trust in practitioners of hypnotic interventions in individuals seeking responsible health care.

The chapters range from general issues of training and choice of clients, through theoretical considerations of memory, the neurophysiology of hypnosis, and the psychotherapies. A generous admixture of clinical case histories is given. The more specific directions for applications of hypnosis techniques include cautions against problems encountered over years of clinical practice.

At a basic level, researchers are taking advantage of developments over the last decades in imaging the brain to gain a better understanding of the neurophysiological basis of hypnotic phenomena.

At the clinical level, the current open attitudes of society to problems that previously were brushed under the carpet, while solving some problems have sometimes raised as many new ones. There has been much heated controversy about repressed memories, but in the long term we gain from such controversies in wisdom as well as knowledge about the complexities of the human mind.

WHAT IS HYPNOSIS?

Like many psychological phenomena, intelligence, depression and anxiety, hypnosis is defined according to the subjective experience and report of participants and by the phenomena that accompany the 'hypnotic state.' The characteristics of this state include a redistribution of attention to an inward focus, a reduction of critical

judgment and reality testing, a suspension of forward planning, increased suggestibility, heightened imagery or involvement in fantasy, and hypnotic role behaviour. While there are many definitions of hypnosis, the most widely accepted is that proposed by the British Medical Association as a result of their investigation into the use of hypnosis in medicine in 1955 (BMA, 1955, 1982):

Hypnosis is a temporary condition of altered perception in the subject which may be induced by another person and in which a variety of phenomena may appear spontaneously or in response to verbal or other stimuli. These phenomena include alterations in consciousness and memory, increased susceptibility to suggestion, and the production in the subject of responses and ideas unfamiliar to him in his normal state of mind. Further phenomena such as anaesthesia, paralysis and the rigidity of muscles, and vasomotor changes can be produced and removed in the hypnotic state.

HISTORICAL USE IN THE TREATMENT OF CLINICAL PROBLEMS

The use of hypnosis, under other names, for the treatment of clinical problems has a long history, being recorded in ancient scripts describing ritual and religious ceremonies. The phenomena of hypnosis have been used to account for miraculous cures that in the middle ages were attributed to sacred statues, healing springs and the 'laying on of hands' by those of high status or religious power. The more modern use of hypnosis began with the work of the Viennese physician Franz Mesmer, who achieved many spectacular cures which he attributed to the appropriate redistribution of invisible 'magnetic fluid' within the body. In 1784, a commission of Louis XVI could find no evidence of animal magnetism, and attributed Mesmer's successes to suggestion.

Despite Mesmer's fall from popularity following the Royal Commission, interest in the clinical application of hypnosis developed rapidly throughout the nineteenth century. The term hypnosis was coined in 1841 by James Braid, a Manchester surgeon, who believed that a psychological state similar to sleep accounted for the phenomena observed. The use of hypnosis by the French neurologist Charcot, and by Breuer and Freud in the 1880s, extended its use to the treatment of neurotic disorders broadly referred to as 'hysterical.' Freud subsequently abandoned the use of hypnosis in favour of psychoanalytic techniques (Sulloway, 1979).

The development of behavioural approaches in psychology in the early twentieth century saw a temporary lessening of interest in internal psychological processes such as hypnosis. Despite this, the use of hypnosis to induce relaxation in behavioural therapies for anxiety was frequently described (Beck & Emery, 1985; Clarke & Jackson, 1983; Marks, Gelder & Edwards, 1968; Rubin, 1972; Rossi, 1986). Hypnotic phenomena were also used to induce behavioural change (Hussain, 1964; Wolpe, 1958, 1973; Kroger & Fezler, 1976) but the nature of the hypnotic component was not always discussed. The more recent development of cognitive therapies which focus on altering the patient's perceptions and cognitions (Brewin,

1988) have all but ignored the use of hypnosis, in spite of the cognitive phenomena which have been demonstrated to accompany the hypnotic state.

PHENOMENA OF HYPNOSIS

A variety of phenomena accompany the hypnotic state, which may be induced on the instruction of a therapist or self-induced by the subject. The extent that the phenomena are experienced and observed depends upon the depth of the hypnotic state, which is a characteristic of the subject and commonly referred to as hypnotizability or hypnotic susceptibility.

During the hypnotic process the focus of attention is narrowed and shifted towards an internal cognitive focus. This leads to a reduction in awareness of the sensory input requiring a response. There is a relative reduction in arousal of sensory and response systems of the central nervous system, in contrast to the mobile shifting of attention which occurs as the anxious patient scans the environment for potential of imagined danger or threat.

REDUCTION IN CRITICAL THINKING, REALITY TESTING AND TOLERANCE OF REALITY DISTORTION

Shor (1969) described the operation processes which characterize normal information processing. The 'generalized reality orientation' brings into play the frame of reference whereby the individual interprets and gives meaning to experience. In the hypnotic state this orientation is to a considerable degree suspended, resulting in concrete uncritical thought processes. Clarke and Jackson (1983) noted in their subjects, that 'ability to rouse oppositional self statements/beliefs is low [during hypnosis]' (p. 242).

Persuasive communications are a part of effective therapy interventions. Studies of hypnosis and hypnotizability are observed to produce a similar reduction in critical thinking. Malott, Bourg & Crawford (1989) demonstrated experimentally that hypnotized subjects generated fewer counter-arguments to persuasive communications, and that highly hypnotizable subjects experience more favourable thoughts and a positive attitude towards messages, whether hypnotized or not. Accompanying the suspension of critical thinking and the 'generalized reality orientation' is the readiness to accept as reality changes in perception and cognition that are suggested by the therapist.

In the hypnotic state, subjects, through their narrowed focus of attention, suspended thoughts of future actions or events. The contemporary focus of the hypnotic state encouraged this process.

HEIGHTENED IMAGERY VIVIDNESS OR REALITY

The heightening of imagery or fantasy generation has been suggested to be an effect of the hypnotic procedure and a characteristic of hypnosis and hypnotizability (Sheehan, 1979; Lynn & Rhue, 1987), and yet the correlations between imagery vividness and hypnotizability are moderate. With the internal/cognitive focus of attention and the suspension in critical judgment referred to earlier, it is likely that imagery experienced will be accepted and responded to as if it has greater reality rather than greater sensory vividness.

VOLITIONAL CHANGES AND ALTERATIONS IN VOLUNTARY MUSCLE ACTIVITY

Subjects undergoing hypnotic induction procedures frequently report a sense of their behaviour as being under their normal control. Weitzenhoffer (1978) discussed this as a feature of the 'classic suggestion effect' that is a characteristic of hypnosis. This suggestion effect has two component criteria: (a) that there must be a response to a suggestion; (b) that the response must be experienced as avolitional.

Relaxation, paralysis, automatic movements and rigid catalepsy may all be experienced as avolitional changes in response to hypnotic suggestion. Enhanced muscle performance may also be reported, but this may be due to reduced perception of muscle fatigue, rather than to actual improved performance.

ALTERATIONS IN INVOLUNTARY MUSCLES, ORGANS AND GLANDS

Extensive experimentation and clinical accounts have demonstrated that many physiological processes assumed to be outside conscious control can be altered in response to hypnotic suggestions (Kiernan, Dane, Phillips & Price, 1995). (Whether these changes are due exclusively to hypnotic interventions or are modulated by hypnotic susceptibility remains to be demonstrated.) A recent experiment by Kiernan et al. (1995) has demonstrated such a physiological response to hypnosis.

ALTERATIONS IN PERCEPTIONS

While many phenomena associated with hypnosis are subtle and few are exclusively related to the hypnotic state, the alterations in sensation, particularly pain, have not been demonstrated to the same extent in nonhypnotic states when suitable subjects and techniques of hypnosis are used. Many descriptions have been given of major and minor surgery carried out with hypnotic anesthesia alone. While this approach is not suggested as the intervention of choice, given the ready availability

of chemical anesthesia, the procedures described confirm the effect of the hypnotic state.

DISTORTIONS OF MEMORY

Post-hypnotic amnesia, either suggested or spontaneous, is a common accompaniment of the hypnotic process. While the changes in cognitive functioning referred to earlier may suggest that this phenomenon is due to differences in encoding memories in the hypnotic state, research on memory distortions and enhancement suggests that the differences result from changes in retrieval rather than encoding (Barnier & McConkey, 1992; McConkey, 1997).

HEIGHTENING OF EXPECTATIONS AND MOTIVATIONS

Given the generally held public beliefs and expectations of the ‘magic’ of hypnosis, the clinician may appropriately use these expectations to maintain patient motivations at the highest possible level and to diminish therapeutic resistance. The experience of the involuntary nature of responses to hypnotic suggestions further enhances motivation promoting success in its application to clinical problems.

INCREASED REALITY ACCEPTANCE OF FANTASY EXPERIENCES

Many psychotherapies utilize imagery and fantasy to facilitate the process of change. Certain patients in hypnotically assisted therapies may more readily respond to imagery and fantasy as reality, since the hypnotic process provides a powerful way of enhancing imagery. For the most effective and responsible use of this potent tool, members of the healing professions seek training in hypnosis to provide an adjunct to their own particular disciplines.

TRAINING IN HYPNOSIS

Training programs in using hypnosis differ from each other around the world. Each program strives for standards of training that enhance the learning, accreditation, and public trust in practitioners of hypnotic interventions in individuals seeking responsible health care. While many clinicians want to learn hypnosis in order to treat the more difficult cases which they encounter, true proficiency occurs over time and requires advanced workshops in subsequent months or years. Moreover, an important principle is that no one should treat those patients with hypnosis that one is not trained and comfortable treating without hypnosis. A final part of training is devoted to ethical principles, professional conduct, and certification. Joining national and international organizations ensures future personal and professional development.

Current controversies in hypnosis research and their applications to clinical practice raise major issues. Dr Bloom stresses the danger of accepting as literally true uncorroborated claims of perinatal and prenatal memories and recollections from past lives. The problems of accepting recovered memories of early childhood sexual abuse are of universal concern. While such abuse certainly does occur, there is the possibility that these memories may be due more to an artifact of the hypnosis than an indication that the abuse occurred. There are guidelines to aid the clinician in using hypnosis in uncovering memories of sexual abuse (Bloom, 1994), but in the final analysis, it is the clinician's own judgment with a particular case on how to proceed.

Dr Linden's chapter outlines a four-step process for establishing the hypnotic relationship with a client: evaluation, education of client, assessment of hypnotizability, and the teaching of self-hypnosis phase, during which time positive expectancies about hypnosis and motivation of the client are enhanced. As the author points out, the public is more open to and more educated about hypnosis than in the past. Moreover, the criteria for patient selection have altered with increased understanding of the interactive nature of the treatment process and its relation to the doctor-patient partnership. Case histories reveal that often the client wants help not with the presenting problem but with an entirely different concern. Therefore diagnostic skills are no less important than hypnotic skills.

Several important but widely differing issues for concern may be mentioned here. Before initiating hypnotic intervention, the nonmedical clinician is advised to inquire of clients as to whether any medical evaluation of their condition has been performed. Many common presentations to the hypnotherapist may have organic etiologies which require surgical or pharmaceutical treatment. In obtaining the trauma history the clinician must be capable of dealing with abreactive material which may surface as normal psychological defenses are evaded. And when inquiry into childhood physical and/or sexual abuse is being made, it is crucial to avoid suggestive or leading questions which may compromise the validity of activated memories.

Some clinical presentations which are poorly suited to hypnotic intervention are listed. Forensic subjects also can pose a particular challenge to clinicians. Finally, when a client's presenting problem is outside the clinician's field of expertise the client should be referred elsewhere.

Chapter 4, on memory in hypnosis, is especially important in view of controversies about repressed memories. The author attempts to give unbiased consideration to the complexity of memory itself, as well as complications introduced by the interaction between client and therapist. The use of hypnosis provides no guarantee to assessing veracity; a degree of confidence (both in hypnosis and in the waking state) should in no way be taken as a reliable indicator of accurate memory. This chapter examines the association between hypnosis and memory by first exploring briefly the nature of both hypnosis and memory, and then looking specifically at

two relevant memory phenomena: pseudomemory, and the recovery of repressed memories of sexual abuse.

As Professor Sheehan points out, while hypnosis may increase the volume of material recalled, there is no dependable enhancement in the accuracy (vs inaccuracy) of the information retrieved. Demonstrations of increases in the accuracy of remembered material are, in fact, relatively rare. Moreover, it is probably very rare in the clinical or forensic setting to find any participant who can lay claim to be emotionally neutral.

The data to be collected must always be gathered in a way that shows respect for general clinical considerations affecting the welfare of those involved. The future welfare of the client concerned and those of others accused of the act of abusing, for example, depends on the strict enforcement of ethical guidelines which are now in place relating to the reporting of recovered memories (Bloom, 1994).

There are general clinical considerations that must be respected in the conduct of hypnosis. And these considerations can only be met if the appropriate guidelines are followed.

We have at last an opportunity to explore activity in the brain during hypnosis with neuroimaging techniques such as regional cerebral blood flow (rCBF), positron emission tomography (PET), single photon emission computer tomography (SPECT), and functional Magnetic Resonance Imaging (fMRI).

Dr Crawford reports how these techniques are addressing questions about psychological and physiological phenomena. There is evidence that hypnotic phenomena selectively involve cortical and subcortical processing. At a neurophysiological level, highly hypnotizable subjects often demonstrate greater EEG hemispheric asymmetries in hypnotic and nonhypnotic conditions. Cerebral metabolism studies have reported increases in certain brain regions during hypnosis (see Chapter 5 for references). Given that increased blood flow and metabolism may be associated with increased mental effort, these data suggest hypnosis may involve enhanced cognitive effort.

This chapter also reports on preliminary neurophysiological research in the role of opioid and nonopioid neurotransmitters and modulators which may be involved in hypnoanalgesia. Recent fMRI research by the author (Crawford, Knebel & Vendemia, 1998) has certainly found shifts in thalamic, insular and other brain structure activity. Future neuroimaging and neurochemical studies will greatly contribute to our expanded knowledge of how hypnotic analgesia is so effective as a behavioural intervention for acute and chronic pain.

Despite the theoretical title, the chapter by Dr Zeig has a very practical touch, as befits one by a disciple of Milton Erickson. Erickson used multilevel communication, both within and outside trance, to stimulate the patient's own initiative in generating more desirable behaviour. As a first step, the therapist should make sure that the patient is responding. Therapeutic change is then promoted by the patient's ability to hear and respond to what the therapist has said indirectly. Moreover, since the change has appeared through the patient's own initiative, it will be more

complete and lasting. Table 6.1 gives a very clear exposition of how Erickson developed his strategy.

To obtain the best response, the therapist must understand that individuals may be working together in any of the following positions: one-up, one-down or equal. Zeig has given accounts of these different situations. These accounts are not only clear but entertaining, especially the metacomplementary relationships leading to secondary gain.

Erickson worked at modifying his technique where necessary to promote that responsiveness. Similarly, during induction, the therapist may need to experiment somewhat, before success is obtained in conveying covert messages to which the patient will respond and initiate self-change.

The first chapter of specific clinical applications of hypnosis is concerned with the currently relevant and controversial one of recovered memory in trauma victims. Clinicians must recognize that clients' remembrance of a previously forgotten trauma has clinical relevance; but recovered memories of abuse cannot be accepted as self-validating. Using hypnosis, it has been demonstrated that memory can be reconstructed (e.g. Barnier & McConkey, 1992).

Clinicians working with individuals who report recovered memories of childhood abuse must display the sensitivity appropriate for dealing with any possibility of childhood abuse (McConkey, 1997). In doing so, however, they need to maintain and use justifiable methods of diagnosis and treatment. Because of its long history of misuse, clinicians when using hypnosis must be scrupulous in applying scientifically based and clinically sound therapeutic intervention.

Hypnosis is particularly suited to use as an adjunct in treatment of anxiety disorders; 95% of practitioners of hypnosis use it to assist in the treatment of anxiety. Hypnosis can be a powerful adjunct to desensitization and to coping rehearsal, since it attributes realism to imagined events. Arousal reduction and relaxation may be enhanced using hypnotic procedures. Self-hypnosis techniques or hypnotic interventions have proved useful in simple phobias, for panic patients and in the treatment of agoraphobia. As Frankel and Orne (1976) have noted, phobic patients tend to be more hypnotizable than other patients or the general population. Apart from general anxiety reduction, hypnotic techniques may be applied to re-establish a sense of self-worth and self-esteem.

Contrasted with the treatment of anxiety, there appears to be a widespread assumption that hypnosis is inappropriate for the management of depression because of the risk of suicide. Given our understanding that hopelessness is the best predictor of suicide risk, the clinician needs to decide whether to avoid the use of hypnosis with patients high on this variable, or to utilize hypnosis as a tool for its reduction.

Major depression remains a challenge to all treatment modalities, including pharmacotherapy, cognitive-behaviour therapy, and psychotherapy. The traditional prejudice against its use in depression has prevented a serious assessment of whether hypnosis has anything significant to contribute to this widespread disabling

problem. The authors of Chapter 9 present a series of arguments in favour of a trial of hypnotherapy augmenting cognitive-behavioural management of depression.

To complete the anxiety–depression spectrum, Spiegel’s lucid and comprehensive presentation of PTSD symptoms and treatment approaches in Chapter 10 begins with an account of the vicissitudes undergone in developing the concept of post-traumatic stress disorder. It provides a cautionary tale that however confident we feel in the accuracy of our knowledge we can never know all the answers, and therefore should retain an open mind for opposing views.

Dr Spiegel notes the growing interest in the overlap between hypnotic and dissociative states and post-traumatic stress disorder, in particular a clear analogy between the three main components of hypnosis: absorption, dissociation, and suggestibility (Spiegel, 1994), and the categories of PTSD symptoms.

Like PTSD, conversion disorders are particularly suited for treatment using hypnosis. In 1986 Trillat made the hasty conclusion that hysteria was an illness that would no longer be seen, but conversion disorders still present neurologists, psychiatrists and psychotherapists with a considerable problem. Chapter 11 by Dr Hoogduin and Dr Roelofs views the relationship between conversion disorders and dissociative disorders from a modern cognitive psychological standpoint. Hypnotherapeutic strategies are described and illustrated by case histories. Finally, it is emphasized that in an appreciable percentage of patients misdiagnosed as having a (psychological) conversion disorder, there may be an organic cause for the complaint.

A further note for caution is sounded. Is hypnosis an essential element in all the cases where treatment involving it leads to a favourable result? There is great need for controlled research in this area. On the other hand, there has been no controlled research relating to other treatment strategies, although some well-documented case descriptions indicate that behaviour therapy and physiotherapy achieve very positive results with conversion disorders.

As Dr Murray-Jobsis notes in Chapter 12, it is over a century and a half since hypnotic methods have been applied to the treatment of the extremely difficult conditions of psychosis and personality disorder. Most experimental work supports the conclusion that psychotic and personality disordered patients possess hypnotic capacity which can be used productively and safely.

The clinician dealing with the severely disturbed patient must have experience with this type of population, and also requires sensitivity. Moreover empathy in pacing is an essential in hypnotherapy of these psychologically fragile patients.

The conceptual framework of hypnotherapy in dealing with psychotic patients and personality disorder has a psychoanalytic framework. The aim is to redo life experiences and allow the disturbed patient to redevelop potential for healthy growth and development. Virtually all traditional psychotherapy techniques can be adapted for use with hypnosis in the treatment of these patients.

The use of hypnosis for dissociative trance disorder is also presented from a strongly psychoanalytical viewpoint. Treatment involves interrupting pathological

trance states and restructuring the dissociative experiences, often with the use of autohypnotic techniques, so that the patient can retain control over his or her proclivity for slipping into trance.

In considering the use of hypnosis with the dissociative disorders, we come again to current concerns about the contribution of hypnosis to pseudomemory formation. Firstly, can hypnosis contribute to the worsening of dissociative identity disorder? Secondly, it has been argued that trauma may not be at the root of many of these disorders, so that hypnotic searching for memories of childhood traumatizations may generate confabulations with far-reaching consequences.

Dr Kluff maintains in Chapter 13 that all perspectives have contributions to make to this complex area of study, and that a rational view of the subject precludes the complete or peremptory discounting of either perspective. Although there is concern about confabulations with this use of hypnosis, it is also possible for patients to recover well-being by working through a confabulated trauma. Since the recovery of the patient rather than the recovery of historical truth is the goal, this should not be a major concern in most instances.

Dissociation is a commonplace reaction to trauma in psychiatric patients and in nonpatient populations. This chapter offers a detailed review of methods of treatment and clinical techniques are presented for hypnotic interventions in the dissociative disorders. In the absence of contraindications Dr Kluff considers most traumatized persons with major dissociative manifestations to be excellent candidates for the use of therapeutic hypnosis.

Both Dr Torem and Dr Vanderlinden comment that with anorexia nervosa and bulimia there has been remarkably little utilization of hypnosis as a therapeutic tool, whereas hypnotherapists have been intensively engaged in the treatment of obesity. Nevertheless, the effectiveness of hypnotic interventions in patients with eating disorders has been recorded in the literature over and over again since the time of Pierre Janet.

The clinical literature identifies a variety of psychodynamics attributed to the psychopathology of eating disorders. Many patients with these disorders feel helpless, hopeless, and ashamed of having to seek psychological help. Ego-strengthening suggestions are therefore an important part of most hypnotherapy interventions. Assignments which they are asked to complete are designed so that the patient will metaphorically and concretely experience a feeling of success, as well as a sense of gaining mastery, control, and exercising new choices and options. Ego State Therapy has become a frequent focus in the hypnosis literature.

While only psychological bases are at present considered to be operational in anorexia nervosa and bulimia, the picture is different for obesity. It is assumed nowadays that biological and psychological factors can function in combination as pathogenic factors in the development of obesity, therefore it is noted that hypnosis should always be part of a multidimensional approach.

Dr Vanderlinden offers a very practical commonsense overview of the problem. Thus, for a considerable group of patients, weight reduction is either not a realistic

goal, or the aim of treatment should be adapted; for instance they must learn to accept themselves as overweight, instead of pursuing weight reduction. The author's own approach (Vanderlinden, Norré & Vandereycken, 1992) contains, among others, behavioural, cognitive, and interactional components.

Most treatments are exclusively aimed at quick weight reduction and ignore the crucial goal, namely weight stabilization and prevention of relapse. A follow-up lasting 1 to 2 years is absolutely indicated to prevent possible relapse, with regular encouragement of the patient.

The treatment of sexual dysfunction can take a psychodynamic psychotherapy approach, a brief focused eclectic psychotherapy approach, or a cognitive-behavioural approach, and hypnotic assistance to each of these is advantageous. There is a surprisingly low degree of usage of hypnosis in sexual dysfunction. And yet, the involvement of thought, image and symbolism in sexual interest, arousal and behaviour cannot be overemphasized. Changing the information, associations, symbols and images that contribute to dysfunction is a primary goal of therapy. Hypnosis provides a powerful means of influencing all these cognitive levels in treatment.

The several chapters dealing with painful conditions highlight the differences between acute and chronic pain, and therefore the need for different strategies in their management.

Whereas acute pain is best managed by anxiety-reducing strategies, chronic pain requires strategies that deal with effective handling of one's psychological environment. In many cases chronic pain may have no clear organic basis, but secondary gain issues typically exist with the chronic pain patient and hypnotic strategies need to be developed which will not initially threaten these issues. Hypnotic intervention based on anxiety reduction will only frustrate the patient and the therapist, and will usually be unsuccessful.

As Dr Evans points out in Chapter 17, the clinical criterion of successful treatment outcome for chronic pain patients is far more complex than mere pain reduction. 'Multiple outcome measures need to consider decreased depression and medication and opioid use; improved sleep, social and family relations and quality of life; increase in range of motion and activity level; and return to work' (p. 249).

Dr Rose notes in Chapter 18 that, in keeping with modern approaches to patient care and autonomy, pain patients are encouraged to become more involved in their own management, both by selecting their own fantasies and maintaining a two-way communication with a hypnosis practitioner. Cues to the appropriate utilization of hypnotic approaches to treat pain are often given in the very terminology patients use to describe their pain. At a later stage, training in self-hypnosis gives patients a sense of mastery and control over their pain and they can become independent of the therapist. A case study reported by Dr Rose repeats the caution by Dr Vanderlinden that patients coming to hypnotherapists for alleviation of chronic conditions may have an organic etiology for the condition. In this case investigations prior to hypnosis had been unsuccessful in finding the organic cause.

The seriously burned patient needs psychiatric help from the time of injury to full recovery (Chapter 19). Opioids are the treatment of choice for pain relief, even though relief is seldom complete. Hypnosis can be a helpful adjunct, and should not be withheld even in patients who test low in hypnotizability.

In the first 2 to 4 hours postburn, hypnosis diminishes the inflammatory response. Later, it is helpful for resting pain, and especially effective for control of pain in those patients with the most excruciating procedural pain. Infection is minimized, suppressed appetite can be restored, and body image and active participation in rehabilitation are enhanced. A burned patient who has accepted the suggestion that his wounded area is 'cool and comfortable' is easy to treat, optimistic, and heals rapidly.

Commonly, the patient who enters the dentist's room is at some level of trance and the dentist has the opportunity to manipulate this hypnotic state to enhance patient comfort in the dental situation. The hypnotic interaction has begun before the first word is uttered.

Another area in which hypnotic strategies are utilized, but the concepts of hypnosis are not mentioned, is in the 3-minute smoking cessation interaction. This can take place at the conclusion of the oral examination and cancer screening, if there is an indication by the patient that there is a desire to 'quit.'

With the advent of stereophonic headphones, the dentist can offer positive hypnotic suggestions while taking care of the mouth. When preparing the patient tapes, it is recommended that the form of speech be primarily in the passive voice and the text be devoid of personal pronouns. For the listener, hearing just the ideas and suggestions is empowering. Note that Dr Glazer, in Chapter 20, in this way is using Ericksonian injunctive communication, as recommended by Dr Zeig. It should be noted that the words pain, hurt and discomfort are never introduced. Because the brain does not easily compute 'no' in the hypnotic state, it is more effective to offer positive suggestions.

The tape is used to teach patients not only to relax but to manage muscle tension headaches and to abort bruxism.

Fear of dentists is commonly listed in the top five commonly held fears and is among the ten most frequent intense fears. There are strong indications that a significant portion of the dental phobic population is hypnotizable and that the same high hypnotizability that allows them to develop a phobia is also a useful tool to help them overcome the phobia.

Implicit in these findings is a caution for dentists that they should be aware that a significant portion of the population is highly responsive to suggestion. Attention should therefore be given not to deliver suggestions to patients that may be counter-productive to treatment. Otherwise treatment difficulties and enduring problems may be created inadvertently.

During the 1970s research began to report both the clinical efficacy and psychophysiological changes associated with self-hypnosis in children. At the same time the benefits of hypnosis training were recognized for children with chronic

illnesses such as cancer, haemophilia, and asthma. Successful applications of self-regulation include a focus on personal control and decision-making by the child, and specific attention to the child's preferences in using personal imagery skills.

For behavioural problems indirect approaches are used. These might include improved coping, allaying of anxiety, and facilitating improved self-esteem with the aid of self-hypnosis, rather than expecting problem resolution as one might reasonably expect in the treatment of habits. The biobehavioural disorders such as asthma, migraine, encopresis, Tourette's Syndrome, and inflammatory bowel disease, are all known to be exacerbated by psychological stress. Teaching self-hypnosis promotes a sense of self-control as well as providing a strategy for reducing symptoms. Clinicians should obtain appropriate training in paediatric clinical hypnosis to apply and integrate it within general or specialty paediatric care.

Since we know that hypnosis used properly by appropriately trained clinicians is safe and effective and has no adverse side effects (Kohen & Olness, 1993), it can become an important potential tool in managing a wide variety of clinical issues in child health care.

SUMMARY

Hypnosis as an adjunct to traditional therapy has a special role in management of chronic debilitating conditions. To maintain ethical standards and responsible practice there are learned societies which offer accreditation to clinicians, offering guidelines in controversial areas.

In this volume we have been fortunate in obtaining contributions in many areas from authors who have achieved distinction in their fields of endeavour. Several caveats are stressed in their reports. Among others, there is a consensus that clinicians should treat with hypnosis only those patients that one is trained and comfortable treating without hypnosis. The nonmedical practitioner should be aware that many common presentations to the hypnotherapist may have organic etiologies which require surgical or pharmaceutical treatment. In obtaining the trauma history the clinician must be capable of dealing with abreactive material which may surface as normal psychological defenses are evaded. And when inquiry into childhood physical and/or sexual abuse is being made, it is crucial to avoid suggestive or leading questions which may compromise the validity of activated memories.

Hypnotic interventions have been particularly successful in managing both acute and chronic pain, reducing the need for medication and improving the quality of life in many ways. Hypnotherapy for burn patients can influence the immune response to the degree that there is no need for antibiotics, and a life-saving reduction in the need for fluid to retain blood pressure. From the psychological

angle, modern methods of induction and in particular use of self-hypnosis can improve self-esteem and feelings of mastery.

It is noteworthy that the authors are open-minded in their approach, and are willing to learn from all available techniques including old-style psychotherapies as well as new-style 'alternative medicine.' Hypnosis gives opportunities for creativity, and it is obvious that this makes for considerable satisfaction in both therapist and client.

REFERENCES

- Barnier, A. J. & McConkey, K. M. (1992). Reports of real and false memories: The relevance of hypnosis, hypnotizability, and context of memory test. *J. Abn. Psychol.*, **101**, 521–527.
- Beck, A. T. & Emery, G. (1985). *Anxiety Disorders and Phobias: A Cognitive Perspective*. New York: Basic Books.
- Bloom, P. B. (1994). Clinical guidelines in using hypnosis in uncovering memories of sexual abuse: A master class commentary. *Int. J. Clin. Exp. Hypn.*, **42**(3), 173–198.
- Brewin, C. R. (1988). *Cognitive Foundations of Clinical Psychology*. London: Lawrence Erlbaum.
- British Medical Association Report (1955). Medical use of hypnotism. *Br. Med. J.*, **1**, Supplement, 190: cited in *Hypnosis in Clinical Practice*, Report of the National Health and Medical Research Council, Canberra, 1982.
- Clarke, J. C. & Jackson, J. A. (1983). *Hypnosis and Behaviour Therapy: The Treatment of Anxiety and Phobias*. New York: Springer.
- Crawford, H. J., Knebel, T., Kaplan, L., Vendemia, J., Xie, M., Jameson, S. & Pribram, K. (1998). Hypnotic Analgesia: I. Somatosensory event-related potential changes to noxious stimuli, and II. Transfer learning to reduce chronic low back pain. *Int. J. Clin. Exp. Hypn.*, **46**, 92–132.
- Crawford, H. J., Knebel, T. & Vendemia, J. M. C. (1998). Neurophysiology of hypnosis and hypnotic analgesia. *Contemporary Hypnosis*, **15**, 22–33.
- Frankel, F. M. & Orne, M. T. (1976). Hypnotizability and phobic behavior. *Arch. Gen. Psychiat.*, **33**, 1259–1261.
- Hussain, A. (1964). The results of behaviour therapy in 105 cases. In J. Wolpe, A. Salter & J. Reyna (Eds), *Conditioning Therapies*. New York: Holt Rinehart Winston.
- Kiernan, B. D., Dane, J. R., Phillips, L. H. & Price, D. D. (1995). Hypnoanalgesia reduces r-III nociceptive reflex: Further evidence concerning the multifactorial nature of hypnotic analgesia. *Pain*, **60**, 39–47.
- Kohen, D. P. & Olness, K. (1993). Hypnotherapy with children. In J. W. Rhue, S. J. Lynn & I. Kirsch (Eds) *Handbook of Clinical Hypnosis* (pp. 357–381). Washington, DC: American Psychological Association.
- Kroger, W. S. & Fezler, W. D. (1976). *Hypnosis and Behaviour Modification: Imagery Conditioning*. Philadelphia: Lippincott.
- Lynn, S. J. & Rhue, J. W. (1987). Hypnosis, imagination, and fantasy. *J. Mental Imagery*, **11**, 101.
- Malott, J. M., Bourg, A. L. & Crawford, H. J. (1989). The effects of hypnosis on cognitive responses to persuasive communication. *Int. J. Clin. Exp. Hypn.*, **37**, 31.
- Marks, I. M., Gelder, M. G. & Edwards, G. (1968). Hypnosis and desensitization for phobias: a controlled prospective trial. *Br. J. Psychiat.*, **114**, 1263.
- McConkey, K. M. (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), *American Psychiatric Press Review of Psychiatry*, Vol. 16 (pp. 83–108). Chicago, IL: American Psychiatric Press.
- Rossi, E. L. (1986). *The Psychobiology of Mind Body Healing: New Concepts, of Therapeutic Hypnosis*. New York: Norton.
- Rubin, M. (1972). Verbally suggested responses as reciprocal inhibition for anxiety. *J. Behav. Ther. Exp. Psychiat.*, **3**, 273.
- Sheehan, P. W. (1979). Hypnosis and processes of imagination. In E. Fromm & R. E. Shor (Eds), *Hypnosis; Developments in Research and New Perspective*, 2nd edn. New York: Aldine.
- Shor, R. E. (1969). Hypnosis and the concept of the generalized reality-orientation. In C. T. Tart (Ed.), *Altered States of Consciousness*. New York: Wiley.
- Spiegel, D. (1994). In J. A. Talbot, R. E. Hales & S. C. Yudofsky (Eds), *Hypnosis. American Psychiatric Press Textbook of Psychiatry*, 2nd edn (pp. 1115–1142). Washington, DC: American Psychiatric Press.
- Sulloway, F. J. (1979). *Freud, Biologist of the Mind: Beyond the Psychoanalytic Legend*. London: Burnett Books.
- Vanderlinden, J., Norré, J. & Vandereycken, W. (1992). *A Practical Guide to the Treatment of Bulimia Nervosa*. New York: Brunner/Mazel.
- Weitzenhoffer, A. M. (1978). Hypnotism and altered states of consciousness. In A. Sugarman & R. E. Tarter (Eds), *Expanding Dimensions of Consciousness*. New York: Springer.
- Wolpe, J. (1958). *Psychotherapy by Reciprocal Inhibition*. Stanford, CA: Stanford University Press.
- Wolpe, J. (1973). *The Practice of Behaviour Therapy*, 2nd edn. New York: Pergamon.

Training in Hypnosis

PETER B. BLOOM

University of Pennsylvania School of Medicine, USA

INTRODUCTION

Training adult health care professionals to use hypnosis in their clinical practices or in their research laboratories is a complex undertaking. Well-trained dentists, non-psychiatric physicians, nurse specialists, psychiatrists, psychologists, clinical social workers, all seek training in hypnosis to provide an efficient adjunct to their healing disciplines. These clinicians insist that hypnotic interventions 'make sense' and be consistent with their basic training in their respective fields or they will not use them in their work. The principles of adult education become the foundation of all training in hypnosis to adult professionals (Bloom, 1993; Carmichael, Small & Regan 1972; Coggeshall, 1965; Dryer, 1962; Hawkins & Kapelis, 1993; Knowles, 1980; Rodolfa, Kraft, Reilly & Blackmore, 1983; Wright, 1991).

Training in hypnosis generates a wider view on how therapy works for most clinicians (Orne, Dinges & Bloom, 1995). Respect for the symptom and its treatment, willingness to delay obtaining insight into the 'deeper causes' of the illness, creating measurable outcomes as the goals for therapy, and understanding patients as evolving, self-generating 'open systems' are new perspectives available to the practitioner who studies hypnosis (Von Bertalanffy, 1968; Bloom, 1994a; Haley, 1963).

Training programs in using hypnosis differ markedly around the world. Some programs are designed to train unqualified 'therapists' who, without licensure, formal training, or accreditation in any primary discipline, use hypnosis as a therapy in of itself, which it is not. Other programs are created for highly qualified professionals who wish to add hypnosis to their therapeutic armamentarium. This chapter will discuss only the latter programs.

The purpose of this chapter is to present an 'ideal' training program in hypnosis which integrates the principles of adult education into teaching the methods of clinical hypnosis. Integration and applications of hypnotic principles into the core fabric of psychotherapy will 'make sense' to the experienced clinician who is willing to think creatively with each new individual patient. In such a training program, the clinician will broaden and enhance his or her own experience of being an effective healing agent in the lives of those who seek his or her care.

ADULT EDUCATION

Andragogy, or adult education, combines new knowledge with the participant's previous professional experience. New information should make sense or it won't be used. *Pedagogy*, or student education, involves knowledge acquisition only. Students find out later whether the information is useful.

In a typical adult learning seminar, the entire group can be conceptualized as equal participants: the leader is a little more equal than the others because of his or her own advanced knowledge and experience; the participants are more equal than the leader in knowing their own life experiences and how they will incorporate what they learn into their practices.

From the leader's decision to address the participants as colleagues and not as students, respect for these principles of adult education begins. Each participant, now valued for his or her experience, shares in the teaching and learning. The leader learns as well. Most seminars with adults vary despite standard syllabi because of the unique contributions of the participants (Hawkins & Kapelis, 1993). These variations within a predetermined scheduling of topics ensure a creative context for maximal learning time and time again.

WORLD WIDE PROGRAMS

Several programs exist in the world that represent thoughtful responses to the need for quality training programs in hypnosis. While not exclusive, and certainly not the only ones worth mentioning, the American, Australian and the Netherlands programs are illustrative and outstanding in different ways. Each country has one or more Constituent Societies of the International Society of Hypnosis (ISH) founded in 1973 in Upsala, Sweden. Essential in each program is the determination to create standards of training that enhance the learning, accreditation, and public trust in practitioners of hypnotic interventions in individuals seeking responsible health care.

There are two ISH Constituent Societies in the United States: the American Society of Clinical Hypnosis (ASCH) founded in 1957 has 2400 members; and the Society for Clinical and Experimental Hypnosis (SCEH) founded in 1949 has over 500 members. SCEH publishes quarterly the official ISH journal. Each US Society requires a minimal 20 hours of training at the introductory level for consideration of membership. Recently, ASCH established criteria for certification of training in hypnosis including: doctoral or selected master degree graduate training, state/provincial licensure or alternate criteria if licensure does not apply to a particular discipline in a state/province, 40 hours of post-degree approved education divided evenly between introductory and intermediate training, 20 additional hours in 'one to one' training with an ASCH approved consultant, and 2 years of independent practice within their specialty area (Hammond & Elkins, 1994).

ASCH requirements for Approved Consultant in Clinical Hypnosis are even

more rigorous and include 100 hours of post-degree approved education, 20 hours of 'one to one' training with an Approved Consultant, and one of the following: Diplomate Status in one of the American Boards of Clinical Hypnosis, Fellowship in either ASCH or SCEH, 5 years membership in either the ASCH or SCEH, or evidence of equivalent membership or training such as in an appropriate component section of the American Psychological Association.

The American Boards of Clinical Hypnosis chartered by the Department of Education of the State of New York in 1958 are endorsed and recognized by ASCH and SCEH. They are comprised of the American Board of Hypnosis in Dentistry, the American Boards in Medical Hypnosis, the American Board of Psychological Hypnosis, and the American Hypnosis Board for Clinical Social Work. These Boards award diplomate status to those who document competency in hypnosis as opposed to certifying training in hypnosis. Applicants must be licensed, certified in their own primary specialty or the equivalent, and present videotape documentation of using hypnosis in actual patient care (accompanied with written release from the subject). He or she must then pass both written and oral examinations which include an actual demonstration of hypnotic and clinical skills. Both the ASCH program of certification/consultant status and the American Boards of Clinical Hypnosis build on the minimal requirements for membership in ASCH and SCEH. Clinicians who are recognized by the ASCH program and by the American Boards are without peer in the United States at this time and are equal in stature to graduates of any program in the world.

The Netherlands Society founded in 1931 is the oldest Constituent Society of the International Society of Hypnosis. The Nederlandse Vereniging voor Hypnosis (NVvH) has two levels of training requirements. First, a qualifying examination must be passed before acceptance into the bi-level training program. Level A requires 5 days @8 hours per day of basic training and standard procedures. Level B requires 12 days @8 hours per day of advanced courses in either psychotherapy or dental medicine. A paper which would be suitable for publication is required. In total, approximately 40 hours basic and 96 hours advanced is required for full membership in the society.

The Australian Society of Hypnosis (ASH) founded in 1971 has the largest representation in the ISH and has over 850 members. Requirements for membership include 80 hours of training over 2 years which include supervision, written and oral examinations. As is typical of each ISH Constituent Society, ASH has several membership categories including Associate, Trainee, Full, Honorary, Corresponding, as well as Fellows and Life Fellows. ASH sponsors a yearly scientific meeting in August/September and publishes a twice-yearly *Australian Journal of Clinical & Experimental Hypnosis* containing clinical and research papers, case reports, and theoretical discussions. ASH endorses a Formal Code of Behavior, and restricts its membership to certain qualified professional groups. These member benefits insure that training in hypnosis and its applications extends far beyond the initial rigorous introductory courses and seminars. In most ISH

Constituent Societies, similar programs and common approaches to member training and career enhancement prevail.

TRAINING IN HYPNOSIS: MY PROGRAMS AND HOW I TEACH THEM

First, I will present two workshops, each given over 8 weeks in the evenings: one in the Fall and one in the Spring. Each workshop is 22 hours in length, lasting nearly 3 hours each evening. They are titled 'Clinical Methods in Hypnosis and Psychotherapy: Integration and Applications—Introductory Workshop (Fall) and Advanced Workshop (Spring).' Then, I will describe briefly an ongoing Senior Seminar which meets monthly throughout the year for graduates of the first two workshops.

While the introductory workshop imparts basic skills in hypnosis, the advanced workshop creates an environment encouraging its use in ongoing patient care. In both workshops, attention is given to helping the clinician change his or her attitude and receptiveness to using new skills in psychotherapy and, if possible, to widening and broadening the understanding of how psychotherapy works in both short-term and long-term treatment settings. While psychodynamic understanding of the patient and the therapist interactions is important, such understanding also rests on learning theories, cognitive therapy, and various principles of behavior therapies. A guiding principle in teaching these workshops is the understanding that the therapeutic alliance is foremost in importance (Binder, Bongar, Messer, Strupp, Lee & Peake, 1993). Creative interactions based on rigorous training in the participant's own discipline coupled with his or her intuitive inspirations constitutes the art of therapy and is encouraged throughout these workshops. Such therapy is always based on a thorough understanding of the patient's symptoms, history, diagnosis, and initial treatment planning.

INTRODUCTORY WORKSHOP: APPROVED AND ACCEPTABLE BY ASCH AND SCEH

All workshop announcements recruit adult participants. The word 'student' is never used. The learning objective enhances the concept of adult education by stating that 'experienced clinicians [will gain] a solid grounding in the principles and practices of hypnosis, and an understanding of how to integrate it into their own practice of psychotherapy.' (Note that while this workshop is aimed at psychotherapists—licensed psychiatrists, psychologists, social workers, and others on special application—the principles described herein are directly applicable to workshops for anesthesiologists, dentists, non-psychiatric physicians, and those dealing with the more 'organic' pathologies of medicine and surgery.)

In the beginning, time is taken to introduce participants to each other and to the group leader. By sharing backgrounds together, the stage is immediately set for sharing professional experience. Learning from each other begins immediately with the group leader or faculty person facilitating the process. Each participant is considered an authority in his or her own work, who is coming to learn new skills. While it is beyond the scope of this chapter to discuss the training in hypnosis of psychiatric residents and psychological interns (Parish, 1975), these groups can be effectively integrated into these workshops if the majority of participants are already established in their postgraduate careers.

The first topic purposely introduces the historical figures in hypnosis. By sharing Mesmer's difficulties in treating the 18-year-old blind daughter of a wealthy and influential civil servant whose family lost her disability pension on return of her vision, the workshop participants can immediately relate to their own patients whose initial recoveries do not last when the consequences of recovery are outweighed by the loss of disability incomes. They can understand and relate to Mesmer's moving to Paris from Vienna for a 'deserved rest' following the controversy surrounding his initially successful intervention (Laurence & Perry, 1986). Each historical figure from Mesmer to Erickson is presented in personal terms that relate to the current clinical issues facing each of the participants. History becomes 'us' not 'them' and lives again.

After reviewing the myths and misperceptions of hypnosis and reminding the participants that hypnosis is not a therapy itself, but rather an adjunct to therapy, I demonstrate a typical induction using one of the participants who volunteers. The induction is simple and straightforward while at the same time quite complex and illustrative of hypnotic phenomena: eye fixation, internal absorption, relaxation of body, increasing quietness of mind, arm rigidity, imaging, and suggestions for further success in learning hypnotic techniques.

Members of the group are reminded that the workshop is an educational format and not a therapeutic one. Therefore, any interest in pursuing insights into personal problems while in trance is strongly discouraged. In fact, I state that such material, even if fresh from their own current therapist sessions, be 'parked' at the door. Participants welcome and value this important boundary reminder and understand that unless the context is appropriate, as it is in their own therapist's office, personal therapy has no place in an educational format. Abreactions seldom if ever occur, and are, in part, 'screened' out by pre-registration interviewing of each participant. Nonetheless, occasionally disturbing material surfaces and is handled by the leader privately if possible after the session. Rarely, participants are asked to avoid trancework during the remainder of the workshop or at least not to practice age regression if that exercise created the initial difficulty. Clinical judgment in the group leader, who should be an experienced psychotherapist, is always valued and useful. Such interventions are his or hers and not the responsibility of the group members despite the previous discussion on equality in adult educational experiences.

The next session begins with an introduction to the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne, 1962). Ever since Hilgard and Weitzenhoffer's brilliant introduction of the concept of hypnotizability and scales for its measurement (Weitzenhoffer & Hilgard, 1959, 1962), most researchers have used them for experimental subject assessment (Bowers, 1976). However, since most clinicians rarely use hypnotizability scales in assessing patients/clients for hypnosis (Cohen, 1989), it seems appropriate to give introductory workshop participants the experience of assessing their own hypnotizability and thereby gaining familiarity with the scales that are available. More than a full hour is devoted to taking this standardized test and in sharing the graded response with the group. In teaching hypnosis to clinicians who treat a wide variety of patients requesting help, from simple pain control to complex dissociative disorders, the therapist's own hypnotizability can influence the patients they select and feel comfortable with. For instance, highly hypnotizable clinicians may feel very comfortable with highly hypnotizable patients who dissociate. These therapists may never take the time or have the patience to help a low hypnotizable subject go into trance to alleviate pain. Conversely, a low hypnotizable clinician will easily dismiss his role in guiding a dissociative disorder patient who seems to effortlessly go into trance and stay there indefinitely. When the clinicians learn how hypnotizable they are, they can take steps in the basic and advanced workshops to compensate for their own experience of hypnosis and learn to work more skillfully with a wider range of subjects. It is gratifying to see a highly hypnotizable therapist insist on working with a low hypnotizable patient step by step until trance is induced, no matter how long it takes.

Small group practice sessions begin during this second session. If the workshop is small in number (8–16), it is possible to divide the participants into groups of 2, 3, or 4 members each. In the beginning, one member 'performs' the hypnosis, one is the subject, and the other(s) watch and contribute to the post-hypnotic discussion afterwards. The faculty person(s) walk around the room, advising here and there, and then lead(s) a combined discussion when all the groups have finished practicing. This model has often been used at annual SCEH meetings in the United States. An alternative model is used frequently at annual and regional ASCH meetings. Group members, usually no more than 8, form a circle. One person induces the trance, one person experiences it, and all the others watch. The leader immediately shares, for the entire group: his or her observations, suggestions for improvement, and responses to questions from individual observers. When this is completed, the operator and subject are rotated around the circle so that on completion of the practice session each person has induced a trance, each has experienced one, and the leader has observed and discussed everyone's personal experience in both roles immediately after each individual experience. I personally like both methods and my choice depends in part on how comfortable the class is in working with less moment to moment supervision, and on how comfortable I am with the 'evenness' of the group skills. If the members are fairly similar in training

and risk-taking, I will often turn them loose, observe the multiple groups simultaneously, and save my discussion for the end. It gives the workshop members more actual practice that way. In any event, the most common complaint given in post-workshop evaluations is that not enough practice time is provided and every effort must be made to accommodate this important need for actual hands-on training.

The third and fourth sessions are devoted to discussing the evaluation and assessment of patients for hypnosis with special emphasis on ego function profiles. Hypnosis is very useful in ego strengthening before subsequent treatment of the presenting symptoms. Assessing ego strengths and deficits in addition to diagnostic considerations creates many additional opportunities for therapeutic interventions. The old caveat that symptom substitution will occur unless the underlying conflict is uncovered and understood is not always true (Bloom, 1994a). Therapists recognizing which patients can improve without such insight can offer effective short-term therapy for many seemingly complex problems. Ego function analysis with selected focused therapy to repair ego deficits has been a long-documented and described procedure (Bellak, Hurvich & Gediman, 1973), and is especially applicable to hypnotic interventions (Haley, 1973).

Additional topics include rapid induction techniques, imagery utilization, ideomotor signaling and other communication techniques, age regression and affect bridging, abreaction management, and post-hypnotic suggestions. Despite the current controversy regarding the narrative versus historical truth (Spence, 1982) of recovered memories, age regression can augment psychotherapy for current problems. The use of common feeling states such as pleasure, anger, depression, or joy can facilitate age regression by forming an 'affect bridge' to times past (Watkins, 1971). In working with post-traumatic stress disorders, dissociative disorders, or in simple cases of lost objects, 'going back' in time may reveal feelings or even facts that may help the therapeutic process move forward. In teaching these techniques, it is useful to remind the clinicians that common sense and the tenets of their graduate training are even more crucial in assessing the recovered material. Too often practitioners of hypnosis unwisely accept as literally true uncorroborated claims of perinatal, prenatal, and past lives' memories on the one hand, while recognizing there has been nothing in their masters' level or doctoral training that would support such claims. The problems of accepting recovered memories of early childhood sexual abuse are of universal concern. While such abuse certainly does occur, hypnosis lends a credibility to these memories that may be due more to an artifact of the hypnosis than an indication the abuse occurred. Guidelines exist, however, to aid the clinician in using hypnosis in uncovering memories of sexual abuse (Bloom, 1994b). In the final analysis, it is the clinician's own judgment with a particular case on how to proceed. The participants in an introductory workshop will have a widely divergent experience and opinion on how to proceed in these cases. These differences must be respected if the controversial issues have been fully presented by the workshop leader.

Supervised small group practices occur for at least one hour each week. It is

useful to prepare a word-by-word transcription of the initially demonstrated induction for subsequent use by the workshop members in their own practice sessions. Such a script anchors the participants in an induction that they have already seen and which works. Once their partner/subject is in trance, the 'hypnotist' can actually read line by line the suggestions for deepening and imagery. As practice continues, confidence levels increase and the participants begin observing opportunities to tailor the induction to the particular needs of the moment. Gradually, further inductions are freer and more creative. It is also helpful to expose the members to the published inductions of others. Several texts are available that provide many good examples of useful induction and deepening techniques (Hammond, 1989; Hunter, 1994). Eventually, as therapeutic applications are introduced into the workshop, future inductions are gleaned from pre-hypnotic and post-hypnotic discussions with actual patients. While I use several standard inductions for the first time with all patients, I subsequently modify, expand, and create highly individualized suggestions for every patient. Even for the patients who usually tape record these initial experiences for practice purposes, I encourage their own creative and individual suggestions for their future clinical work. For both workshop members and patients, it is useful to start with a standard induction and then move from that as confidence and practice allow.

In introductory and advanced workshops, it is important to require reading of articles from the literature. With graduate professionals in dentistry, medicine, nursing, psychiatry, psychology, and social work, it is very useful to expose members to different points of view or to include topics for which little time is available in the actual sessions. I also believe that one faculty person for small workshops provides a model for learning how to use hypnosis in clinical practice. Workshops that have many faculty persons, each contributing a mini-lecture on single topics, fail to engage the group in an overall process of learning together. If a therapeutic alliance is important in patient care, an 'educational' alliance is critical in adult education and effective learning. Given my experience on teaching alone in small groups, it is doubly important that examples from the literature create additional perspectives. It is also a chance for me to expose the members to more in-depth discussions on particular topics that I have an interest in as well as, for example, the concept of Ericksonian Hypnotherapy (Bloom, 1991, 1994c).

During the fifth, sixth, and seventh sessions of the introductory workshop, the task of integrating hypnosis into clinical practice begins. Principles of short-term psychotherapy are reviewed and applications of hypnosis in treating phobias, performance anxieties, disorders of dyscontrol, psychosomatic illnesses, and pain management are introduced. Videotapes of surgical procedures using hypnosis as the sole anesthetic agent offer dramatic proof that the mind can control the body's sensations in a powerful way. Treatment planning with strategies for integrating hypnosis into short-term therapy is extended into long-term therapy. While hypnosis is an effective adjunct in treating so called 'untreatable' patients, a review

of transference and countertransference issues, managing resistance, and handling potential difficulties in forensic situations are discussed in detail.

It is tempting to allow workshop members to discuss the use of hypnosis in memory enhancement, post-traumatic disorders, and dissociative conditions too early in their learning rather than in more simple applications. Introductory workshops first teach 'how to get into trance' and then 'what to do when you get there.' The group needs to be reassured that using clinical hypnosis requires time: first, to experience one's own trance phenomena; second, to teach it to others. After these skills are learned, each clinician will then be able to learn what to do with an individual patient once the trance has been induced. While many clinicians want to learn hypnosis in order to treat these more difficult cases, true proficiency occurs over time and requires advanced workshops on each of the above topics alone in subsequent months or years.

During the small supervised group practice sessions, identification of slow or hesitant learners is essential if post-workshop use of hypnosis will occur. Participants who report early use of hypnosis with patients for simple relaxation and stress reduction do well in the future for more advanced cases. Those participants, however, who still hold on to scripts, and report little intersession use, may need some individual attention within the group framework. In general, those who understand that additional workshops may be helpful in ultimately claiming this modality for future use are encouraged to relax and accept their own rate of learning.

The last session is devoted to ethical principles, professional conduct, and certification (Bloom, 1995c). Maintaining training standards and advancing the field becomes an additional task of each workshop member on leaving the introductory course. Joining national and international organizations ensures future personal and professional development. Current controversies in hypnosis research and their applications to clinical practice raise major issues. Because of controversies in using hypnosis in memory retrieval, treating dissociative disorders, and understanding the 'false memory syndrome' movement, experimentalists contribute answers to important questions generated by clinical concerns. How does memory work, is repressed memory a proper subject of controlled studies, and how do investigating demands shape forensic hypnosis? (McConkey & Sheehan, 1995). There is a current danger that responsible clinicians will dismiss laboratory findings if they do not support their own perception of their patients' problems and responses to therapy. There is also a potential for serious misunderstanding if experimentalists do not appreciate that clinicians are licensed by the state/province to make independent responsible judgments on how to treat each individual patient. Two truths therefore seem to conflict: the truth of science, and the truth of clinical wisdom. Workshop members need to appreciate the inherent ambiguity of their work and learn to accept both truths at the same time. Human understanding is not advanced on clinical anecdote alone, but the wisdom of the healer is seldom dependent on the double blind study. Investigators and clinicians need each other and must find ways to share common ground.

A final note on enhancing creativity in one's practice is made, and future advanced workshops designed to cultivate these attributes in each participant, are presented and encouraged.

ADVANCED WORKSHOP: APPROVED AND ACCEPTABLE BY ASCH AND SCEH

Four months later, an advanced workshop in Clinical Methods in Hypnosis and Psychotherapy: Integration and Applications is offered. The art of psychotherapy depends on the individual therapist as well as his or her individual patients. The advanced workshop as given is different from the workshops usually given in annual meetings of the National Constituent Societies of the International Society of Hypnosis. Usually an intermediate workshop is given to further one's experience with deepening techniques and using hypnosis in more complicated clinical cases, before advanced workshops in treating specific syndromes such as chronic pain, cancer, post-traumatic stress disorders, sexual problems, anxiety disorders, and dissociative identity disorders (formerly Multiple Personality Disorders) are presented. My own advanced workshop, presented here, shifts the emphasis from the problems of the patient/client to the professional development of the therapist. Let us examine what an 'ideal' advanced workshop might look like in this regard.

Creating a strong therapeutic alliance is the essential basis of successful psychotherapy. The context in which this relationship develops must be understood. The 'demand characteristics' described by Orne (1962) in the laboratory also contribute to the outcome of therapy in the clinical setting. With this in mind, I begin the first workshop session with a detailed examination of the setting of my own office: the location of the windows and doors, the arrangement of the chairs and bookshelves, and the creation of various visual lines to create a sense of comfort. It is not surprising, and in fact it was the specific requirement I had for creating my office, that each new patient would respond, when asked for the first word to come to their minds when sitting down, with 'comfortable'.

Once the context of the office is described, the personal styles of various therapists, both contemporary and historical, are discussed. While there should be no ideal style, emerging styles that are unique to each therapist should be recognized and encouraged as valuable. Finding one's voice as a therapist is a lifetime task (Bloom, 1995a,b). Selecting the 'right' patient and learning to treat the 'wrong' patient are challenges that can lead to therapist and patient growth. How to identify and strengthen the unique styles of each participant is the main task of the group's leader in collaboration with the other members of the workshop.

The next session examines the 'mind of the therapist', a concept originated by Bernauer W. Newton, PhD (personal communication, 1988). By presenting our mutual cases, we elaborate what we were thinking as the therapy unfolded and clinical choices in therapy were made. When is hypnosis utilized, what is the nature of the interventions, what are the goals of treatment, and how are the results of

therapy understood and enhanced the next time? We all know that hearing audiotapes or seeing videotapes of our therapy with our patients evoke the same thoughts and words in our minds that occurred during the actual therapy—even if the therapy occurred years before. Unexpressed of course during the process of therapy, these inner deliberations can be shared in a small group setting devoted to examining the mind of the therapist. It is these inner deliberations, not solely the actual patient–therapist dialogues, that shed the most light on our work.

The third session focusses on treating the ‘untreatable’ patient. Difficult patients force the therapist to return to basic concepts of history, mental status, diagnosis, and treatment planning. Issues of transference and countertransference must be examined freshly and often by consultation with colleagues. I believe Carl Whitaker (1950) once said ‘Every impasse is an impasse in the therapist.’ Yet some patients are simply unable to summon sufficient motivation to change. Others, of course, experience symptoms derived from unknown biological disorders that resist psychological interventions. All patients benefit from a supportive therapeutic alliance which enhances ego building and coping mechanisms. Teaching self-hypnosis enables these simple goals to be accomplished in almost every case.

The next two sessions focus on using hypnosis in short-term and long-term therapy with special emphasis on problems with memory retrieval. In this advanced workshop, the participant’s own case material is shared by the group and the direction of the workshop is shaped and refined by these particular interests. It is necessary to create a context of trust to facilitate this sharing, and yet it still remains difficult to encourage these presentations and thereby exposure of the participant’s case material. This problem rests both in the persisting hesitancy to use hypnosis in clinical practice, and in discomfort in reviewing publicly one’s basic psychotherapy skills. The leader must set the example by presenting his or her own difficult patients and the process of dealing with them (Bloom, in press). He or she must also be aware that the group will readily allow the allotted time to pass in this way without presenting their own cases. Occasionally an eager participant will monopolize all the time, again allowing other members the opportunity to remain silent. Experience in group dynamics and a clear understanding of the educational goals of the workshop helps the leader to navigate these seemingly conflicting agendas. These are the challenges and rewards of good adult education.

The sixth and seventh sessions go to the heart of the advanced workshop. In all creative therapy, true art occurs when science is fused with intuition (Bloom, 1990). Learning to rely on one’s intuition or hunches takes time and willingness to trust oneself. Weaving these insights into the fabric of an individual’s psychotherapy often advances the process of therapy in useful ways. When participants become more comfortable in finding responsible freedom to be creative in their work, they begin to find their style or ‘voice’ in their work. This path of learning leads to the knowledge that they are healers: it is the art and process of becoming a therapist. In learning hypnosis and psychotherapy, each workshop member is rewarded for examining his or her success and failures. However, while expanding

our flexibility to treat a wider array of individuals, it is also important to learn who not to treat. Some patients unduly demand time, energy, and effort that far exceeds our capacity to give. If our creative energies are depleted, we must refer these patients to colleagues more able to treat them.

No advanced workshop is complete without a review of current research findings and the relationship to clinical practice. Areas of mutual interest to the researcher and clinician include pain management in chronic illness, sickle cell anemia (Dinges, Whitehouse, Orne, Bloom, P.B. et al., 1997), and cancer. Also teaching self-hypnosis in patients who are dying can be a life-extending intervention (Spiegel, Bloom, J.R., Kraemer & Gottheil, 1989). Self-hypnosis techniques enhance self-control, increase coping, and increase freedom from discomfort in these patients. In establishing the therapeutic alliance with dying patients, a rich experience for both the patient and the clinician is created for the benefit of both.

SENIOR SEMINAR

Graduates of both the introductory and advanced workshops often express the wish to meet monthly throughout the year to discuss ongoing cases. These round table formats attract individuals who are pushing the limits of their understanding of how therapy works, and how they might enhance their art. Each evening is divided into: (a) a review of the current literature as determined by any participant who chooses to discuss an interesting article; and (b) a presentation of complex and interesting cases. More than in previous workshops, group members share deeper feelings and insights into their own work. While maintaining an adult educational format, these discussions lead to further shifts in becoming senior therapists. Upon completion of this seminar, participants must seek out other faculty leaders both locally, nationally, and internationally to meet as colleagues. For those who are interested, teaching in these wider settings becomes the next major step on the path of knowledge.

CONCLUSION

In this chapter, I have outlined several workshop programs for learning clinical hypnosis by graduate health care professionals. These workshops incorporate the principles of adult education and the standards required for certification by some national constituent societies of the International Society of Hypnosis and for diplomate status of the American Boards of Clinical Hypnosis. Inevitably, individual tailoring of such programs depends on the personality and style of the workshop leader and the participants' needs and interests. Basic principles of therapy, the experience of one's non-hypnotic practice, and common sense are emphasized before integrating hypnosis into practice. It follows that no one should treat those patients with hypnosis that one is not trained and comfortable treating without hypnosis. These workshops also help the participants identify their own style or voice, and

provide support for enhancing the special opportunities for creativity that come to therapists working with hypnosis. Finally, these workshops are devoted to helping clinicians learn new ways to treat patients more effectively and, by doing so, become more skillful therapists and clinicians in their own disciplines.

REFERENCES

- Bellak, L., Hurvich, M. & Gediman, H. K. (1973). Ego functions in schizophrenics, neurotics, and normals: A systematic study of conceptual, diagnostic, and therapeutic aspects. New York: Wiley.
- Binder, J. B., Bongar, B., Messer, S., Strupp, H. H., Lee, S. S. & Peake, T. H. (1993). Recommendations for improving psychotherapy training based on experiences with manual guided training and research: Epilogue. *Psychother.* **30**(4), 599–600.
- Bloom, P. B. (1990). The creative process in hypnotherapy. In M. L. Fass & D. Brown (Eds), *Creative Mastery in Hypnosis and Hypnoanalysis: A Festschrift for Erika Fromm*. Hillsdale, NJ: Lawrence Erlbaum.
- Bloom, P. B. (1991). Some general considerations about Ericksonian hypnotherapy. *Am. J. Clin. Hypn.*, **33**, 221–224.
- Bloom, P. B. (1993). Training issues in hypnosis. In J. W. Rhue, S.J. Lynn & I. Kirsch (Eds), *Handbook of Clinical Hypnosis* (pp. 673–690). Washington, DC: American Psychological Association.
- Bloom, P. B. (1994a). Is insight necessary for successful treatment? Discussion paper of Michael Yapko, Suggestibility and repressed memories of abuse: A survey of psychotherapists' beliefs. *Am. J. Clin. Hypn.*, **33**, 172–174.
- Bloom, P. B. (1994b). Clinical guidelines in using hypnosis in uncovering memories of sexual abuse: A master class commentary. *Int. J. Clin. Exp. Hypn.*, **42**(3), 173–198.
- Bloom, P. B. (1994c). How does a non-Ericksonian integrate Ericksonian techniques without becoming an Ericksonian? *Aust. J. Clin. Exp. Hypn.*, **22**(1), 1–10.
- Bloom, P. B. (1995a). Finding one's voice: The art and process of becoming a therapist. In M. Kleinhaus, B. Peter, S. Livnay, V. Delano, K. Fuchs & A. Iost-Peter (Eds), Jerusalem lectures on hypnosis and hypnotherapy. *The Proceedings of the 12th International Congress of Hypnosis and the Joint Conference: Ericksonian Hypnosis and Psychotherapy* (Jerusalem, 1992), pp. 109–118.
- Bloom, P. B. (1995b). Finding one's voice: The art and process of becoming a therapist, Part 2. In Hypnosis connecting disciplines: *Proceedings of the 6th European Congress of Hypnosis in Psychotherapy and Psychosomatic Medicine* (Vienna, 1993), pp. 57–61.
- Bloom, P. B. (1995c). Hypnosis. In W. R. Reich (Ed.), *The Encyclopedia of Bioethics*, revised edn (pp. 1183–1186). New York: Macmillan.
- Bloom, P. B. (2001). Treating adolescent conversion disorders: Are hypnotic techniques reusable? *Int. J. Clin. Exp. Hypn.*, **49**(3).
- Bowers, K. S. (1976). *Hypnosis for the Seriously Curious*. New York: Norton.
- Carmichael, H. T., Small, S. M. & Regan, P. F. (1972). *Prospects and Proposals: Lifetime Learning for Psychiatrists*. Washington, DC: American Psychiatric Association.
- Coggeshall, L. T. (1965). *Planning for Medical Progress Through Education*. Evanston, IL: Association of American Medical Colleges.
- Cohen, S. B. (1989). Clinical uses of measures of hypnotizability. Invited discussion with J. Barber, M. Diamond, F. Frankel, E. Rossi & H. Spiegel. *Am. J. Clin. Hypn.*, **32**, 4–9, 10–16.
- Dinges, D. F., Whitehouse, W. G., Orne, E. C., Bloom, P. B., Carlin, M. M., Bauer, N. K.,

- Gillen, K. A., Shapiro, B. S., Ohene-Frampong, K., Dampier, C. & Orne, M. T. (1997). Self-hypnosis training as an adjunctive treatment in the management of pain associated with sickle cell disease. *Int. J. Clin. Exp. Hypn.*, **45**(4), 417–432.
- Dryer, B. V. (1962). Lifetime learning for physicians. *J. Med. Educ.*, **37**(6), part 2, 1–334.
- Haley, J. (1963). *Strategies of Psychotherapy*. New York: Grune & Stratton.
- Haley, J. (1973). *Uncommon Therapy: The Psychiatric Techniques of Milton H. Erickson, M.D.* New York: W. W. Norton.
- Hammond, D. C. (Ed.) (1989). *Handbook of Suggestions and Metaphors*. New York: W.W. Norton.
- Hammond, D. C. & Elkins, G. R. (1994). *Standards of Training in Clinical Hypnosis*. A publication of the Certification Committee of the American Society of Clinical Hypnosis (ASCH). Chicago: ASCH Press.
- Hawkins, R. M. F. & Kapelis, L. (1993). Teaching hypnosis: The andragogy and direct-teaching models. *Aust. J. Clin. Exp. Hypn.*, **21**(2), 37–43.
- Hunter, M. E. (1994). *Creative Scripts for Hypnotherapy*. New York: Brunner/Mazel.
- Knowles, M. S. (1980). *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (revised and updated). Chicago: Association Press, Follett Publishing.
- Laurence, J.-R. & Perry, C. (1986). *Hypnosis, Will, and Memory: A Psycho-legal history* (pp. 9–11, 49). New York: Guilford Press.
- McConkey, K. M. & Sheehan, P. W. (1995). *Hypnosis, Memory, and Behavior in Criminal Investigation*. New York: Guilford Press.
- Orne, M. T. (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *Am. Psychologist*, **17**, 776–783.
- Orne, M. T., Dinges, D. F. & Bloom, P. B. (1995). Hypnosis. In H. I. Kaplan & B. J. Sadock (Eds), *Comprehensive Textbook of Psychiatry*, Vol. VI. Baltimore, MD: Williams & Wilkins.
- Parish, M. J. (1975). Predoctoral training in clinical hypnosis: A national survey of availability and educator attitudes in schools of medicine, dentistry, and graduate clinical psychology. *Int. J. Clin. Exp. Hypn.*, **23**(4), 249–265.
- Rodolfa, E. R., Kraft, W. A., Reilly, R. R. & Blackmore, S. H. (1983). The status of research and training in hypnosis at APA accredited clinical/counseling psychology internship sites: A national survey. *Int. J. Clin. Exp. Hypn.*, **31**(4), 284–292.
- Shor, R. E. & Orne, E.C. (1962). *The Harvard Group Scale of Hypnotic Susceptibility*. Palo Alto, CA: Consulting Psychologists Press.
- Spence, D. P. (1982). *Narrative Truth and Historical Truth: Meaning and Interpretation in Psychoanalysis*. New York: Norton.
- Spiegel, D., Bloom, J. R., Kraemer, H. C. & Gottheil, E. (1989). Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *Lancet*, **2**, 888–891.
- von Bertalanffy, L. (1968). *General System Theory*. New York: Braziller.
- Watkins, J. G. (1971). The affect bridge: A hypnotherapeutic technique. *Int. J. Clin. Exp. Hypn.*, **19**, 21–27.
- 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 Hypnotic Susceptibility Scale, Form C*. Palo Alto, CA: Consulting Psychologists Press.
- Whitaker, C. (with J. Warkentin & N. Johnson) (1950). The psychotherapeutic impasse. *Am. J. Orthopsychiat.*, **20**, 641–647, reprinted with permission in Neill, J. R. & Kniskern, D. P. (Eds) (1982) *From Psyche to System: The Evolving Therapy of Carl Whitaker* (pp. 39–44). New York: Guilford Press.
- Wright, J. M. (1991). Continuing medical education in psychiatry. *Aust. NZ J. Psychiat.*, **25**, 111–118.

PART II

General Clinical Considerations

Patient Selection: Assessment and Preparation, Indications and Contraindications

JULIE H. LINDEN

Private Practice, Philadelphia, PA, USA

Advances in the field of hypnosis over the last two decades are reflected in many areas of hypnotic research and applicability. In this time period clinicians and researchers have come to appreciate and share the difficulty of defining this useful phenomenon we refer to as hypnosis, while simultaneously exploring its usefulness in a wide range of medical and psychotherapeutic settings. While debate about how to define hypnosis continues, so does its employment in many settings.

A perusal of the older texts on hypnosis portrays a poorly understood set of phenomena replete with warnings about the 'dangers and contraindications' of its use (ASCH, 1973). These texts were characterized by three common features. First, the format was often a cookbook approach to hypnotic applicability. Anyone could be a hypnotist if they simply followed the recipe. Second, there was a hint of a defensive posture on the part of authors, eager to convince their sometimes doubting or sceptical colleagues of the usefulness of hypnotic interventions (Hartland, 1966). The public portrayal of hypnosis in the media, on TV or in the movies often reinforced myths and inaccurate stereotypes of hypnosis. More accurate public information was mostly unavailable. And finally, the hypnosis was often set apart from both the therapies and the therapists. Framed in a medical model, it was often portrayed as the necessary injection, without regard to the skill of the injector or the medicine injected.

Current texts portray a different picture. Hypnosis itself has come of age. It is a respected therapeutic modality, considered part of the clinician's full therapeutic armamentarium (Kroger, 1977; Crasilneck & Hall, 1975; Brown & Fromm, 1987; Northrup, 1998). As with so many new health alternatives, the public is more open to and more educated about hypnosis (Davis, McKay & Eshelman, 1980). Emphasis is both on the integration of hypnotic techniques into the clinician's existing orientation and on the skillfulness of the clinician in its use. Case studies no longer suggest a cookbook style, but rather the creative and individualized approaches to

applying hypnosis, which are tailored to the client's often complex presentation of symptomatology. A full discussion of patient selection must therefore include issues about hypnotic responsiveness, individual differences, and positive expectancies.

Establishing the hypnotic relationship with a client may be seen as a four-step process. First is the evaluation phase during which the building of rapport guides the clinician's every thought and action. Second is the educational phase during which the client is introduced to the concept of hypnosis and informed consent is garnered. Third is the assessment of hypnotizability, done either with formal or informal techniques. And fourth is the teaching of self-hypnosis phase, during which time positive expectancies about hypnosis and motivation of the client are further enhanced. These phases do not always occur in a linear fashion but are subject to the ebb and flow of the therapeutic relationship. However, it is a useful way for the clinician to organize his or her own experience of the unfolding of the hypnotic relationship. In addition, the four phases serve as a guide to the areas that should be covered in preparing the client for hypnotic treatment.

PHASE 1 EVALUATION

WHO ARE OUR HYPNOTIC CLIENTS? INDICATIONS

This new exposition of hypnosis changes the way we think about patient selection. No longer is it simply a matter of the doctor selecting what is best for the patient. This change in how we think about hypnosis, in combination with our increasing understanding of the interactive nature of the treatment process and the relational aspects (Miller, 1986; Surrey, 1984) of the 'doctor–patient' partnership alters the lens through which we view the suitability of hypnosis for clients.

In fact, patients are far more apt to present in our offices requesting an hypnotic intervention. We might then think of clients as falling into several categories. There is that group of clients who present with symptoms that are particularly amenable to an hypnotic intervention. Areas of increased use of hypnosis include stress reduction, pain management/wellness, and uncovering work in a psychodynamic relationship. Many of these clients are sophisticated in their knowledge of alternative health benefits and ask for information on hypnosis, while others are aware of the benefits of stress reduction techniques such as relaxation exercises, meditation and guided imagery, but are uninformed about their similarity to hypnosis. Still others are uninformed about hypnosis and ignorant of its application to their problem. Those who are actively resistant to the idea of hypnosis pose a particular challenge to clinicians. Resistance may come from several sources. Religious and cultural beliefs may influence a client's willingness to consider hypnosis (Marcum, 1994). Fear of the proposed procedure (of the unknown) may

render a client resistant, as well as fear of the clinician relationship (of a lack of safety).

Another group of clients seem to use the request for hypnosis as a way to get their proverbial foot into the therapist's door. They often request help with a discrete problem, such as the cessation of a smoking habit or the need to lose weight. Evaluation of the full clinical picture often reveals no conscious wish for help with the presenting problem, but rather help with an entirely different concern. The importance of the diagnostic skills of the practitioner is highlighted in these instances, rather than the hypnotic skills. The practitioner may be able to do a very credible job assisting the client with the 'presenting problem' but miss the underlying problems which the client may be unable to voice or explain.

Therefore when we conceptualize the process of introducing hypnosis to a patient population, we are reminded that patients are partners in their treatment and either partner may initiate the discussion about the suitability of hypnosis for the presenting problem. It follows from this relational perspective that both the client and the therapist variables are operative in the success of hypnotic application (Rhue, Lynn & Kirsch, 1993). However, 'patient acceptance of the hypnotic relationship is the primary determinant of the appropriateness of the patient for hypnosis' (Murray-Jobson, 1993, p. 430).

WHAT IS THE PRESENTING PROBLEM?

The gathering of information about the presenting problem is of chief importance for the clinician. Research done by Torrey suggests that the client's motivation for improvement is determined by several factors of which the first is the 'degree to which the therapist's ability to name the disease and its cause agrees with the views of the patient' (Coe, 1993, p. 73). During the evaluation phase of treatment, the clinician will be establishing rapport, assessing the suitability of hypnosis for the presenting problem, and assessing the client's motivation for change, all the while that clinical data are being gathered. There are strong behavioural components in both the development and maintenance of illness. The clinician will want to identify these factors that affected the development of a condition as part of the assessment phase (Brown & Fromm, 1987).

HAVE YOU CONSIDERED OR GATHERED INFORMATION ABOUT MEDICAL/ORGANIC ETIOLOGY?

The nonmedical clinician is advised to inquire of clients as to whether any medical evaluation of their condition has been performed prior to initiating an hypnotic intervention. Common presentations to the hypnotherapist such as headaches, insomnia, and back pain may have organic etiologies that require surgical or pharmaceutical treatment (Olness & Libbey, 1987). A hasty hypnotic intervention may delay proper diagnosis, cloud symptoms or actually worsen a client's condi-

tion. For example, a highly hypnotizable client presented with what he thought was a sprained ankle to an inexperienced therapist, and asked to be hypnotized so he could manage the pain. His responsiveness to the hypnotic suggestion that he would feel *no* pain, allowed him to walk on the injured foot for several days, after which time increased swelling led him to the Emergency Room, and an x-ray determined he had a broken ankle. This is not a danger inherent in hypnosis, but a danger in the clinician's faulty judgment. The skillfulness and clinical experience of the practitioner are operating variables that affect outcome of treatment and need to be separated from the value or success of hypnosis itself.

WHAT IS THE HISTORY OF PREVIOUS TREATMENTS?

In making the determination as to whether an hypnotic intervention is suitable for a client, it is important to learn whether the client has had any prior experience with hypnosis or other alternative health approaches such as meditation, relaxation tapes or guided imagery. When there has been previous experience, inquiry about the client's experience as to depth of trance, reaction to suggestions, and the client's measure of the success or usefulness of the previous interventions, will provide the clinician with valuable data. This feedback will be useful in several areas: continuing to set positive expectancies for the client; tailoring the hypnotic intervention to the individual needs of the client; and correcting misinformation. Therapists report that when a previous experience with hypnosis has soured a client on the use of hypnosis, it may still be valuable to pursue the consideration of using hypnosis, patiently correcting misinformation and encouraging the client to reassess the previous 'bad' experience.

WHAT IS THE TRAUMA HISTORY?

An increasingly popular practice among clinicians is the inclusion of questions about historical traumas (Linden, 1995). The relevance of traumas in the client's clinical history is the culmination of several factors that coalesced in the field of mental health. These were the Women's Movement of the 1970s and sociopolitical concerns about victimization of women, attention to the scope of child physical and sexual abuse and sociopolitical concerns about the victimization of children, the addition of the diagnostic category of PTSD to the 1980 DSM II nomenclature (Yehuda & McFarlane, 1995) and the rapid expansion of research in the area of dissociation during the decade of the 1970s (Lynn & Rhue, 1994) which grew out of the similarities between the trance behaviours of abused persons and hypnotic phenomena (Lynn Hilgard, 1986; Spiegel, 1986; Braun, 1986). Added to this, was the appreciation that little was understood about the nature of trauma in children, and that most knowledge came through retrospective studies of adults who experienced trauma in childhood (Eth & Pynoos, 1984). Most trauma models included predisposing factors of biology and temperament and prior trauma (Van

der Kolk, 1987; Burgess & Grant, 1988) in determining the development or severity of PTSD symptomatology. These models were mostly based on clinical case studies with traumatized adults. Emerging information on the neurobiology of PTSD is confirming the distinctness of this diagnostic entity (Yehuda & McFarlane, 1995; Van der Kolk, McFarlane & Weisaeth, 1996). Still unclear, is the impact of child development on the models for PTSD.

The need for obtaining the trauma history also grew from clinical experience with hypnosis which has taught us that abreactive material may surface as the client's usual means of psychological defense is circumvented (Fromm, 1980). In addition, current problems may be unconsciously associated with past traumas. The associative pathways for these stored memories may be activated during the hypnotic intervention.

A thorough trauma assessment asks about both large and small traumas a client may have experienced. Traumatic events are generally defined as those that render an individual overwhelmed or helpless. These may be physical in nature, such as car accidents, broken bones, hospitalizations, or minor trips to the Emergency Room. Or they may be psychological in nature, such as loss of a loved one, abandonment, or neglect. There is controversy over what is considered traumatic and the discussion of this controversy is beyond the scope of this chapter. Suffice it to say, the author's extensive experience treating children has taught her that trauma is a relative concept. Children are easily overwhelmed and rendered helpless, and without the benefit of an adult's coping mechanisms. Procuring an account of traumas, as the client defines them, will be useful.

How the clinician obtains a trauma history is a matter of some controversy. Central to this controversy is the concern that the clinician refrain from suggestive or leading questions during inquiry, especially when inquiry into childhood physical and/or sexual abuse is being made. The sensitive and seasoned clinician asks open-ended questions and knows that obtaining client histories is often an unfolding process rather than a linear process.

The clinician working with Post-Traumatic Stress Disorders or Dissociative Disorders will find hypnosis to be useful; however, it should not be considered a treatment in and of itself. It is a procedure that may both elicit or manage strong abreactive material, and the inexperienced clinician should proceed cautiously.

WHAT IS THE CLIENT'S MOTIVATION?

Assessing both conscious and unconscious motivation of a client is an integral part of the evaluation and treatment plan. Asking what brings the client in at this time, will often summon important motivational material. Asking what it will be like if the presenting problem is relieved, may also get at underlying contributors to symptomatology, and secondary gain factors. When motivation is low or absent, an effective treatment plan will include strategies to increase motivation. Once treatment has begun, and consent for hypnosis has been obtained, hypnosis may be

utilized to both assess and increase motivation. For example, ideomotor signalling may lead to underlying factors that compromise motivation. Ego-strengthening inductions can help to rebuild or restore hope.

SUITABILITY OF HYPNOSIS FOR THE PROBLEM?

Hypnosis is applicable in almost every area of medicine, dentistry, and psychotherapy either as a primary treatment choice or as one that is used adjunctively. The clinician's familiarity with treating the presenting problem nonhypnotically is preeminent. Knowledge of hypnosis is like the buttress of the central structure—one's specialty field. The clinician must stay within his or her area of expertise when utilizing hypnosis.

Moreover, it is not so much whether or not to apply a hypnotic procedure that the clinician will ponder, but rather the responsiveness of a client to such a procedure that will be a decisive factor in whether to use hypnosis or not. This leads to the inquiry about hypnotizability of a client that is discussed under phase III of patient preparation.

Research has shown hypnotic responsiveness to be unrelated to gender (Spiegel & Spiegel, 1978), and of some relationship to age. Children are particularly good subjects, with their hypnotic ability peaking between ages 9–12 (LeBaron & Hilgard, 1984). Their hypnotic responsiveness seems related to their ready ability to use fantasy and imagination (Wicks, 1995).

Since most people can be considered as candidates for hypnosis, it may be that judicious timing of the introduction of hypnosis is a factor in outcome. Timing of an hypnotic intervention, as its own variable, has received little attention from researchers, and timing of the introduction of the *idea* of hypnosis has received none, to my knowledge, perhaps because it is such a complex matter of clinical judgment and patient variables such as readiness, pathological presentation, and expectations.

On some occasions, hypnosis may be applied in an emergency situation without following all of the steps suggested in preparing the client. Examples of such rapid interventions mostly include pain management of serious physical injuries. Such interventions are best left in the hands of the experienced clinical hypnotherapist.

WHAT IS THE CLIENT'S METAPHOR FOR THE PRESENTING PROBLEM?

The way in which clients describe and report their presenting problem is useful information for the hypnotherapist. Hypnosis is about communication, and, some would say, about communication with the unconscious aspects of the individual (Rossi & Cheek, 1988; Weil, 1995, pp. 93–97)). While proven models for empirical investigation of how metaphoric information produces change are still lacking, the literature abounds with case examples of positive outcomes both

somatically and psychologically with the use of client's metaphors in hypnosis (Hammond, 1990; Malmo, 1995).

PHASE II—EDUCATION

WHAT ARE THE CLIENT'S BELIEFS AND PERCEPTIONS ABOUT HYPNOSIS?

The transition between evaluating the client (phase I) and educating the client (phase II) occurs as the clinician begins to determine the client's understanding of hypnosis. Research in the area of positive expectancies has taught us that the responsiveness of a client to any treatment will be affected by their expectations. Therefore, the preparation of our clients for hypnosis is a process of educating them and building positive expectations (Coe, 1993). Kirsch has interpreted the results of several of his studies as suggesting that, with sufficiently strong expectation, anyone is hypnotizable (Rhue, Lynn & Kirsch, 1993, p. 89). This parallels Hilgard's (1968) observation that laboratory studies of hypnotic ability and susceptibility are often unable to mirror the demands of the clinical setting where the client's expectations and motivation may render the results on the tests of hypnotizability less important.

An educational discussion about hypnosis prefaces any induction procedure. This pre-induction talk covers the myths, the misperceptions, the uninformed constructs that the individual may hold about hypnosis. Some of the common beliefs held about hypnosis include but are not limited to the following:

- 1 Hypnosis is something done to a person. The client may say 'Put me under, Doc.' This idea that the hypnotist has some power to control the client is partly rooted in the much larger sociopolitical view of the medical model as a non-egalitarian relationship. In addition, this notion of having something done to you is comparable to the surgical paradigm of the client who is unconscious on the operating table and literally in the hands of the doctor. It is important early in the educational process to clarify that all hypnosis is self-hypnosis and that client and clinician are partners in the endeavour. The client is thus encouraged to actively participate in the exploration of his or her own hypnotic abilities.

- 2 Hypnosis is sleep, loss of consciousness or amnesia. The client may ask 'How will you wake me up?', or 'How come I heard everything you said?' The origin of the word hypnosis is the Greek word for sleep. Many accounts of hypnosis describe it as similar to the early stage of sleep when one is drifting in and out of conscious awareness but still awake. Clients' confusion about hypnosis being a state of sleep is further compounded by their knowledge that sleepwalking occurs in the hypnagogic stage of sleep. Our semantic difficulties in describing the experience of trance, of hypnosis, have contributed to this misconception about hypnosis. Clients usually find it helpful when they can recall an experience of profound concentration

or fixed attention. Such an experience can then be compared to their hypnotic trance. It is also helpful to share with clients that brain wave studies of subjects 'under hypnosis' show an alert brain wave pattern, and not that of a deep sleep state.

3 The trance will be irreversible. The client may ask 'Can I come out of this?' This fear that once in a trance state the client will be unable to terminate the trance is founded on the belief that something is being done to him or her. It suggests there is an external locus of control for the hypnotic process. It is useful to compare the hypnotic partnership to the roles of guide and pioneer. The hypnotist is a teaching guide, the client may choose whether and when to follow, and the client rapidly learns the terrain already familiar to the clinician.

4 The hypnotist will have power over the client, over their behaviour, their thoughts, over their wills. The client may fear that a suggestion will violate a moral or ethical code. 'Will I bark like a dog?' 'Will I talk about something I don't want to talk about?' These concerns often reflect the client's exposure to the portrayal of hypnosis in the entertainment industry. Lay hypnotists, unlike hypnotists in the professional health fields, lack clinical training and all too often lack concern for the subject's privacy, psychological well-being or moral codes. It is the clinician's responsibility to teach hypnosis adhering to the codes of ethics of his or her profession and to teach the client to discriminate between the ethical and unethical uses of hypnosis.

Each of these beliefs carries a concern about who is in control. This underlies the important clinical construct that all hypnosis is self-hypnosis. It is useful to teach this to clients and it may serve to lay the foundation for the later teaching of self-hypnotic procedures.

Some other valuable constructs which are important to explain to the client include defining and describing absorption, concentration, focused attention, and dissociation. The commonness of absorption or what is termed the 'everyday trance' can be illustrated by experiences of automaticity shared by many, such as automobile driving behaviours, tooth brushing and other repetitious behaviours. The focused attention or concentration of hypnosis may be compared to the state one experiences while at prayer, or while reading a highly absorbing novel. The state of shock one is in following an injury or accident can be likened to the experience of dissociation.

There is variability in hypnotic talent and skill. Discussion of this point is helpful in building positive expectancies that practice will make a difference in hypnotic responsiveness over time. Hypnotizability scales may be used to assess degree of hypnotizability.

Discussion about memory and hypnosis is an important requirement of the pre-induction talk. Memory is imperfect, productive, and reproductive both in and outside of hypnosis. Some hypnotic techniques metaphorically suggest that events in memory will be retrieved as they happened or were encoded (e.g. the TV screen

or movie technique). It is important to distinguish between this metaphorical exploration of memory and what research tells us about the nature of memory. This is similar to the distinction that is made between narrative truth and historical truth. Educating the client about these distinctions will be beneficial.

A final area for consideration by the clinician is that of informed consent. The clinician will document the evaluation and treatment plan for a client according to the standards of care determined by his/her profession. In addition, if a case involves or may involve forensic testimony, clients need to know about any issues related to admissibility of testimony gathered with hypnosis.

PHASE III—HYPNOTIZABILITY ASSESSMENT

The assessment of hypnotizability is phase III of patient preparation. Standard measures may be used, although increasingly these are limited to research settings. The most common measurement instruments are: The Stanford Hypnotic Clinical Scales for Adults and Children, The Hypnotic Induction Profile, the Harvard Group Scale of Hypnotic Susceptibility, the Stanford Hypnotic Susceptibility Scale, Forms A, B, and C, and the Children's Hypnotic Susceptibility Scale. Other research instruments include the Stanford Profile Scales of Hypnotic Susceptibility, the Barber Suggestibility Scale, the Creative Imagination Scale, the Wexler–Alman Indirect Susceptibility Scale and the Waterloo Stanford Group C Scale of Hypnotic Susceptibility.

It is important to note that the client who is low hypnotizable on a standard measure may in fact achieve great benefit from learning hypnotic skills. Issues of ability and susceptibility, while extensively studied in the laboratory, pale in significance in the clinical setting next to the client's expectations and motivation.

Nonstandard measures of hypnotizability may also be used to assess a client's responsiveness. Many clinicians use a simple induction procedure for this purpose. Usually, it is one they have used with many other clients, so that they have gathered data for comparative purposes. These same inductions can be used as part of the building of positive expectations, to set up success experiences and to establish motivation.

PHASE IV—TEACH SELF-HYPNOSIS

Generally, once the evaluative and educational phases are complete, and hypnotizability has been assessed, the clinician is ready to teach the client self-hypnosis. This is phase IV of the preparation process. A principle for success is to separate the teaching of hypnosis from the presenting problem. For example, the client who presents with a headache should not receive a first intervention for symptom relief until basic hypnotic principles have been taught. Otherwise, the clinician risks the

client viewing hypnosis as a failure, should the headache not be relieved. In addition, because hypnosis is considered a skill, it is subject to improvement with practice. Clients can be instructed to practice self-hypnosis, thereby increasing their skills while simultaneously validating their altered state, thus increasing positive expectancies.

CONTRAINDICATIONS

There are only a few instances in which hypnosis should not be used, and these mostly have to do with the skill of the therapist. Hypnosis should not be used with any presenting problem that the clinician is unprepared to treat without hypnosis. When a client's presenting problem is outside the clinician's field of expertise the client should be referred elsewhere. Every clinician has had the experience of meeting a client they would rather not treat. It is advisable to refer them elsewhere, as well. While the literature contains case reports of successful hypnotic applications with almost every DSM category, most clinicians have delineated a narrower field of practice and will find they can easily apply hypnosis within their defined domain.

Some clinical presentations are poorly suited to hypnotic intervention. Organic brain syndromes is one such category. Clients who present as suicidally depressed or as paranoid schizophrenics are generally not good candidates for hypnosis, at least in the beginning of treatment. The rapidity with which hypnosis may bring forth repressed material, or unravel the already fragile psychic structure, are unwanted repercussions with such clients.

Similarly, in uncovering work, caution must be taken when working with clients with fragile ego structure, thought disorders, or borderline psychotics where there may be further decompensation with hypnosis. Paranoid clients may also feel an intensification of hostile feelings related to feeling controlled following hypnosis (Frauman, Lynn & Brentar, 1993).

Forensic subjects can pose a particular challenge to clinicians. Recent recommendations (Hammond, Garver, Mutter et al., 1994) clarify the state and federal models for forensic hypnosis. Training in forensic applications of hypnosis and nonsuggestive or nonleading interviewing techniques are recommended for professionals working with forensic subjects. It is the clinician's responsibility 'to reject the use of hypnosis in any case in which' the client (the witness) is not competent to give or refuses to give written informed consent, or where the mental, emotional or physical health of the person will be at risk of harm with the use of hypnosis, or when 'the witness was not in a position to realistically perceive the events in question' (ibid, p. 39). In the aggregate, when forensic guidelines have not been properly followed by a forensic subject, the use of hypnosis is ill-advised.

As noted earlier, indiscriminate removal of organic pain may lead to complications. This is a particular problem with highly hypnotizable clients whose talents in

the area of pain relief are enviable. Such complications are not the result of hypnosis, but rather a failure on the part of the clinician to adequately assess hypnotizability and carefully construct hypnotic suggestions.

When Fromm (Frauman, Lynn & Brentar, 1993) looked at therapists' styles and values, she found that the coercive, omnipotent stance tended to produce negative reactions in the client, while a more permissive, respectful, and collaborative stance was unlikely to encounter complications. This research again highlights clinician characteristics, such as style and competence, as limiting factors in the hypnotic relationship, rather than hypnosis itself as having any inherent dangers.

A final area of concern is the potential for abuse of the hypnotic technique by the client. It is the task of the clinician to teach clients that self-hypnosis is solely for their own use. Children, in particular, must be reminded that the new skill they are learning is for them alone, and not for them to teach to their classmates and friends. There are stories shared among clinicians about individuals who have misused their hypnotic skills with others. Most of these cautions, again, have to do with the risks for highly hypnotizable subjects, and not with dangers inherent to hypnosis.

In the final analysis it is the clinician's own judgment and experience that determines *whether* or not hypnosis should be employed and *when* to introduce the notion of hypnosis. If a client is unwilling to learn about hypnosis he or she has the conclusive say in determining this. As has been outlined in the preceding comments, the issues of trust and control in the therapeutic relationship are the cornerstones of good rapport, and the client's wishes must be respected.

CONCLUSION

In summary, the selection of the client for hypnosis is a relational process in which both the client and clinician bring many variables to the therapeutic table. The hypnotic responsiveness of the client, individual differences and the positive expectancies the client holds, or those which are established with the client, are all important variables in the assessment and preparation of a client. There are no known dangers inherent to hypnosis, but contributing factors to 'negative effects' are found within the therapist and client characteristics and within the relationship they form.

There are four phases to the assessment and preparation of the client. The first is the evaluation phase, the second is the educational, the third is the assessment of hypnotizability, and the fourth is the teaching of self-hypnosis.

This chapter has emphasized that hypnosis is a valuable technique to utilize in a variety of settings. With an appropriate introduction and education about hypnosis and hypnotic phenomena clinicians are likely to experience much success in the use of hypnotic techniques within their individual fields. The chapters that follow will explore in detail the diverse applications of hypnosis.

REFERENCES

- American Society of Clinical Hypnosis (ASCH) (1973). *A Syllabus on Hypnosis and a Handbook of Therapeutic Suggestions*. Chicago: ASCH-ERF.
- Braun, B. (1986). *Treatment of Multiple Personality Disorder*. Washington, DC: American Psychiatric Press.
- Brown, D. & Fromm, E. (1987). *Hypnosis and Behavioural Medicine*. Hillsdale, NJ: Lawrence Erlbaum.
- Burgess, A. & Grant C. (1988). *Children Traumatized in Sex Rings*. Washington, DC: National Center for Missing and Exploited Children.
- Coe, W. (1993). Expectations and hypnotherapy. In J. W. Rhue, S. J. Lynn & I. Kirsch (Eds), *Handbook of Clinical Hypnosis* (pp. 73–93). Washington, DC: American Psychological Association.
- Crasilneck, H. & Hall, J. (1975). *Clinical Hypnosis: Principles and Applications*. New York: Grune & Stratton.
- Davis, M., McKay, M. & Eshelman, E. (1980). *The Relaxation and Stress Reduction Handbook*. CA: New Harbinger Publications.
- Eth, S. & Pynoos, R. (1984). *Posttraumatic Stress Disorder in Children*. Washington, DC: American Psychiatric Press.
- Fraumann, D., Lynn, S. & Brentar, J. (1993). Prevention and therapeutic management of 'negative effects' in hypnotherapy. In J. W. Rhue, S. J. Lynn & I. Kirsch (Eds), *Handbook of Clinical Hypnosis*. Washington, DC: American Psychological Association.
- Fromm, E. (1980). Values in hypnotherapy. *Psychotherapy: Theory, Res. Pract.*, **17**, 425–430.
- Hammond, D. C. (Ed.) (1990). *Handbook of Hypnotic Suggestions and Metaphors*. New York: W. W. Norton.
- Hammond, D. C. & Elkins, G. (1994). *Standards of Training in Clinical Hypnosis*. Des Plaines, IL: American Society of Clinical Hypnosis Press.
- Hammond, D. C., Garver, R., Mutter, C. et al. (1994). *Clinical Hypnosis and Memory: Guidelines for Clinicians and for Forensic Hypnosis*. Des Plaines, IL: American Society of Clinical Hypnosis Press.
- Hartland, J. (1966). *Medical and Dental Hypnosis*, 2nd edn. Baltimore, MD: Williams & Wilkins.
- Hilgard, E. (1968). *The Experience of Hypnosis*. New York: Harcourt, Brace & World.
- Hilgard, E. (1986). *Divided Consciousness: Multiple Controls in Human Thought and Action*. New York: Wiley.
- Kroger, W. (1977). *Clinical and Experimental Hypnosis*. Philadelphia: J.B. Lippincott.
- LeBaron, S. & Hilgard, J. R. (1984). *Hypnotherapy of Pain in Children With Cancer*. Los Altos, CA: William Kaufmann.
- Linden, J. (1995). When mind–body integrity is tramatised by problems with physical health: The woman's response. In G. D. Burrows, & R. O. Stanley (Eds), *Contemporary International Hypnosis*. New York: Wiley.
- Lynn, S. & Rhue, J. (1994). *Dissociation*. New York: Guilford Press.
- Malmo, C. (1995). Drawings in MPD and therapy of childhood trauma. *Hypnos*, **23**(2), 60–72.
- Marcum, J. (1994). Jackhammering the concrete—or working in the buckle of the Bible Belt. Paper presented at the 36th Annual Scientific Meeting of the American Society of Clinical Hypnosis, San Diego, CA.
- Miller, J. B. (1986). *Toward a New Psychology of Women*. Boston: Beacon Press.
- Murray-Jobsis, J. (1993). The borderline patient and the psychotic patient. In J. W. Rhue, S. J. Lynn & I. Kirsch (Eds), *Handbook of Clinical Hypnosis*. Washington, DC: American Psychological Association.

- Northrup, C. (1998). *Women's Bodies, Women's Wisdom*. New York: Bantam Books.
- Olness, K. & Libbey, P. (1987). Unrecognised biologic bases of behavioural symptoms in patients referred for hypnotherapy. *Am. J. Clin. Hypn.*, **3**, 1–8.
- Schefflin, A. & Shapiro, J. (1989). *Trance on Trial*. New York: Guilford Press.
- Spiegel, D. (1986). Dissociation, double binds, and posttraumatic stress in multiple personality disorder. In B. Braun, (Ed.), *Treatment of Multiple Personality disorder* (pp. 61–78). Washington, DC: American Psychiatric Press.
- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment*. Washington, DC: American Psychiatric Press.
- Surrey, J. (1984). The 'self-in-relation': A Theory of Women's Development. Work in Progress 84:02. Wellsley, MA: Stone Center Working Papers Series.
- Rhue, J. W., Lynn, S. J. & Kirsch, I. (1993). *Handbook of Clinical Hypnosis*. Washington, DC: American Psychological Association.
- Rossi, E. & Cheek, D. (1988). *Mind–Body Therapy*. New York: W. W. Norton.
- Van der Kolk, B. (1987). *Psychological Trauma*. Washington, DC: American Psychiatric Press.
- Van der Kolk, B., McFarlane, A. & Weisaeth, L. (Eds) (1996). *Traumatic Stress*. New York: Guilford Press.
- Weil, A. (1995). *Spontaneous Healing*. New York: Fawcett Columbine.
- Wicks, G. (1995). Hypnosis in a general pediatric hospital setting. *Hypnos*, **22**(2), 106–111.
- Yehuda, R. & McFarlane, A. (1995). Conflict between current knowledge about posttraumatic stress disorder and its original conceptual basis. *Am. J. Psychiat.*, **152**, 1702–1713.

Memory and Hypnosis— General Considerations

PETER W. SHEEHAN

Australian Catholic University

This chapter concerns itself with hypnosis and memory, and the relationship between them. At the outset, it seems most appropriate to define the nature of both, and then to briefly review the association that exists between them. The concern of this chapter is primarily with memory distortion, rather than accuracy, as the distorting effects of what people remember are often clinically relevant.

THE NATURE OF HYPNOSIS AND MEMORY

THE NATURE OF HYPNOSIS

The nature of hypnosis has been much debated in the literature (Orne, 1959; Kihlstrom, 1985; Lynn & Rhue, 1991). Nevertheless, there is reasonable consensus about some of its defining properties. Although distortions typically occur, hypnosis can be said to occur when one person (the subject) experiences alterations in perception, memory, or mood in response to suggestions given by another person (the hypnotist). Although distortions typically occur, hypnosis is essentially an experiential phenomenon where the hypnotist typically guides the subject to create a favorable situation for the display of his or her special capacities and skills. Substantial reliance has to be placed therefore on the subject's self-report as to the nature of his or her experience.

If a subject is motivated to fake hypnosis (i.e. to report an experience that he or she is not having), then it is possible to do so. In such a case, subjects typically base their performance on the information that has been given about hypnosis before the hypnosis session and on the cues that are given during the hypnosis session itself. This is not a view that is compatible with hypnosis recovering traces of original perception, and sits most comfortably with the perspective that memories retrieved in hypnosis are products of hypnotized subjects' imaginative capacities at work. It does not say, however, that hypnosis is inherently distorting.

THE NATURE OF MEMORY

Memory is equally a complex process. It is a labile phenomenon and its inherent plasticity is clearly acknowledged in the literature (e.g., Annon, 1988). It is influenced strongly by pre-existing representations (Echabe & Rovira, 1989), but postevent misinformation is also effective and known to lead to distortion of memory in both adults and children (e.g., Ceci, Ross & Toglia, 1987).

In general, memory is a constructive and reconstructive process. There is substantial evidence that it changes over time to accommodate alterations in feelings toward or information about the event(s) being remembered. Hypnosis may lead to an increase in the amount of material reported as memory. However, whereas some of the additional material may be accurate, other aspects of it may be inaccurate; and this is despite the fact that the person may be substantially confident about the accuracy of the material that is reported.

ILLUSTRATIVE PHENOMENA

By way of illustration, it seems most instructive to single out pseudomemories, and memories of past, personal events recorded in the clinical setting by use of hypnosis. These two phenomena are selected because they both illustrate the rich variety of the complex processes and factors that are frequently at work.

PSEUDOMEMORY

The phenomenon of pseudomemory is tied necessarily to subjects' acceptance of postevent misinformation. In operational terms, the conditions for establishing it in the hypnotic setting typically involve the administration of suggestions giving false information to subjects following the induction of hypnosis. Routinely, subjects are awakened subsequently and then tested for how well they remembered the events that they saw earlier.

Empirically, there is a range of parameters that has been shown to be related to hypnotically induced pseudomemory, but not all of them have produced reliable results. Incidence of the phenomenon is variable, the most consistent evidence that has emerged being that level of hypnotic susceptibility is related positively to the phenomenon, with high susceptible subjects showing greater evidence of pseudomemory than low susceptible subjects.

The evidence for the relevance of hypnotic skill comes from a variety of studies that have now used a range of paradigms for studying pseudomemory. Labelle, Laurence, Nadon & Perry (1990), for instance, found that pseudomemories were reported most often by highly susceptible subjects, and not at all by low susceptible subjects: and this pattern of findings was largely replicated by McConkey, Labelle, Bibb & Bryant (1990). Relatively few studies have used nonhypnotic comparison

groups in studying pseudomemory, comparison rarely being made between waking and hypnotic instructions. The study by Labelle et al. (1990) did not include waking comparison, while McConkey et al. (1990) and Barnier & McConkey (1993) did so, and where the comparison was provided results have generally failed to demonstrate a hypnotic instruction effect. Other studies (Sheehan, Statham & Jamieson, 1991), however, have indicated increased pseudomemory effect for hypnotic instruction, with high susceptible subjects showing greater acceptance of the false information under hypnotic as opposed to waking instruction.

Contextual factors as they affect pseudomemory have been studied in a variety of ways and have yielded relatively consistent results. Their influence is widely evident across other memory phenomena as well. Factors relevant to pseudomemory (and other memory phenomena as well) include type of stimulus event, the setting in which suggestion is tested, mode of memory test, presence of reward, and other contextual influences (see Spanos, Gwynn, Comer, Baltruweit & de Groh, 1989). Also, Spanos & McClean (1986) studied the influence of the cues available in different testing contexts as they affected the incidence of reported pseudomemories and found that pseudomemory varied positively as a function of the type of expectation given to subjects, though not all expectancies in terms of prehypnotic information have been shown to be effective (Lynn, Weekes & Milano, 1989).

Contextual factors obviously play a part in influencing the phenomenon of pseudomemory, but the mix of possible mediating factors requires exploration of a much wider range of parameters than has been conducted to date. In particular, interpersonal parameters, such as rapport, are also relevant. Rapport has been claimed by a number of theorists (Sheehan, 1971, 1980; Shor, 1962) to be integrally related to hypnosis, and demonstrating the importance of rapport in maximising the occurrence of hypnotic phenomena has been the primary aim of a number of studies in the past (e.g., Gfeller, Lynn & Pribble, 1987; Matheson, Shue & Bart, 1989; Sheehan & McConkey, 1988).

Rapport appears widely in the hypnosis literature under a range of alternative labels and they are all clinically related. These include archaic involvement (Shor, 1962, 1979), social relationship factors (Sarbin & Coe, 1972), transference (Gill & Brenman, 1961), and fusional or symbiotic alliance (Diamond, 1988). Viewed within the hypnotic setting, the concept normally expresses the positive interaction of hypnotist and subject, predictably resulting in strong feelings of relaxation and comfort in the subject who is hypnotized. Specifically, Shor has asserted that rapport (or archaic involvement) is one of three major factors that mediates hypnotic response, arguing that the hypnotist is infused with importance to the extent that the hypnotized subject has a special wish to please, the core of the subject's personality being bound up in the relationship that is formed with the hypnotist. Sheehan (1971, 1980) studied the implications of Shor's theorising and found strong support for this process as a primary determinant of hypnotic response. Of particular significance for the clinical relevance of hypnosis was the finding that as rapport diminished between the hypnotist and subject, susceptible

subjects in hypnosis were appreciably less inclined to do as the hypnotist wanted (Sheehan, 1980). If this finding can be generalized to the pseudomemory test situation, then pseudomemory might be expected to be less under reduced conditions of rapport when the relationship between hypnotist and subject is appreciably reduced or has broken down.

Generality of Findings

With these specific findings on pseudomemory aside, evidence across multiple methodologies investigating memory distortion indicates sporadic effects for state instruction, but very reliable effects for level of susceptibility, and some evidence of an interaction between state instruction and aptitude for hypnosis. The effects are quite pervasive for pseudomemory, for instance, across different experiments using the same paradigm and the same basic sets of procedures. Table 4.1 sets out the major inferences from the literature reviewed across different paradigms and illustrates how some quite specific conclusions evidenced from pseudomemory do generalize to other kinds of memory reporting as well (see Sheehan, 1994).

For instance, it is clear across paradigms that hypnosis provides no guarantee to assessing veracity. Although hypnosis is not inherently distorting, it can easily lead to falsification, error and confabulation. Hypnosis is likely to produce more information, but it is not possible to determine in hypnosis, without later independent verification, which facts being recalled are true. Additional facts recalled, however, may be useful clinically and forensically. The act of reporting, separate to the accuracy of what is remembered, is typically one in which the hypnotized person is confident, but confidence (both in hypnosis and in the waking state) should in no way be taken as a reliable indicator of accurate memory. Overall, a subject's level of hypnotic skill is a powerful determinant of the hypnotic creation of memory, and hypnotizability often (in pseudomemory, at least) interacts with the use of hypnotic instruction.

Past data clearly indicate that phenomena involve a mix of mediating processes. Looking at the general program of work on memory in the hypnotic literature as

Table 4.1. Major inferences from experimental data drawn on the association between memory and hypnosis

-
- No reliable memory enhancement effects occur either within single paradigms or across them
 - Memory distortion effects are not unique to hypnosis
 - A number of variables exist (adhering to context) that are influential in determining effects
 - Patterns of effects depend on the means by which false information is communicated in the test situation
 - Hypnotic skill is especially influential across different methodologies
 - Confidence, in particular, is influential across paradigms with distorted memories frequently being reported confidently
-

Source: Adapted from Sheehan (1994).

a whole, level of suggestibility, type of memory test, and stimulus pull are all necessary, though not sufficient, factors in determining the occurrence of hypnotically induced memory distortion.

There are several theoretical implications of such findings for the role of hypnosis in its association with memory. First, the research reported as a whole does not determine whether hypnosis *per se* was responsible for memory distortion effects observed among hypnotic subjects, but data are nevertheless consistent with the position that contextual variables are important determinants of the strength of effects that are created in hypnosis for highly susceptible subjects.

In highlighting the particular relevance of contextual variables, the implication can also be drawn that clinical memory reporting does not necessarily involve (indeed, often may not) genuine memory distortion. To the extent that genuine memory distortion would not be expected to be reversed by the influence of interpersonal factors, one implication of the evidence is that phenomena (for some subjects at least) more likely reflect goal-directed performance which is motivated by an intent to please the hypnotist. Far from being an example of behavioural conformity, however, such may signify genuine hypnotic effects, albeit not ones that necessarily reflect durable impairment of memory. There are major theoretical implications of these data that perhaps deserve emphasis. One is that hypnotically induced pseudomemory may well be a particular instance of posthypnotic responding. Memory distortion, for example, occurs in a postinduction setting that is clearly related to hypnosis.

On the basis of any of the experiments discussed here it would be difficult to argue that hypnosis provides a unique environment for special memory effects to manifest themselves. The assertion that memories can, under some circumstances, be altered or even changed completely is a serious one, especially when viewed in the forensic context (see Orne, 1979). Countenancing the possibility of serious distortion in the memories that are reported is a notion that may not rest easily with the general public and that is one reason why the accomplishment of systematic empirical work in the area is so important.

RECOVERED MEMORIES

One of the key contemporary questions or issues in relation to memory and hypnosis, is that of recovered memories. This topic is pursued in greater detail in chapter 8 of this book. Such is the relevance of this topic to the relationship of memory to hypnosis that it is pursued here to illustrate the complexity of the many factors affecting the association between memory and hypnosis.

Evidence on Recovered Memories

Returning to the opening remarks of this chapter, about memory being a constructive and reconstructive process, there are some important implications for the

nature of memory. What is remembered about an event is shaped by what was observed of that event, by conditions prevailing during attempts to remember, and by events occurring between the observation and the attempted remembering. It is essential therefore to recognize that memories can be altered, deleted, and created by events that occur during and after the time of encoding, during the period of storage, and during attempts at retrieval.

Repression and dissociation are key processes in some theories and particular approaches to therapy. According to these theories, memories of traumatic events may be blocked out unconsciously and this leads to a person having no memory of the events. However, memories of traumatic events may become accessible at some later time. It is important to recognize that the scientific evidence does not allow precise statements to be made about a definite relationship between trauma and memory (McConkey & Sheehan, 1995). The evidence tells us more that memories reported spontaneously or following the use of special procedures in therapy may be accurate, inaccurate, fabricated, or a mixture of these. Belief can often be strong but it is not the yardstick of veracity; and neither is the level of detail diagnostic of the truth of the recollections.

We know that sexual and/or physical abuse against children and adults is destructive of mental health, self-esteem and personal relationships. It is a fact also that reports of abuse long after the events are reported to have occurred are difficult to prove or disprove in the majority of cases. Independent corroboration is for the most part impossible. It is therefore essential that clinicians exercise special care in dealing with clients, their family members, and the wider community when allegations of past abuse are made.

Looking summarily at the evidence, there is increasing testimony now that there are individuals entering therapy with no specific recollection of incest or molestation who, during the course of therapy, uncover detailed recollections of repeated sexual abuse by family members. Many of these people believe their recovered memories are veridical, and have taken legal action on the basis of these memories which have sometimes been recovered through hypnosis. There is now full-scale debate about the issues in the scientific, professional, and mass-market literature.

Serious questions exist in the literature about the validity of recovered memories (see research by Loftus and her associates Loftus & Ketcham, 1994, for example). Major issues at stake include the validity of repression as a psychological mechanism, where there is substantial evidence that people can be very confident about the accuracy of their memories of past events even when those memories are wrong. Neisser's work with Nicole Harsch (Neisser & Harsch, 1992; see also Neisser, 1993) on the Challenger space shuttle disaster compellingly illustrates that memory for emotionally charged events is widely inaccurate, despite the conviction people might hold about these events. That work convincingly demonstrates that personally memorable events occurring in the past are often not what they seem and can be entirely misleading in the manner in which they are reported. Memories of

distant events, and particularly memories of early childhood, appear to be very susceptible to distortion and error. Further, it is the case that many victims of traumatic events do not repress events, but remember them and often report uncontrollable, intrusive memories about them. What then distinguishes for traumatized people, memories that can be retrieved (if sufficient effort is made), from memories that are seemingly permanently blocked (despite efforts at retrieval)? Evidence reported by Lindsay & Read (1994), for example, implies that complete forgetting of childhood sexual abuse, whether through repression, dissociation, or normal forgetting, never actually occurs; rather, necessary caution is advocated in assuming any particular incidence rate for amnesia and in accepting or rejecting the recovered memories of an individual. As Loftus and her associates claim, although sexual abuse may be tragically common, the emerging culture of unearthing traumatic repressed memories may be creating as many problems as it is claimed to be solving.

The term ‘Recovered Memory Therapy’ (the relevant experimental evidence is discussed in detail in chapter 8) profiles a form of therapy that does not formally exist. As a term it really refers to the recovery for therapeutic purposes of repressed memories of sexual abuse, such memories often being associated with reported satanic rituals and manifestations of Multiple Personality Disorder. It is a label that essentially has come to denote poor practice across a range of therapies, forgotten memories being the natural target of many different modes of treatment.

A forgotten instance of abuse in a history of abuse is not necessarily evidence of repression at work, and a number of issues are implicated: memories may be avoided, not just remain temporarily inaccessible, and some people may be more successful than others in that process of avoidance. Equally, there are reports in therapy that can be trusted and reports which cannot. The professional’s problem is to know which is which and we have no precise way of making that discrimination—a problem that is exaggerated in its significance when many of us accept routinely that the important matter in therapy is the client’s personal account of what has happened and what he or she is feeling about that now.

Therapy certainly can facilitate access to memories and produces memory reports, but it is also a mode of influence that inevitably transmits specific cues and suggestions about what is fitting, wanted or appropriate to report. Therapy (like other influence techniques) can produce significant memory distortion while *at the same time* fresh memories can be retrieved that are true and reported. The essential problem is that we have no easy guarantee of the veracity of verbal reports offered in therapy, and past emotional events can rarely be corroborated independently to establish their truth value.

Because of the risks of suggestion and the many possibilities of distortion, special professional obligations exist when the memories being explored in therapy are associated with possible past abuse. This leads one to a major matter for consideration—the need for guidelines for practice.

Proper Professional Practice

Guidelines are now in place relating to the reporting of recovered memories. They have been accepted by the Australian Psychological Society and have been used in the conduct of actual cases that have come to a conclusion.

Essentially, in summary of them, it is important to: obtain informed consent regarding the therapeutic procedures; record intact memories at the beginning of therapy; be familiar with research in memory (and hypnosis, if used); clarify that the client is responsible for the reported accuracy of memories and not the therapist; and be aware of possible biases regarding the accuracy of recovered memories of traumatic events.

Conclusion

Special concluding comment is needed on the complexity of what one is addressing here in the light of the comments that have been made. The level of that complexity can be prodigious.

Consider, for a moment, a man who remembers in therapy that he was abused sexually and recovers that recollection in therapy. His memory may be genuinely very difficult to retrieve. The events themselves, however, may have taken place in a state of normal or dissociated consciousness. Events that were encoded in an altered state of consciousness may be especially difficult to retrieve. If they are not, there are enormously strong motivations that exist for that person not to want to recall them.

Intervening between the original trauma and therapy is often a lifespan of experiences and other recollections that return to this chapter's opening comments on memory. The person has been exposed to a myriad of events, suggestions and experiences which have the potential to reshape and later correct recollections of what has, in fact, previously occurred. In therapy there may be a grain of truth, as it were, in what is eventually remembered, but the facts could well be distorted, reshaped, embellished or confabulated. What occurs makes eventual reporting far from the absolute truth.

Into the act of retrieval comes a therapist, years later, who in the task of interrogating (albeit supportively) is unwittingly influential in altering further recollections of those past events. Those events are then explored in a context where there are implicit or explicit cues about what should be remembered. That suggestion will occur is incontrovertible. And it is for this reason that guidelines for proper professional practice must be adopted, understood and practised.

SOME GENERAL CLINICAL CONSIDERATIONS RELATING TO MEMORY

In the application of hypnosis, there are general considerations that must be respected and these relate primarily to locating the correct balance between

technical and clinical concerns. As argued elsewhere (see McConkey & Sheehan, 1995), this is often a matter of professional judgement and such a judgement must be guided by familiarity with relevant ethical principles and the application of professional competency.

Consider, for a moment, two specific instances, one in the clinical setting and one in the forensic setting, where the issue of memory accuracy is often of paramount importance.

In clinical practice, hypnosis typically relates to a range of applications which can involve major issues for practitioners when hypnosis is used in a therapeutic way. Factors requiring attention relate to the perceived association between emotion and recall in hypnosis, the implication of falsifications occurring in hypnosis, the possibility that confirmation or suggestions of abuse may be inadvertently communicated to the client, and interpretations of the 'evidence' of a session being drawn which could be inconsistent with scientific data. Clinical concern can be wider than the pursuit of client 'improvement.'

In other settings, such as the forensic one, similar factors are involved. They primarily relate to the choice of the person to be hypnotized, the role of emotion in recall (again), the possibility of deception, and the civil rights of the person being hypnotized. Each of these factors is relevant to both settings but takes on a particular appearance in different social contexts. The role of emotion is distinctly important in the forensic setting, for instance, where the welfare of a client (the person being hypnotized) can be threatened by the forensic procedures the practitioner adopts. A person who is severely distressed at the point of retrieving (possibly) relevant information, for instance, raises the problem of whether further stress is justified to retrieve more information that may or may not have a useful legal purpose.

These general professional considerations are nearly always relevant, but have particular relevance to some cases. Legitimate questions can often be raised as to whether the use of hypnosis has a timely investigative purpose and where the balance of technical versus clinical concerns is critical. Decisions to proceed to explore the association between hypnosis and memory can often be quite difficult, and if hypnosis is used clear support for moving ahead must be reliably evident or forthcoming.

Where the association between memory and hypnosis is concerned, a special consideration (both technically and clinically) is the reliability of the memory reporting. In a technical sense, there are specific procedures which can aim to determine whether reporting is reliable (independent checking of memory events reported in hypnosis, for example), but clinical and professional factors are also relevant. Where personal reputations can be damaged, for instance, by a recovered recollection of sexual abuse the practitioner must make every effort to ensure that the memory retrieved is accurate. The future welfare of the client concerned and that of others accused of the act of abusing, for example, depends on the strict enforcement of ethical guidelines for recovering the memory in question. For

explication of these, see the Chapter 7 in this book (and also, McConkey & Sheehan, 1995).

CONCLUSION

As argued above (see also Sheehan & McConkey, 1993), hypnosis is not communication in the usual sense of the word. It frequently involves a close interpersonal relationship, and can involve radical changes in ways of thinking which can occur in a range of different social contexts—including therapy. Hypnotized people do not in general critically analyze incoming detailed information (Kihlstrom, 1985), and this has major implications for the use of hypnosis in the clinical and forensic setting. Furthermore, beliefs of the hypnotist and of clients reliably influence the manner in which hypnotized people respond. Looking at memory, in particular, although hypnosis may increase the volume of material recalled, there is no dependable enhancement in the accuracy (vs inaccuracy) of the information retrieved. Demonstrations of increases in the accuracy of remembered material, are, in fact, relatively rare (e.g., Crawford & Allen, 1983; McConkey & Kinoshita, 1988; Stager & Lundy, 1985).

In this chapter, two sample phenomena have been analyzed and general conclusions drawn about the association between hypnosis and memory.

Clinically speaking, in relation to memory and its association with hypnosis, if the decision has been made to proceed with hypnosis then it must be assumed by the practitioner that benefits are likely to occur. Such benefits may be the promise of therapeutic cure, events that will take the form of refreshed memory on the part of the client which can be checked independently, or the determination of the state of consciousness of an involved participant when some event took place. A whole complex set of motivational factors comes into play once the decision to use hypnosis has been taken and the link with the relevant laboratory evidence has been made. There may be, if the person is truly hypnotized, motivational factors associated with hypnosis, such as a desire to please the hypnotist; but there may be other extrinsic motivational factors at work as well that are related to the context in which hypnosis is embedded. In clinical hypnosis, for example, these cues are often salient and powerfully motivational in character. In the case of forensic hypnosis, victims may in some cases have reasons for wanting innocent people convicted, and this is vividly illustrated in the cases discussed by Orne (1979). Suspects may have a very strong need to demonstrate their innocence (or guilt) and a large number of motivating forces can be present. It is probably very rare in the clinical or forensic setting to find any participant who can lay claim to be emotionally neutral.

The question of hypnotizing a person who is involved in an actual memory event (to be later retrieved) has many potential difficulties. The laboratory evidence tells us that aptitude for trance is clearly a highly relevant variable, state instruction may

be relevant, and lying is a possibility. Some theorists believe that it is possible to lie while under hypnosis while others are more cautious about making a definite judgement in the matter.

Emotional involvement is clearly implicated in analyzing the association of memory and hypnosis, and one major issue which is raised in this chapter is how emotion can be handled in real-life settings when recovered memories are reported. Memories that are recovered are often given spontaneously and when they are associated with hypnosis they occur in a context where therapeutic questions may also be suggestive. These memories can be accurate, in error, or show a combination of both; and confidence in the memories, and the level of affect associated with them, offers no real proof of literal accuracy.

Situations that attempt to retrieve past memories obviously require complete ethical response. There are general clinical considerations that must be respected in the conduct of hypnosis. And these considerations can only be met if the appropriate guidelines are followed.

REFERENCES

- Annon, J. S. (1988). Detection of deception and search for truth: A proposed model with particular reference to the witness, the victim, and the defendant. *Forensic Reports*, **1**, 303–360.
- Barnier, A. & McConkey, K. M. (1993). Reports of real and false memories: The relevance of hypnosis, hypnotizability, and context of memory test. *J. Abnorm. Psychol.*, **3**, 521–527.
- Ceci, S. J., Ross, D. F. & Toglia, M. P. (1987). Suggestibility of children's memory: Psycholegal implications. *J. Exp. Psychol: General*, **116**, 38–49.
- Crawford, H. J. & Allen, S. N. (1983). Enhanced visual memory during hypnosis as mediated by hypnotic responsiveness and cognitive strategies. *J. Exp. Psychol: General*, **112**, 662–685.
- Diamond, M. J. (1988). Assessing archaic involvement: Toward unravelling the mystery of Erickson's hypnosis. *Int. J. Clin. Exp. Hypn.*, **36**, 141–156.
- Echabe, A. E. & Rovia, D. P. (1989). Social representations and memory: The case of AIDS. *European J. Soc. Psychol.*, **19**, 543–551.
- Gfeller, J. D., Lynn, S. J. & Pribble, W. E. (1987). Enhancing hypnotic susceptibility: Interpersonal and rapport factors. *J. Person. Soc. Psychol.*, **52**, 586–595.
- Gill, M. M. & Brenman, M. (1961). *Hypnosis and Related States*. New York: International Universities Press.
- Kihlstrom, J. E. (1985). Hypnosis. *Ann. Rev. Psychol.*, **36**, 385–418.
- Labelle L., Laurence, J. R., Nadon, R. & Perry, C. W. (1990). Hypnotizability, preference for an imagic cognitive style, and memory creation in hypnosis. *J. Abnorm. Psychol.*, **99**, 222–228.
- Lindsay, D. S. & Read, J. D. (1994). Psychotherapy and memories of childhood sexual abuse: A cognitive perspective. *Appl. Cog. Psychol.*, **8**, 281–338.
- Loftus, E. F. & Ketcham, K. (1994). *The Myth of Repressed Memory: False Memories and Allegations of Sexual Abuse*. New York: St. Martin's Press.

- Lynn, S. J. & Rhue, J. W. (Eds) (1991). *Theories of Hypnosis: Current Models and Perspectives*. New York: Guilford Press.
- Lynn, S. J., Weekes, J. R. & Milano, M. (1989). Reality versus suggestions: Pseudomemory in hypnotizable and simulating subjects. *J. Abnorm. Psychol.*, **98**, 137–144.
- Matheson, G., Shue, K. L. & Bart, C. (1989). A validation study of a short-form Hypnotic-Experience Questionnaire and its relationship to hypnotizability. *Am. J. Clin. Hypn.*, **32**, 17–26.
- McConkey, K. M. & Kinoshita, S. (1988). The influence of hypnosis on memory after one day and one week. *Br. J. Exp. Clin. Hypn.*, **3**, 162–166.
- McConkey, K. M., Labelle, L., Bibb, B. C. & Bryant, R. A. (1990). Hypnosis and suggested pseudomemory: The relevance of test context. *Aust. J. Psychol.*, **42**, 197–206.
- McConkey, K. M. & Sheehan, P. W. (1995). *Hypnosis, Memory, and Behaviour in Criminal Investigation*. New York: Guilford Press.
- Neisser, U. (1993). Memory with a grain of salt. Paper presented at the False Memory Syndrome Foundation Conference: Memory and Reality: Emerging Crisis, Valley Forge, PA.
- Neisser, U. & Harsch, N. (1992). Phantom flash bulbs: False recollections of hearing the news about Challenger. In E. Winograd & U. Neisser (Eds), *Affect and Accuracy in Recall: Studies of 'Flash Bulb' Memories* (pp. 9–31). New York: Cambridge University Press.
- Orne, M. T. (1959). The nature of hypnosis: Artifact and essence. *J. Abnorm. Soc. Psychol.*, **58**, 277–299.
- Orne, M. T. (1979). The use and misuse of hypnosis in court. *Int. J. Clin. Exp. Hypn.*, **27**, 311–341.
- Sarbin, T. R. & Coe, W. C. (1972). *Hypnosis: A Social Psychological Analysis of Influence Communication*. New York: Holt, Rinehart & Winston.
- Sheehan, P. W. (1971). Countering preconceptions about hypnosis: An objective index of involvement with the hypnotist. *J. Abnorm. Psychol. Monograph*, **78**, 299–322.
- Sheehan, P. W. (1980). Factors influencing rapport in hypnosis. *J. Abnorm. Psychol.*, **89**, 263–281.
- Sheehan, P. W. (1994). The Effects of Asking Leading Questions in Hypnosis. Chapter 6 in C. D. Burrows & R. Stanley, (Eds), *Contemporary International Hypnosis* (pp. 55–62). Chichester: Wiley.
- Sheehan, P. W. & McConkey, K. M. (1988). Lying in hypnosis: A conceptual analysis of the possibilities. *Aust. J. Clin. Exp. Hypn.*, **16**, 1–9.
- Sheehan, P. W. & McConkey, K. M. (1993). Forensic hypnosis: The application of ethical guidelines. In J. W. Rhue, S. J. Lynn, & I. Kirsch (Eds), *Handbook of Clinical Hypnosis* (pp. 719–738). Washington, DC: American Psychological Association.
- Sheehan, P. W., Statham, D. & Jamieson, G. A. (1991). Pseudomemory effects over time in the hypnotic setting. *J. Abnorm. Psychol.*, **100**, 39–44.
- Shor, R. E. (1962). Three dimensions of hypnotic depth. *Int. J. Clin. Exp. Hypn.*, **10**, 23–28.
- Shor, R. E. (1979). The fundamental problem in hypnosis research as viewed from historic perspectives. In E. Fromm & R. E. Shor (Eds), *Hypnosis: Developments in Research and New Perspectives* (pp. 15–41). New York: Aldine.
- Spanos, N. P., Gwynn, M. I., Comer, S. L., Baltruweit, W. J. & de Groh, M. (1989). Are hypnotically induced pseudomemories resistant to cross-examination? *Law and Human Behavior*, **13**, 271–289.
- Spanos, N. P. & McClean, J. (1986). Hypnotically created pseudomemories: Memory distortions or reporting biases? *Br. J. Exp. Clin. Hypn.*, **3**, 155–159.
- Stager, G. L. & Lundy, R. M. (1985). Hypnosis and the learning and recall of visually presented material. *Int. J. Clin. Exp. Hypn.*, **33**, 27–39.

Neuropsychophysiology of Hypnosis: Towards an Understanding of How Hypnotic Interventions Work

HELEN J. CRAWFORD

Virginia Polytechnic Institute and State University, USA

No longer can one hypothesize hypnosis to be a right-hemisphere task, a commonly espoused theory popular since the 1970s (e.g., Graham, 1977; MacLeod-Morgan, 1982), or that highly hypnotizable individuals exhibit greater right hemisphericity (Gur & Gur, 1974). Rather there is growing evidence (Crawford, 1994a; Crawford & Gruzelier, 1992; Gruzelier, 1988) that hypnotic phenomena selectively involve cortical and subcortical processes of either hemisphere, dependent upon the nature of the task, as well as shifts in attention and 'disattention' processes . . . Thus, hypnosis instructions 'can be seen to trigger a process that alters brain functional organization—a process that at the same time is dependent on individual differences in existing functional dynamics of the central nervous system.' (Crawford & Gruzelier, 1992, p. 265; Crawford, 1996, p. 254)

During the transition from the 1990s, labeled the 'Decade of the Brain,' into the twenty-first century, new discoveries about the neuropsychophysiological bases of hypnosis are being made. The excitement is high as interdisciplinary approaches address old and new questions about psychological and physiological phenomena with ever-refined electrophysiological and neuroimaging techniques. Hypnosis and its various phenomena, should have neuropsychophysiological correlates if one takes to heart a quote from Miller, Galanter and Pribram's (1960) seminal book, *Plans and the Structure of Behavior*: 'There is good evidence for the age-old belief that the brain has something to do with . . . mind' (p. 196).

The present chapter looks back and forth between the phenomena of hypnosis and neurophysiology in a quest to help understand how and when hypnotic interventions work effectively in clinical and medical settings. (Due to limited

space, only those studies of greater relevance to this clinical handbook of hypnosis are addressed herein. The reader is referred to other reviews: Crawford, 1994a,b, 1996; Crawford & Gruzelier, 1992; Crawford, Horton, McClain-Furmanski & Vendemia, 1998; Crawford, Knebel, Vendemia & Horton, 1999; Gruzelier, 1988; Perlini & Spanos, 1991; Perlini, Spanos & Jones, 1996; Spiegel, 1991; and Spiegel & Vermuten, 1994). While hypnotic susceptibility level is sometimes considered irrelevant in a clinical context, it has been shown to be a highly relevant moderator in many clinical and neurophysiological studies and is thus considered within the chapter. It is hoped that knowledge of these neurophysiological findings will help the practicing clinician to communicate to the medical and psychological communities, as well as to the patient and his/her family, as to how hypnosis works as an important therapeutic technique in behavioral medicine and psychotherapy. Furthermore, evidence presented herein supports hypnosis being an integral part in the development of medical treatment plans for pain management.

NEUROPHYSIOLOGY OF THE HYPNOTIC STATE: IT TAKES EFFORT TO BE HYPNOTIZED

Hypnosis involves an amplification of focused attention either towards or away from an internal or external event (e.g., Hilgard, 1965, 1986; Krippner & Bindler, 1974). Since the nineteenth century hypnotically responsive persons commonly report profound physical relaxation (for exceptions, see Bányai & Hilgard, 1976) and alterations in perception following a hypnotic induction. In this physically relaxed state, they report their experiences as being more involuntary and effortless (e.g., Bowers, 1982–83), yet, somewhat paradoxically, at the same time more intense and involving than in a nonhypnotic condition. Such paradoxical reports suggest a dissociation between awareness of attentional effort (perceived workload) and perceptual awarenesses. If we view hypnotizable persons as active and ‘creative problem-solving agents’ (Lynn & Sivec, 1992) who can draw upon their abilities (including absorption, imagery, giving up of reality testing and focused and sustained attention) during hypnosis, then the paradox is eliminated. Contrary to common conceptions in the clinical and experimental literature, recent EEG and cerebral metabolism research supports the view that hypnosis may take cognitive effort that demands further allocations of attention and disattention (Crawford, 1994a,b; Crawford & Gruzelier, 1992; Hilgard, 1986).

EEG DIFFERENCES BETWEEN LOW AND HIGHLY HYPNOTIZABLE PERSONS

In studies of EEG brain wave activity, a robust finding is that theta power (3–7 Hz), hypothesized to be associated with focused attention (e.g., Schacter, 1977), is positively related to hypnotic susceptibility (e.g., Akpınar, Ulett & Itil, 1971;

Crawford, 1990; Galbraith, London, Leibovitz, Cooper & Hart, 1970; Graffin, Ray & Lundy, 1995; Sabourin, Cutcomb, Crawford & Pribram, 1990; Tebecis, Provins, Farnbach & Pentony, 1975; Ulett, Akpinar & Itil, 1972a,b; for review, see Crawford & Gruzelier, 1992). In a nonhypnotic state, highly hypnotizable persons (referred to as 'highs') are likely to generate more theta power than the low hypnotizable persons ('lows'). This is supportive of behavioral research that finds highs have greater extremely focused and sustained attentional abilities, as measured by the Tellegen Absorption Scale (e.g., Crawford, Brown & Moon, 1993; Tellegen & Atkinson 1974; for review, see Roche & McConkey 1990) or the Differential Attentional Processes Inventory (Crawford, Brown & Moon, 1993), and by performance measures involving attentional processing. Highs have shown superior performance on attentional tasks such as visual search (Wallace & Patterson, 1984), gestalt closure (Crawford, 1981; Wallace, 1990), reversible figures and visual illusions (e.g., Crawford, Brown & Moon, 1993, Wallace, 1986, 1988) and other attentional tasks (for review, see Crawford, 1994b).

As individuals enter into hypnosis, EEG theta power often increases, sometimes in both lows and highs. Highs continue to generate more theta than lows in various brain regions (e.g., Crawford, 1990; Graffin, Ray & Lundy, 1995; Sabourin et al., 1990). Sabourin et al. (1990) noted theta power increases in *both* hemispheres of frontal, central and occipital regions during hypnotic induction and a subsequent series of standardized hypnotic suggestions provided by the Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer & Hilgard, 1962). Graffin, Ray and Lundy (1995) reported that during an induction theta power increased in the posterior areas, while during a subsequent passive hypnotic condition theta decreased for highs. Within hypnosis, Crawford (1990) found highly hypnotizable persons generated significantly more high theta (5.5–7.5 Hz) than did lows at frontal, temporal, parietal and occipital regions. Highs showed asymmetrical EEG high theta power shifts, particularly in the temporal region, during cold pressor pain when focusing on pain (left hemisphere dominant) or experiencing hypnotic analgesia (right hemisphere dominant), suggesting differential involvement of possibly the hippocampal system from which theta may be generated, particularly during vigilant conditions (e.g., Crowne, Konow, Drake & Pribram, 1972; Michel, Lehmann, Henggeler & Brandeis, 1992).

The so-called '40-Hz band' is a high frequency, low amplitude EEG rhythm centered around 40 Hz that has been found to be a covariate of focused arousal (e.g., Sheer, 1976). It appears to be from localized cortical neurons that receive thalamic afferents (Steriade, Gloor, Llonas, Lopes da Silva & Mesulam, 1990) and has 'been taken to be indicative of a mechanism linking or temporally coordinating the distributed cortical representation of stimuli' (Barlow, 1993, p. 165). Akpiner, Ulett and Itil (1971) reported more 40–50 Hz-activity during nonhypnotic rest and reaction time tasks in highs than lows. De Pascalis and Penna (1990) found highs showed greater right-hemispheric 40-Hz production during hypnosis, while lows showed reduced activity in both hemispheres. In line with the hypothesis that highs

become more deeply involved in their emotional states, highs, but not lows, showed greater 40-Hz density at both left and right parieto-occipito-temporal cortex junctions during emotional states compared to rest in both nonhypnotic (De Pascalis, Marucci, Penna & Pessa, 1987) and hypnotic (De Pascalis, Marucci & Penna, 1989) conditions. Using mean magnitude 40-Hz, Crawford, Clarke and Kitner-Triolo (1996) did not find differences between lows and highs during self-generated happy and sad emotions. Interestingly, Schnyer and Allen (1995) found highs who experienced recognition amnesia generated significantly more 40-Hz power in preinduction but not postinduction conditions than highs not experiencing recognition amnesia or lows.

GREATER HEMISPHERIC ASYMMETRIES AMONG HIGHS

High hypnotizable persons have a greater disposition for more sustained attention and deeper involvement. In addition, they appear to have greater cognitive flexibility, the ability to shift from one strategy to another and from one alternative state of consciousness to another (e.g., Crawford, 1989; Crawford & Allen, 1983; Crawford & Gruzelier, 1992). Similarly, at a neurophysiological level, highs often demonstrate greater EEG hemispheric specificity in hypnotic and nonhypnotic conditions.

MacLeod-Morgan and Lack (1982) noted highs shifted in EEG alpha power hemispheric dominance when performing analytical and nonanalytical tasks while lows did not. Greater hemispheric specificity in certain EEG frequency bands, in nonhypnosis and hypnosis conditions, among highs has been noted elsewhere (e.g., Crawford, 1989; Crawford, Clarke & Kitner-Triolo, 1996; De Pascalis & Palumbo, 1986; Mészáros & Bányai, 1978; Mészáros, Crawford, Szabó, Nagy-Kovács & Révész, 1989; Sabourin et al., 1990).

Hypnosis facilitates access to and involvement in emotional material and for this reason is often seen as a facilitator of hypnotherapy. Quite relevant to hypnotherapy, highs generally report more intense affect when viewing violent films (Crowson, Conroy & Chester, 1991) and experiencing positive and negative emotions (Crawford, 1989; Crawford, Clarke & Kitner-Triolo, 1996; Crawford, Kapelis & Harrison, 1995) during nonhypnotic conditions. During hypnosis, possibly due to greater focused attention and decreased generalized reality orientation, highs report enhanced intensity and vividness of emotionally laden imagery (e.g., Crawford, Clarke & Kitner-Triolo, 1996). This may help explain why hypnoprojective and abreactive techniques (e.g., Brown & Fromm, 1986; Watkins, 1993), often utilized in therapy to elicit, titrate and metabolize traumatic material, can be useful for some patients. Furthermore, it may help us understand why desensitization techniques are often facilitated by hypnosis.

At a neurophysiological level, when presented with emotional stimuli (Crawford, Kapelis & Harrison, 1995), or asked to generate emotional memories (Crawford, Clarke & Kitner-Triolo, 1996), highs show, respectively, greater visual field and

EEG hemispheric differences in both hypnotic and nonhypnotic conditions. Highs were significantly faster than lows in recognizing angry and happy affect in the discrimination of faces presented to the left or right visual field (Crawford, Kapelis & Harrison, 1995). For highs only, angry faces were identified faster when presented to the right (left visual field) than left (right visual field) hemispheres, while lows showed no significant asymmetries. During self-generated happy and sad emotions in hypnosis and nonhypnosis conditions, in comparison to lows, highs showed significantly greater hemispheric asymmetries (greater right than left) in the parietal region, in high theta, high alpha and beta activity between 16 and 25 Hz, all frequency bands that are associated with sustained attentional processing (Crawford, Clarke & Kitner-Triolo, 1996). Taken together, these two studies suggest that highs have more focused and sustained attention. Greater right parietal activity, as indicated by faster reaction times and more EEG activity, is suggestive of greater emotional arousal (e.g., Heller, 1993) and/or sustained attention among the highs.

FRONTAL LOBE ACTIVITY AND HYPNOTIZABILITY

Our work suggests that highly hypnotizable persons have more effective and flexible frontal attentional and inhibitory systems (Crawford 1994a,b; Crawford, Brown & Moon, 1993; Crawford & Gruzelier, 1992; Gruzelier & Warren, 1993). Consistent with the above discussed research showing a relationship between hypnotizability and sustained attentional processing, an intriguing neurochemical study by Spiegel and King (1992) suggests that frontal lobe activation is related to hypnotizability. In 26 male psychiatric inpatients and 7 normal male controls, levels of the dopamine metabolite homovanillic acid were assessed in the cerebrospinal fluid. While preliminary in nature, the results suggested that dopamine activity, possibly involving the frontal lobes, was necessary for hypnotic concentration.

Gruzelier and Brow (1985) found highs showed fewer orienting responses and increased habituation to relevant auditory clicks during hypnosis, suggesting increased activity in frontal inhibitory action (Gruzelier, 1990). Gruzelier and his colleagues (Gruzelier, 1990; Gruzelier, 1999; Gruzelier & Warren, 1993; for review, see Crawford & Gruzelier, 1992) proposed that during the hypnotic induction there is an engagement of the left frontal attentional system and then a significant decrease of left frontal involvement with a shift to other regions of the brain, dependent upon the hypnotic task involved. Our hypnotic analgesia work reviewed below also strongly implicates the active involvement of the frontal inhibitory processing system.

CEREBRAL METABOLISM DIFFERENCES BETWEEN LOW AND HIGHLY HYPNOTIZABLE PERSONS

Only recently have we been able to begin to explore cortical and subcortical processes during hypnosis with neuroimaging techniques such as regional cerebral

blood flow (rCBF), positron emission tomography (PET), single photon emission computer tomography (SPECT) and functional Magnetic Resonance Imaging (fMRI).

Consistently, regional cerebral metabolism studies [unlike EEG studies reviewed above] have reported no waking differences between low and highly hypnotizable persons. A robust finding has been that highs show increases in cerebral metabolism in certain brain regions during hypnosis (for reviews, see Crawford, 1994a,b, 1996; Crawford & Gruzelier, 1992). This has been found in normally healthy (Crawford, Gur, Skolnick, Gur & Benson, 1993; De Benedittis & Longostreui, 1988; Meyer, Diehl, Ulrich & Meinig, 1989) and psychiatric (Walter, 1992; Halama, 1989, 1990) populations. Given that increased blood flow and metabolism may be associated with increased mental effort (Frith, 1991), these data suggest hypnosis may involve enhanced cognitive effort.

Among healthy individuals, De Benedittis and Longostreui (1988) found highs but not lows showed increases in brain metabolism during hypnosis. Using the xenon inhalation method, Crawford, Gur et al. (1993) found substantial increases in rCBF during hypnosis (rest; ischemic pain with and without suggested analgesia) in highs but not lows. During rest while reviewing past memories of a trip taken, fCBF enhancements in the anterior, parietal, temporal and temporo-posterior regions ranged from 13 to 28%, with the largest being in the bilateral temporal area in highs (unpublished data). Among hypnotically responsive individuals, Meyer et al. (1989) found global increases of rCBF in both hemispheres during hypnotically suggested arm levitation. An additional activation of the temporal centers was observed during acoustic attention. Under hypnotically narrowed consciousness focus, there was 'an unexplained deactivation of inferior temporal areas' (p. 48). Discussed in greater detail below, Crawford, Gur et al. (1993) found further rCBF enhancements of orbito-frontal and somatosensory regions during hypnotic analgesia among highs only.

Within a psychiatric population (16 neurotic, 1 epileptic) using SPECT, Halama (1989) reported a global blood flow increase during hypnosis, with those more deeply hypnotizable showing greater CBF increases than the less hypnotically responsive. During hypnosis 'a cortical "frontalization," takes place particularly in the right hemisphere and in higher areas (7 cm above the meato-orbito-level) more than in the deeper ones (4 cm above the meato-orbital-level)' (p. 19). Frontal region increases included the gyrus frontal, medial and inferior, as well as the superior and precentral gyrus regions. These are suggestive of greater involvement of the frontal attentional system during hypnosis. By contrast, there was a significant decrease in brain metabolism in the left hemisphere in the gyrus temporalis and inferior region, as well as in Brodmann areas (BA) 39 and 40.

Hypnotic instructions (i.e., inductions and suggestions) trigger a process that alters brain functional organization, a process that is moderated by hypnotic susceptibility level. No longer can we hypothesize hypnosis to be a right-hemisphere task, a commonly espoused theory popular since the 1970s (e.g.,

Graham, 1977; MacLeod-Morgan, 1982). The studies reviewed here suggest that hypnosis is much more dynamic, activating differentially regions in either the left or right hemispheres, or both hemispheres dependent upon the attentional, perceptual and cognitive processes involved. Since pain management is perhaps the most dramatic and clinically useful application of hypnosis, the neurophysiological evidence for hypnotic analgesia effects are examined in greater detail in the following section.

NEUROPHYSIOLOGICAL EVIDENCE FOR HYPNOTIC ANALGESIA EFFECTS

Hypnosis is one of the best documented behavioral interventions for controlling acute and chronic pain in adults and children (for reviews, see Barber & Adrian, 1982; Chaves, 1989, 1994; Crawford, 1994a, 1995a,b; Crawford, Knebel & Vendemia, 1998; Crawford, Knebel, Vendemia, Horton & Lamas, 1999; Evans, 1987; Evans & Rose, chapters 18a, 18b this volume; Ewin, chapter 19 this volume; Gardner & Olness, 1981; Hilgard & Hilgard, 1994; J. R. Hilgard & LeBaron, 1984). The reader is referred to two special issues (October 1997; January 1998) on 'Hypnosis in the Relief of Pain' in the *International Journal of Clinical and Experimental Hypnosis* (Chaves, Perry & Frankel, 1997, 1998). This section will address: (a) recent advances in the understanding of the neurophysiology of pain relevant to our understanding the effectiveness of hypnotic analgesia interventions; and (b) neurophysiological studies of hypnotic analgesia.

Pain is a multidimensional and multifaceted experience. Several models of pain processing (e.g., Melzack, 1992; Pribram, 1991; Price, 1988) differentiate between the sensory and affective aspects of pain. While the role of subcortical processes is well known, only recently have we begun to appreciate the role of the cerebral cortex in pain perception. Findings from PET (Casey, Minoshima, Berger, Koeppe, Morrow & Frey, 1994; Jones, Brown, Friston, Qi & Frackowiak, 1991; Talbot, Marrett, Evans, Meyer, Bushnell & Duncan, 1991), SPECT (Apkarian, Stea, Manglos, Szeverenyi, King & Thomas, 1992; Stea & Apkarian, 1992) & fMRI (Downs, Crawford et al., 1998; Crawford, Horton et al., 1998; Davis, Wood, Crawley & Mikulis, 1995; Davis, Taylor, Crawley, Wood & Mikulis, 1997) studies using painful heat or cold stimuli, have identified cortical and subcortical brain regions which seem likely to be involved in affective and sensory processing of pain.

Magnetoencephalographic (MEG) studies of electrical tooth stimulation (Hari, Kaukoranta, Reinikainen, Huopaniemie & Mauno, 1983) and electric finger shock (Howland, Wakai, Mjaanes, Balog & Cleeland, 1995) point to involvement of several cortical regions: S1 and SII regions traditionally associated with somatosensory processing, as well as frontal (frontal operculum) and parietal (posterior insula) regions associated with affective processing. Bromm and Chen (1995), using the brain electrical source analysis program with 31 EEG leads, found laser

evoked potentials in response to painful trigeminal nerve stimulation to have several generators: bilaterally in the secondary somatosensory areas of the trigeminal nerve system, in the frontal cortex probably related to attention and arousal processes & in a more central region (e.g., cingular gyrus) probably associated with perceptual activation and cognitive information processing.

Our first fMRI research (Downs et al., 1998) using stimulation of the left middle finger with a painful electrical stimulation found all participants showed activation of primary somatosensory S1 either unilaterally or bilaterally, supplementary motor area bilaterally and primary motor area bilaterally or right only. Posterocentral activation occurred inconsistently. Unilateral or bilateral activation occurred in superior and inferior parietal areas, precuneus and dorsolateral frontal cortex. Frontal pole activation was visible in some. All showed unilateral or bilateral activation in the cingulate cortex, although specific areas differed. Anterior and/or posterior insular, as well as thalamic, activity was observed in some participants. Thus, like prior research, we found a widespread neuronal network involving evaluative and sensory-discriminative pain was activated.

The anterior frontal cortex is known to gate or inhibit somatosensory input, operating at early stages of sensory processing on both cortical and subcortical structures, from 'the periphery through dorsal column nuclei and thalamus to the sensory cortex' (Yamaguchi & Knight, 1990, p. 281). Thus, the frontal region is a prime candidate to become involved during disattention and active inhibition of pain during successful hypnotic analgesia. Studies of dynamic changes in regional cerebral blood flow, EEG activity, somatosensory event-related potentials and even peripheral reflexes during hypnotic analgesia lend credence to the hypothesis that the frontal attention system is actively involved in the inhibition of incoming somatosensory information coming from the pain source during hypnotic analgesia and works by way of its connections with the thalamus and possibly other brain structures to regulate the perception of the intensity of pain (e.g., Crawford, 1994a,b; Crawford, Gur et al., 1993; Crawford, Knebel et al., 1996, 1997).

Using the ¹³³-xenon inhalation method during attention and hypnotic analgesia to ischemic pain applied to the arms, Crawford, Gur et al. (1993) found different rCBF activation patterns in low and high hypnotizable subjects. Using the subtractive technique, only highs showed further substantial increases in rCBF in the anterior frontal orbito-frontal and somatosensory regions during successful hypnotic analgesia. This was interpreted as being supportive of the view that hypnotic analgesia involves the supervisory, attentional control system (Hilgard, 1986) of the anterior frontal cortex in a topographically specific inhibitory feedback circuit that cooperates in the regulation of thalamocortical activities (e.g., Birbaumer, Elbert, Canavan & Rockstroh, 1990). It also suggests that mental effort occurred during the inhibition of painful stimuli. Thus, hypnotic analgesia and dissociation from pain requires higher cognitive processing and mental effort—and the involvement of the frontal attentional system.

Further research employing fMRI, PET and SPECT neuroimaging techniques

will permit us to understand how hypnotic analgesia affects both cortical and subcortical processes. For instance, the first fMRI study (Crawford et al., 1998; Crawford, Horton, Harrington, Hirsh-Downs, Fox, Daugherty & Downs, 2000) that examined hypnotic analgesia in highly hypnotizable individuals showed dramatic activation shifts between attend and hypnotic analgesia in response to noxious stimuli presented to the left middle finger. In the cingulate cortex, there was bilateral or right hemisphere activation during attend, whereas in hypnotic analgesia only left hemisphere activation remained. Among other findings, we also observed reductions of insular and shifts in thalamic activity during hypnotic analgesia.

Human pain responses have been successfully studied through the analysis of brain somatosensory event-related potentials (SEPs). Hypnotically suggested analgesia results in significant decreases in the later SEP components (100 msec or later after stimulus) at certain scalp leads using painful electrical (e.g., Crawford, 1994a; Crawford, Clarke & Kitner-Triolo, 1996; De Pascalis, Crawford & Marucci, 1992; Meszaros, Bányai & Greguss, 1978; Spiegel, Bierre & Rootenberg, 1989; but see Meier, Klucken, Soyka & Bromm, 1993), laser heat (e.g., Arendt-Nielsen, Zachariae & Bjerring, 1990; Zacharie & Bjerring, 1994) or tooth pulp (Sharav & Tal, 1989) stimulation. Earlier studies, often plagued by methodological flaws, provide mixed evidence (for reviews, see Crawford & Gruzelier, 1992; Spiegel, Bierre & Rootenberg, 1989).

Multiple intracranial electrodes temporarily implanted in the anterior cingulate cortex, amygdala, temporal cortex and parietal cortex of two patients undergoing evaluation and treatment of obsessive-compulsive disorder permitted Kropotov, Crawford & Polyakov (1997) to conduct a unique evaluation of pain processes. We investigated changes in SEPs accompanying electrical stimulations to the right finger during conditions of attention and hypnotically suggested analgesia. Only in the hypnotically responsive patient was reduced pain perception during suggested hypnotic analgesia accompanied by a significant reduction of the positive SEP component within the range of 120–140 msec. In the left anterior temporal cortex, a significant enhancement of the negative SEP component in the range of 210–260 msec was observed. Enhancement of the N200 component is thought to be indicative of increased active and controlled inhibitory processing. No significant changes were observed at the amygdala or at Fz. Rainville, Duncan, Price, Carrier and Bushnell (1997), using hypnotically suggested reduction of affective but sensory pain to cold pressor pain during PET recordings, reported a relationship between the degree of affective pain experienced and activation of the anterior cingulate cortex. Considered together, Crawford et al. (1998), Kropotov et al. (1997) and Rainville et al. (1997) demonstrate changes in the activation of the anterior cingulate during hypnotic analgesia, a region known to show increased activation during attention to pain (e.g., Bromm & Chen, 1995; Jones et al., 1991; Talbot et al., 1991).

In our laboratory, we evaluated SEPs in two populations: (a) normal college undergraduates who were either low or 'virtuoso' highs, the latter of whom could

completely eliminate all perception of pain or distress during cold pressor pain training with hypnotic analgesia (Crawford, 1995b; Crawford et al., 1996, 1997; in preparation); and (b) adults with enduring chronic low back pain who, as a group, were able to reduce their pain by 90% in cold pressor training with hypnotic analgesia (Crawford, Knebel, Kaplan et al., 1998). After training with cold pressor pain, subjects returned the next week for the SEP study. Blocks of 30 electrical stimuli were delivered to the left middle finger, the intensity of which was titrated to each subject to be rated as strongly painful but bearable (7–8 on 0–10 point scale). During hypnosis, an A-B-A design was employed: (a) normally attend to stimuli; (b) hypnotically suggested analgesia; and (c) normally attend to stimuli.

Among the college students, highs had a significantly higher P70 in the right anterior frontal (Fp1) and parietal regions during attend, yet during hypnotic analgesia there was a dramatic reduction of P70 only at the right anterior frontal region. During hypnotic analgesia, only highs showed significant reductions of P200 in central and parietal regions & of P300 in the central region. The N140 and N250, both possibly reflective of greater inhibitory processing, were enhanced during hypnotic analgesia.

The participants with chronic low back pain showed significant reductions in P200 (bilateral midfrontal and central and left parietal regions) and P300 (right midfrontal and central regions) during hypnotic analgesia. Furthermore, hypothesized inhibitory processing was evidenced by enhanced N140 in the anterior frontal region and by a pre-stimulus positive-ongoing contingent cortical potential at left anterior frontal (Fp1) region only during hypnotic analgesia. These findings suggest that two pain processes are affected by hypnotic analgesia: one dealing with the allocation of attention to pain (frontal attention system) and one dealing with the perception of the intensity of pain (frontal attention system working via connections with the thalamus and possibly other cortical and subcortical regions).

Furthermore, of particular relevance to clinicians, we documented the development of self-efficacy through the successful transfer of the newly learned skills of experimental pain reduction to the reduction of the participant's own chronic pain (Crawford, Knebel et al., 1998). Over three experimental sessions, they reported significant reductions of experienced chronic pain, increased psychological well-being and increased sleep quality. We argue that 'the development of "neurosignatures of pain" can influence subsequent pain experiences (Coderre, Katz, Vaccarino & Melzack, 1993; Melzack, 1993) and may be expanded in size and easily reactivated (Flor & Birbaumer, 1994; Melzack, 1991, 1993). Therefore, hypnosis and other psychological interventions need to be *introduced early* as adjuncts in medical treatments for onset-pain before the development of chronic pain' (p. 92).

In a patient undergoing dental surgery with hypnosis as the sole anesthetic, Chen, Dworkin and Bloomquist (1981) found total EEG power decreased with a greater diminution in the left hemisphere in alpha and theta EEG bands. Karlin, Morgan and Goldstein (1980) reported hemispheric shifts in total EEG power during hypnotic analgesia to cold pressor pain that were interpreted as greater

overall right hemisphere involvement at the bipolar parieto-occipital derivation. In an EEG study of cold pressor pain, with and without hypnotic analgesia, Crawford (1990) found hemispheric shifts in theta power production during hypnotic analgesia only among highs, while lows showed no hemispheric asymmetries. In the temporal region the highs were significantly more left hemisphere dominant during the pain dip while concentrating on the pain, but during hypnotic analgesia there was a shift to right hemisphere theta power dominance. This was interpreted as further evidence for the involvement of the frontal attentional system and possibly the hippocampal region during pain inhibition (Crawford, 1990; 1994a,b).

Typically there is continuing autonomic reactivity (increases in galvanic skin responses, blood pressure and pulse) to acute pain during hypnotic analgesia, although some exceptions have been noted in well-trained, highly hypnotizable persons (Hilgard & Hilgard, 1994). Dynamic pupillary measurements revealed that the reduction of pain through hypnotic suggestions was accompanied by an autonomic deactivation (Grunberger, Linzmayer, Walter et al., 1995).

Biochemical studies of hypnotic analgesia are thus far very limited, but encouraging. The role of endorphins in hypnotic analgesia has been explored since these endogenous substances were implicated in analgesia effects produced by acupuncture (e.g., Kisser et al., 1983) and placebo (Grevert, Albert & Goldstein, 1983). The opiate antagonist naloxone typically does not reverse hypnotic alleviation of chronic (Spiegel & Albert, 1983) or acute (Goldstein & Hilgard, 1975; Joubert & van Os, 1989; Moret, Forster, Laverriere et al., 1991) pain. Yet, Stevenson (1978) reported such a reversal in a single subject and Hilgard (personal communication, 1976) observed a reversal in a pilot subject. Only under conditions of environmental stress did Frid and Singer (1980) find naloxone could significantly reverse hypnotic analgesia levels.

Preliminary research (e.g., Domangue, Margolis, Lieberman & Kaji, 1985; Sternbach, 1982) suggests other neurochemical processes may be involved in hypnosis. Arthritic patients who reported significant reductions in pain after hypnoanalgesia showed significant posttreatment enhancement of the mean plasma level of beta-endorphin-immunoreactivity but no changes in plasma levels of epinephrine, dopamine or serotonin (Domangue et al., 1985). There is recent neurophysiological evidence that some descending inhibitory control systems are responsive to naloxone while others are not. Noradrenaline, acetylcholine and dopamine are non-opioid transmitters that are involved in analgesia and possibly hypnotic analgesia. Which of these non-opioid transmitters and descending inhibitory systems may be affected by hypnotic analgesia is worthy of investigation.

At the peripheral nervous system, the effect of hypnosis *per se* and hypnotic analgesia on reflex activity has been considered. Motor-neuron excitability, as measured by the Hoffman reflex amplitude of the soleus muscle, was decreased significantly during hypnosis in high but not low hypnotizables, yet manipulations of suggested analgesia or paralysis had no further effect (Santarcangelo, Busse & Carli, 1989). Kiernan, Dane, Phillips and Price (1995) found that hypnotic

analgesia can reduce the R-III nociceptive reflex, which implicates inhibitory processes at the spinal level.

In summary, evidence is strong that the more highly hypnotizable persons possess stronger attentional filtering and inhibitory abilities that are associated with the frontal attention system. The importance of the anterior frontal attention system in the control of pain is supported by independent studies of EEG, evoked potentials, and cerebral metabolism. Regional cerebral blood flow increases found in the orbito-frontal and somatosensory cortical regions suggested cognitive activity of an inhibitory nature (Crawford, Gur et al., 1993). Active inhibition involves both a search and subsequent ignoring of irrelevant stimuli (Crowne et al., 1972). Changes in the involvement of the anterior cingulate cortex (Kropotov, Crawford & Polyakov, 1997; Rainville et al., 1997) and decreases in P70 mean amplitude in the right anterior frontal region suggest a change in the allocation of attention during hypnotic analgesia (Crawford, Clarke & Kitner-Triolo, 1996). Furthermore, if we view the human body as a feedback loop, as electrical engineers do, then it is not surprising that hypnotic interventions can even affect peripheral reflex activity (e.g., Kiernan et al., 1995). While we hypothesize the frontal attention system can work by way of its connections with the thalamus and other brain structures to regulate the perception of the intensity of pain (Crawford, Clarke & Kitner-Triolo, 1996), this has yet to be demonstrated fully. Our recent fMRI research (Crawford et al., 1998) certainly found shifts in thalamic, insular and other brain structure activity. Future neuroimaging and neurochemical studies will greatly contribute to our expanded knowledge of how hypnotic analgesia is so effective as a behavioral intervention for acute and chronic pain.

HYPNOSIS AND PSYCHONEUROIMMUNOLOGY

In light of current interest in psychoneuroimmunology and mind–body connections, a somewhat neglected area of hypnotherapy research of major theoretical and practical interest is the underlying neurophysiological processes that might mediate hypnosis in its contribution to immunomodulation. Interpretation of earlier research is hindered by methodological shortcomings; these shortcomings are now being addressed and overcome with the most recent wave of research. It is suggested that the reduction of stress, enhancement of positive emotional states and enhanced imaginal processing that often occur during clinical applications of hypnosis may be contributing factors. Spiegel (1993) suggests that self-hypnosis may enhance feelings of control which, in turn, produce reduced pain and increased immune functioning for highly hypnotizable individuals and, perhaps, lows as well. Whether physiological reactivity, hypnotic responsiveness, mood state, or some other factor mediates these hypothesized connections between hypnosis and immunomodulation needs further investigation.

A review of the literature (Laidlaw, Richardson, Booth & Large, 1994) points out

that the combination of hypnosis and skin reactivity has been investigated for over 50 years, first beginning with work by Clarkson (1937), Zeller (1944) and the early studies by Black and Mason in England (e.g., Black, 1963a,b, 1969; Black, Humphrey & Niven, 1963; Mason & Black, 1958) and continuing to a resurgence of interest in the past 10 years (e.g., Laidlaw, Booth & Large, 1994, 1996; Laidlaw, Large & Booth, 1997; Laidlaw, Richardson, Booth & Large, 1994; Zachariae & Bjerring, 1993; Zachariae, Bjerring & Arendt-Nielsen, 1989). The Mantoux reaction to tuberculin was inhibited by highly hypnotizable subjects who were Mantoux-positive (Black, Humphrey & Niven, 1963; Zachariae, Bjerring & Arendt-Nielsen, 1989), yet two other studies (Beahrs, Harris & Hilgard, 1970; Locke, Ransil, Covino et al., 1987) were unable to replicate. Asthmatic patients reduced reactions to histamine more so in hypnosis than nonhypnosis conditions (Laidlaw et al., 1994). Further work from New Zealand found that subjects given hypnotic suggestions were able to decrease their reactivity to histamine reactions (Laidlaw, Booth & Large, 1996) and allergen reactions (Laidlaw, Large & Booth, 1997). Those who produced the largest effects tended to be more hypnotizable (Laidlaw, Large & Booth, 1997). Of great interest is that mood was an important correlate: low irritability rating was associated with smaller wheals (Laidlaw, Booth & Large, 1994, 1996). Hypnotic treatment of warts was found to be more successful than topical medication or placebo medication (e.g., Spanos, Williams & Gwynn, 1990).

Beyond the space of this chapter are other important physiological changes accompanying waking and hypnotic suggestions that are worthy of further investigation. Suggestions of cooling and imagery have assisted burn patients, particularly those who were noted to image well, within hours of the burn incident (Margolis, Domangue, Ehleben & Shrier, 1983; for a review, see Patterson, Adcock & Bombardier, 1997). Suggestions have led to reduced blood loss in spinal (Bennett, Benson & Kuiken, 1986) and maxillofacial (Enqvist, von Konow & Bystedt, 1995) surgery patients, possibly because of the reduced anxiety and lowered blood pressure accompanying the suggestions. Suggestions have enhanced blood clotting in severe hemophilia (Swirsky-Sacchetti & Margolis, 1986). Increased blood volume was increased in Raynaud's disease (Conn & Mott, 1984). Hypnosis in the successful treatment of asthma has been demonstrated (e.g., Collison, 1975; Ewer & Stewart, 1986). The possible effect of hypnosis on T and B cell functioning, neutrophil adhesiveness and other immunological factors may have important implications for cancer and the psychology of healing (e.g., Hall, 1982-83, Hall, Minnes, Tosi & Olness, 1992; Hall, Mumma, Longo & Dixon, 1992; Ruzyla-Smith, Barabasz, Barabasz & Warner, 1995).

CONCLUSIONS

Hypnosis has been shown to be a viable adjunct, alone or combined with other psychological interventions, for the treatment of a number of physiological and

psychological disorders. Experimental evidence shows that more highly hypnotizable persons have greater cognitive and physiological flexibility than do lows (e.g., Crawford, 1989). Highs shift more easily from detail to holistic strategies (e.g., Crawford & Allen, 1983), from left to right anterior functioning as demonstrated by neuropsychological tests (e.g., Gruzelier & Warren, 1993) and from one state of awareness to another. Evidence was reviewed that these cognitive strategy shifts are evidenced by greater neurophysiological hemispheric specificity or dominance across tasks, as seen in EEG and visual field studies.

EEG, evoked potential and neuroimaging (pET, SPECT, rCBF, fMRI) data provide evidence that hypnotic phenomena selectively involve cortical and subcortical processes of either hemisphere, dependent upon the nature of the task. No longer can one call hypnosis a right hemisphere task. The more highly hypnotizable persons appear to possess stronger attentional filtering and inhibitory abilities that may be associated with the frontal attentional system. Dissociated control during hypnosis, such as that seen in hypnotic analgesia for pain, requires higher order cognitive and attentional effort, as evidenced by shifts in EEG theta power (e.g., Crawford, 1990) and increased cerebral metabolism in neuroimaging studies (e.g., Crawford, Gur et al., 1993; Halama, 1989). The lack of perceived control and a decreased self-concept (Kunzendorf, 1989–90) does not negate processes still occurring that involve higher cognitive processing and the executive control system.

Brain research is validating and extending clinical and experimental observations of hypnotic phenomena. It is demonstrating that 'There is good evidence for the age-old belief that the brain has something to do with . . . mind' (Miller, Galanter & Pribram, 1960, p. 196). This knowledge will help us communicate to the medical and psychological communities, as well as the patient and family, why and how hypnosis is such an important therapeutic technique in behavioral medicine and psychotherapy.

ACKNOWLEDGMENTS

To my many clinical colleagues, your informal discussions at meetings and excellent case studies and experimental clinical intervention studies are much appreciated. From you I learned to appreciate the intricacies of hypnotic interventions and was alerted to clinical phenomena and issues that could be investigated in the laboratory. Research reported herein was supported by the National Institutes of Health (1 R21 RR09598), The Spencer Foundation, National Institutes of Health Biomedical Research Support grants and intramural grants from Virginia Polytechnic Institute and State University and the University of Wyoming to the author.

REFERENCES

- Akpinar, S., Ulett, G. A. & Itil, T. M. (1971). Hypnotizability predicted by computer-analyzed EEG pattern. *Biolog. Psychiat.*, **3**, 387–392.

- Apkarian, A. V., Stea, R. A., Manglos, S. H., Szeverenyi, N. M., King, R. R. & Thomas, F. D. (1992). Persistent pain inhibits contralateral somatosensory cortical activity in humans. *Neurosci. Lett.*, **140**, 141–147.
- Arendt-Nielsen, N. L., Zacharie, R. & Bjerring, P. (1990). Quantitative evaluation of hypnotically suggested hyperaesthesia and analgesia by painful laser stimulation. *Pain*, **42**, 243–251.
- Bányai, É.I. & Hilgard, E. R. (1976). A comparison of active-alert hypnotic induction with traditional relaxation induction. *J. Abnorm. Psychol.*, **85**, 218–224.
- Barber, J. & Adrian, C. (Eds) (1982). *Psychological Approaches to the Management of Pain*. New York: Brunner/Mazel.
- Barlow, J. S. (1993). *The Electroencephalogram: Its Patterns and Origins*. Cambridge, MA: MIT Press.
- Behrs, J. O., Harris, D. R. & Hilgard, E. R. (1970). Failure to alter skin inflammation by hypnotic suggestion in five subjects with normal skin reactivity. *Psychosom. Med.*, **32**(6), 627–631.
- Bennett, H. L., Benson, D. R. & Kuiken, D. A. (1986). Preoperative instructions for decreased bleeding during spine surgery. *Anesthesiol.*, **65**, A245 (abstract).
- Birbaumer, N., Elbert, T., Canavan, A. G. M. & Rockstroh, B. (1990). Slow potentials of the cerebral cortex and behavior. *Physiol. Rev.*, **70**, 1–41.
- Black, S. (1963a). Shift in dose response curve of Prausnitz–Kustner Reaction by direct suggestion under hypnosis. *Br. Med. J.*, **6**, 990–992.
- Black, S. (1963b). Inhibition of immediate-type hypersensitivity response by direct suggestion under hypnosis. *Br. Med. J.*, **6**, 925–929.
- Black, S. (1969). *Mind and Body*. London: William Kimber.
- Black, S., Humphrey, J. H. & Niven, J. S. (1963). Inhibition of Mantoux Reaction by direct suggestion under hypnosis. *Br. Med. J.*, **6**, 1649–1952.
- Bowers, P. G. (1982–1983). On not trying so hard: Effortless experiencing and its correlates. *Imagin. Cogn. Personal.*, **2**, 3–13.
- Bromm, B. & Chen, A. C. (1995). Brain electrical source analysis of laser evoked potentials in response to painful trigeminal nerve stimulation. *Electroencephal. Clin. Neurophysiol.*, **95**, 14–26.
- Brown, D. P. & Fromm, E. (1986). *Hypnotherapy and Hypnoanalysis*. Hillsdale, NJ: Erlbaum.
- Casey, K. L., Minoshima, S., Berger, K. L., Koeppe, R. A., Morrow, T. J. & Frey, K. A. (1994). Positron emission tomographic analysis of cerebral structures activated specifically by repetitive noxious heat stimuli. *J. Neurophysiol.*, **74**, 802–807.
- Chaves, J. F. (1989). Hypnotic control of clinical pain. In N. P. Spanos & J. F. Chaves (Eds), *Hypnosis: The Cognitive–Behavioral Perspective* (pp. 242–272). Buffalo, NY: Prometheus Books.
- Chaves, J. F. (1994). Recent advances in the application of hypnosis to pain management. *Am. J. Clin. Hypn.*, **37**, 117–129.
- Chaves, J. F., Perry, C. & Frankel, F. H. (Eds) (1997). Special Issue: Hypnosis in the relief of pain: Part 1. *Int. J. Clin. Exp. Hypn.*, **45**(4), Entire Issue.
- Chaves, J. F., Perry, C. & Frankel, F. H. (Eds) (1998). Special Issue: Hypnosis in the relief of pain: Part 2. *Int. J. Clin. Exp. Hypn.*, **46**(1), Entire Issue.
- Chen, A. C. N., Dworkin, S. F. & Bloomquist, D. S. (1981). Cortical power spectrum analysis of hypnotic pain control in surgery. *Int. J. Neuroscience*, **13**, 127–136.
- Clarkson, A. K. (1937). The nervous factor in juvenile asthma. *Br. Med. J.*, **2**, 845–850.
- Coderre, T. J., Katz, J., Vaccarino, A. L. & Melzack, R. (1993). Contribution of central neuroplasticity to pathological pain: Review of clinical and experimental evidence. *Pain*, **52**, 259–285.

- Collison, D. A. (1975). Which asthmatic patients should be treated by hypnotherapy? *Med. J. Aust.*, **1**, 776–781.
- Conn, L. & Mott, T. (1984). Plethysmographic demonstration of rapid vasodilation by direct suggestion: A case of Raynaud's Disease treated by hypnosis. *Am. J. Clin. Hypn.*, **26**, 166–177.
- Crawford, H. J. (1981). Hypnotic susceptibility as related to gestalt closure. *J. Personal. Soc. Psychol.*, **40**, 376–383.
- Crawford, H. J. (1989). Cognitive and physiological flexibility: multiple pathways to hypnotic responsiveness. In V. Ghorghui, P. Netter, H. Eysenck & R. Rosenthal (Eds), *Suggestion And Suggestibility: Theory And Research* (pp. 155–168). Berlin: Springer-Verlag.
- Crawford, H. J. (1990). Cognitive and psychophysiological correlates of hypnotic responsiveness and hypnosis. In M. L. Fass & D. P. Brown (Eds), *Creative Mastery In Hypnosis And Hypnoanalysis: A Festschrift for Erika Fromm* (pp. 155–168). Hillsdale, NJ: Erlbaum.
- Crawford, H. J. (1994a). Brain systems involved in attention and disattention (hypnotic analgesia) to pain. In K. Pribram (Ed.), *Origins: Brain and Self Organization* (pp. 661–679). Hillsdale, NJ: Erlbaum.
- Crawford, H. J. (1994b). Brain dynamics and hypnosis: Attentional and disattentional processes. *Int. J. Clin. Exp. Hypn.*, **42**, 4204–4232.
- Crawford, H. J. (1995a June). Chronic pain and hypnosis: Brain dynamics. Paper presented at the Drug Information Association Conference, Orlando, Florida.
- Crawford, H. J. (1995b October). Use of hypnotic techniques in the control of pain: Neuropsychophysiological foundation and evidence. Invited paper at the Technology Assessment Conference on Integration of Behavioral and Relaxation Approaches into the Treatment of Chronic Pain and Insomnia, National Institutes of Health, Bethesda, MD.
- Crawford, H. J. (1996). Cerebral brain dynamics of mental imagery: Evidence and issues for hypnosis. In R. G. Kunzendorf, N. P. Spanos & B. Wallace (Eds), *Hypnosis and Imagination* (pp. 253–282). Amityville, New York: Baywood.
- Crawford, H. J. & Allen, S. N. (1983). Enhanced visual memory during hypnosis as mediated by hypnotic responsiveness and cognitive strategies. *J. Exp. Psychol.: General*, **112**, 662–685.
- Crawford, H. J., Brown, A. & Moon, C. (1993). Sustained attentional and disattentional abilities: Differences between low and highly hypnotizable persons. *J. Abnorm. Psychol.*, **102**, 534–543.
- Crawford, H. J., Clarke, S. N. & Kitner-Triolo, M. (1996). Self-generated happy and sad emotions in low and highly hypnotizable persons during waking and hypnosis: Laterality and regional EEG activity differences. *Int. J. Psychophysiol.*, **24**(3), 239–266.
- Crawford, H. J. & Gruzelier, J. H. (1992). A midstream view of the neuropsychophysiology of hypnosis: Recent research and future directions. In E. Fromm & M. R. Nash (Eds), *Contemporary Hypnosis Research* (pp. 227–266). New York: Guilford Press.
- Crawford, H. J., Gur, R. C., Skolnick, B., Gur, R. E. & Benson, D. (1993). Effects of hypnosis on regional cerebral blood flow during ischemic pain with and without suggested hypnotic analgesia. *Int. J. Psychophysiol.*, **15**, 181–195.
- Crawford, H. J., Horton, J. E., Harrington, G. S., Hirsh-Downs, T., Fox, K., Daugherty, S. & Downs III, J. H. (2000). Attention and disattention (hypnotic analgesia) to noxious somatosensory TENS stimuli: Differences in high and low hypnotizable individuals. *Neuroimage*, **11**, S44.
- Crawford, H. J., Horton, J. E., Harrington, G. S., Vendemia, J. M. C., Plantec, M. B., Yung, S., Shamro, C. & Downs, J. H. (1998). Hypnotic analgesia (disattending pain) impacts neuronal network activation: An fMRI study of noxious somatosensory TENS stimuli. *Neuroimage*, S436.
- Crawford, H. J., Horton, J. E., McClain-Furmanski, D. & Vendemia, J. (1998). Brain dynamic shifts during the elimination of perceived pain and distress: Neuroimaging studies of

- hypnotic analgesia. On-Line Proceedings of the 5th Internet World Congress on Bio-medical Sciences '98 at McMaster University, Canada (available from URL: <http://www.mcmaster.ca/inabis98/simantov/dus0133/index.html>).
- Crawford, H. J., Kapelis, L. & Harrison, D. W. (1995). Visual field asymmetry in facial affect perception: Moderating effects of hypnosis, hypnotic susceptibility level, absorption, and sustained attentional abilities. *Int. J. Neurosci.*, **82**, 11–23.
- Crawford, H. J., Knebel, T., Kaplan, L., Vendemia, J. M. C., L'Hommedieu, C., Xie, M. & Pribram, K. H. (1996 April). Hypnotically suggested analgesia as moderated by hypnotic susceptibility level: Somatosensory event-related potentials. Paper presented at the Cognitive Neurosciences Society annual meeting, San Francisco, CA.
- Crawford, H. J., Knebel, T., Vendemia, J., Kaplan, L., Xie, M., L'Hommedieu, C. & Pribram, K. (1997). Somatosensory event-related potentials and allocation of attention to pain: Effects of hypnotic analgesia as moderated by hypnotizability level. *Int. J. Psychophysiol.*, **25**, 72–73.
- Crawford, H. J., Knebel, T., Kaplan, L., Vendemia, J., Xie, M., Jameson, S. & Pribram, K. (1998). Hypnotic Analgesia: I. Somatosensory event-related potential changes to noxious stimuli and II. Transfer learning to reduce chronic low back pain. *Int. J. Clin. Exp. Hypn.*, **46**, 92–132.
- Crawford, H. J., Knebel, T. & Vendemia, J. M. C. (1998). Neurophysiology of hypnosis and hypnotic analgesia. *Contemp. Hypn.*, **15**, 22–33.
- Crawford, H. J., Knebel, T., Vendemia, J. M. C., Horton, J. E. & Lamas, J. R. (1999). La naturaleza de la analgesia hipnótica: bases y evidencias neurofisiológicas. *Anales de Psicología*, **15**, 133–146.
- Crowne, D. P., Konow, A., Drake, K. J. & Pribram, K. H. (1972). Hippocampal electrical activity in the monkey during delayed alternation problems. *Electroencephal. Clin. Neurophysiol.*, **33**, 567–577.
- Crowson, Jr, J. J., Conroy, A. M. & Chester, T. D. (1991). Hypnotizability as related to visually induced affective reactivity. *Int. J. Clin. Exp. Hypn.*, **39**, 140–144.
- Davis, K. D., Wood, M. L., Crawley, A. P. & Mikulis, D. J. (1995). fMRI of human somatosensory and cingulate cortex during painful electrical nerve stimulation. *NeuroReport*, **7**, 321–325.
- Davis, K. D., Taylor, S. J., Crawley, A. P., Wood, M. L. & Mikulis, D. J. (1997). Functional MRI of pain- and attention-related activations in the human cingulate cortex. *J. Neurophysiol.*, **77**, 3370–3380.
- DeBenedittis, G. & Longostreui, G. P. (1988, July). Cerebral blood flow changes in hypnosis: A single photon emission computerized tomography (SPET) study. Paper presented at the Fourth International Congress of Psychophysiology, Prague, Czechoslovakia.
- De Pascalis, V., Crawford, H. J. & Marucci, F. S. (1992). Analgesia ipnotica nella modulazione del dolore: Effetti sui potenziali somatosensoriali. [The modulation of pain by hypnotic analgesia: Effect on somatosensory evoked potentials.] *Comunicazioni Scientifiche di Psicologia Generale*, 71–89.
- De Pascalis, V., Marucci, F. S. & Penna, P. M. (1989). 40-Hz EEG asymmetry during recall of emotional events in waking and hypnosis: Differences between low and high hypnotizables. *Int. J. Psychophysiol.*, **7**, 85–96.
- De Pascalis, V., Marucci, F. S., Penna, P. M. & Pessa, E. (1987). Hemispheric activity of 40 Hz EEG during recall of emotional events: Differences between low and high hypnotizables. *Int. J. Psychophysiol.*, **5**, 167–180.
- De Pascalis, V. & Palumbo, G. (1986). EEG alpha asymmetry: Task difficulty and hypnotizability. *Percept. Mot. Skills*, **62**, 139–150.
- De Pascalis, V. & Penna, P. M. (1990). 40-Hz EEG activity during hypnotic induction and hypnotic testing. *Int. J. Clin. Exp. Hypn.*, **38**, 125–138.

- Domangue, B. B., Margolis, C. G., Lieberman, D. & Kaji, H. (1985). Biochemical correlates of hypnoanalgesia in arthritic pain patients. *J. Clin. Psychiat.*, **46**, 235–238.
- Downs III, J. H., Crawford, H. J., Plantec, M. B., Horton, J. E., Vendemia, J. M. C., Harrington, G. S., Yung, S. & Shamro, C. (in press). Attention to Painful Somatosensory TENS Stimuli: An fMRI Study. *Neuroimage*.
- Enqvist, B., von Konow, L. & Bystedt, H. (1995). Pre- and preoperative suggestion in maxillofacial surgery: Effects on blood loss and recovery. *Int. J. Clin. Exp. Hypn.*, **43**, 284–294.
- Evans, F. J. (1987). Hypnosis and chronic pain. In G. Burrows & L. Dennerstein (Eds), *Handbook of Chronic Pain*. Amsterdam: Elsevier.
- Ewer, T. C. & Stewart, D. E. (1986). Improvement in bronchial hyperresponsiveness in patients with moderate asthma after treatment with a hypnotic technique: A randomised trial. *Br. Med. J.*, **293**, 1129–1132.
- Flor, H. & Birbaumer, N. (1994). Acquisition of chronic pain: Psychophysiological mechanisms. *Am. Pain Soc. J.*, **3**, 119–127.
- Frid, M. & Singer, G. (1980). The effects of naloxone on human pain reactions during stress. In C. Peck & M. Wallace (Eds), *Problems in Pain: Proceedings of the First Australian New Zealand Conference on Pain* (pp. 78–86). Sydney: Pergamon Press.
- Frith, C. D. (1991). Positron emission tomography studies of frontal lobe function: Relevance to psychiatric disease. In D. Chadwick & J. Whalen (Eds), *Exploring Brain Functional Anatomy with Positron Tomography* (pp. 181–197). New York: Wiley. (Ciba Foundation Symposium 163.)
- Galbraith, G. C., London, P., Leibovitz, M. P., Cooper, L. M. & Hart, J. T. (1970). EEG and hypnotic susceptibility. *J. Comp. Physiol. Psychol.*, **72**, 125–131.
- Gardner, G. G. & Olness, K. (1981). *Hypnosis and Hypnotherapy with Children*. New York: Grune & Stratton.
- Goldstein, A. & Hilgard, E. R. (1975). Failure of opiate antagonist naloxone to modify hypnotic analgesia. *Proc. Nat. Acad. Sci.*, **72**, 2041–2043.
- Graffin, N. F., Ray, W. J. & Lundy, R. (1995). EEG concomitants of hypnosis and hypnotic susceptibility. *J. Abnorm. Psychol.*, **104**, 123–131.
- Graham, K. R. (1977). Perceptual processes and hypnosis: Support for a cognitive-state theory based on laterality. In W. E. Edmonston, Jr (Ed.), *Conceptual and investigative approaches to hypnosis and hypnotic phenomena*, *Ann. New York Acad. Sci.*, **296**, 274–283.
- Grevert, P., Albert, L. H. & Goldstein, A. (1983). Partial antagonism of placebo analgesia by naloxone. *Pain*, **16**, 129–143.
- Grunberger, J., Linzmayer, L., Walter, H., Hofer, C., Gutierrez-Lobos, K. & Stohr, H. (1995). Assessment of experimentally-induced pain effects and their elimination by hypnosis using pupillometry studies. *Wien Med. Wochenschr.*, **145**, 646–650.
- Gruzelier, J. H. (1988). The neuropsychology of hypnosis. In M. Heap (Ed.), *Hypnosis: Current Clinical, Experimental and Forensic Practices* (pp. 68–76). London: Croom Helm.
- Gruzelier, J. H. (1990). Neuropsychophysiological investigations of hypnosis: Cerebral laterality and beyond. In R. Van Dyck, P. H. Spinhoven & A. L. W. Van Der Does (Eds), *Hypnosis: Theory, Research & Clinical Practice* (pp. 38–51). Amsterdam: Free University Press.
- Gruzelier, J. (1999). Hypnosis from a neurobiological perspective: A review of evidence and applications to improve immune function. *Anales de Psicologia*, **15**, 111–132.
- Gruzelier, J. H. & Brow, T. D. (1985). Psychophysiological evidence for a state theory of hypnosis and susceptibility. *J. Psychosomat. Res.*, **29**, 287–302.
- Gruzelier, J. H. & Warren, K. (1993). Neuropsychological evidence of reductions on left frontal tests with hypnosis. *Psychol. Med.*, **23**, 93–101.

- Gur, R. C. & Gur, R. E. (1974). Handness, sex and eyedness as moderating variables in the relation between hypnotic susceptibility and functional brain asymmetry. *J. Abnorm. Psychol.*, **83**, 635–643.
- Halama, P. (1989). Die Veränderung der corticalen Durchblutung vor und in Hypnose [The change of the cortical blood circulation before and during hypnosis]. *Experimentelle und Klinische Hypnose*, **5**, 19–26.
- Halama, P. (1990). Neurophysiologische Untersuchungen vor und in Hypnose am menschlichen Cortex mittels SPECT—Untersuchung—Pilotstudie. *Experimentelle und Klinische Hypnose*, **6**, 65–73.
- Hall, H. R. (1982–1983). Hypnosis and the immune system: A review with implications for cancer and the psychology of healing. *Am. J. Clin. Hypn.*, **25**, 92–103.
- Hall, H. R., Minnes, L., Tosi, M. & Olness, K. (1992). Voluntary modulation of neutrophil adhesiveness using a cyberphysiologic strategy. *Int. J. Neurosci.*, **63**, 287–297.
- Hall, H. R., Mumma, G. H., Longo, S. & Dixon, R. (1992). Voluntary immunomodulation: A preliminary study. *Int. J. Neurosci.*, **63**, 275–285.
- Hari, R., Kaukoranta, E., Reinikainen, K., Huopaniemi, T., & Mauno, J. (1983). Neuromagnetic localization of cortical activity evoked by painful dental stimulation in man. *Neurosci. Lett.*, **42**, 77–82.
- Heller, W. (1993). Neuropsychological mechanisms of individual differences in emotion, personality and arousal. *Neuropsychol.*, **7**, 476–489.
- Hilgard, E. R. (1965). *Hypnotic Susceptibility*. New York: Harcourt, Brace & World.
- Hilgard, E. R. (1986). *Divided Consciousness: Multiple Controls in Human Thought and Actions* (rev. edn). New York: Wiley.
- Hilgard, E. R. & Hilgard, J. R. (1994). *Hypnosis in the Relief of Pain* (rev. edn). New York: Brunner/Mazel.
- Hilgard, J. R. & LeBaron, S. (1984). *Hypnotherapy of Pain in Children with Cancer*. Los Altos, CA: William Kaufmann.
- Howland, E. W., Wakai, R. T., Mjaanes, B. A., Balog, J. P. & Cleeland, C. S. (1995). Whole head mapping of magnetic fields following painful electric finger shock. *Cog. Brain Res.*, **2**, 165–172.
- Jones, A. K. P., Brown, W. D., Friston, K. J., Qi, L. Y. & Frackowiak, S. J. (1991). Cortical and subcortical localization of response in pain in man using positron emission tomography. *Proc. Roy. Soc. Lond., Ser. B., Biol. Sci.*, **244**, 39–44.
- Joubert, P. H. & van Os, B. E. (1989). The effect of hypnosis, placebo, paracetamol & naloxone on the response to dental pulp stimulation. *Curr. Therapeut. Res.*, **46**, 774–781.
- Karlin, R., Morgan, D. & Goldstein, L. (1980). Hypnotic analgesia: A preliminary investigation of quantitated hemispheric electroencephalographic and attentional correlates. *J. Abnorm. Psychol.*, **89**, 591–594.
- Kiernan, B. D., Dane, J. R., Phillips, L. H. & Price, D. D. (1995). Hypnoanalgesia reduces r-III nociceptive reflex: Further evidence concerning the multifactorial nature of hypnotic analgesia. *Pain*, **60**, 39–47.
- Kisser, R. S. et al. (1983). Acupuncture relief of chronic pain syndrome correlates with increased met-enkephalin levels. *Lancet*, **2**, 1394–1396.
- Krippner, S. & Bindler, P. R. (1974). Hypnosis and attention: A review. *Am. J. Clin. Hypn.*, **26**, 166–177.
- Kropotov, J. D., Crawford, H. J. & Polyakov, Y. I. (1997). Somatosensory event-related potential changes to painful stimuli during hypnotic analgesia: Anterior cingulate cortex and anterior temporal cortex intracranial recordings. *Int. J. Psychophysiol.*, **27**, 1–8.
- Kunzendorf, R. G. (1989–90). Posthypnotic amnesia: Dissociation of self-concept or self-consciousness? *Imagin., Cogn. Personal.*, **9**, 321–324.

- Laidlaw, T. M., Booth, R. J. & Large, R. G. (1994). The variability of Type I hypersensitivity reactions: The importance of mood. *J. Psychosom. Res.*, **38**, 51–61.
- Laidlaw, T. M., Booth, R. J. & Large, R. G. (1996). Reduction in skin reactions to histamine following a hypnotic procedure. *Psychosom. Med.*, **58**, 242–248.
- Laidlaw, T. M., Large, R. G. & Booth, R. J. (1997). Diminishing skin test reactivity to allergens with a hypnotic intervention. In W. Matthews & J. 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. *J. Psychosom. Res.*, **38**, 569–580.
- 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. *Ann. N. Y. Acad. Sci.*, **496**, 745–749.
- Lynn, S. J. & Sivec, H. (1992). The hypnotizable subject as creative problem-solving agent. In E. Fromm & M. R. Nash (Eds), *Contemporary Hypnosis Research* (pp. 292–333). New York: Guilford Press.
- MacLeod-Morgan, C. (1982). EEG lateralization in hypnosis: A preliminary report. *Aust. J. Clin. Exp. Hypn.*, **10**, 99–102.
- MacLeod-Morgan, C. & Lack, L. (1982). Hemispheric specificity: A physiological concomitant of hypnotizability. *Psychophysiol.*, **19**, 687–690.
- Margolis, C. G., Domangue, B. B., Ehleben, C. & Shrier, L. (1983). Hypnosis in the early treatment of burns. *Am. J. Clin. Hypn.*, **26**, 9–15.
- Mason, A. A. & Black, S. (1958). Allergic skin responses abolished under treatment of asthma and hayfever by hypnosis. *Lancet*, **1**, 877–880.
- Meier, W., Klucken, M., Soyka, D. & Bromm, B. (1993). Hypnotic hypo- and hyperanalgesia: divergent effects on pain ratings and pain-related cerebral potentials. *Pain*, **53**, 175–181.
- Melzack, R. A. (1991). The gate control theory 25 years later: New perspectives on phantom limb pain. In M. R. Bond, J. E. Charlton & C. J. Woolf (Eds), *Proceedings of the Vth World Congress on Pain* (pp. 9–21). Amsterdam: Elsevier.
- Melzack, R. (1992). Recent concepts of pain. *J. Med.*, **13**, 147–160.
- Melzack, R. A. (1993). Pain: Past, present and future. *Can. J. Exp. Psychol.*, **47**, 615–629.
- Mészáros, I. & Bányái, É. I. (1978). Electrophysiological characteristics of hypnosis. In K. Lissak (Ed.), *Neural and Neurohumoral Organization of Motivated Behavior* (pp. 173–187). Budapest: Akadémiai Kiadó.
- Mészáros, I., Bányái, É. I. & Greguss, A. C. (1978). Alteration of activity level: The essence of hypnosis or a byproduct of the type of induction? In G. Adám, I. Mészáros & É. I. Bányái (Eds), *Advanced Physiological Science, Brain and Behaviour*, **17**, 457–465.
- Mészáros, I., Crawford, H. J., Szabó, C., Nagy-Kovács, A. & Révész, M. A. (1989). Hypnotic susceptibility and cerebral hemisphere preponderance: Verbal-imaginal discrimination task. In V. Gheorghiu, P. Netter, H. Eysenck, & R. Rosenthal (Eds), *Suggestion and Suggestibility: Theory and Research* (pp. 191–204). Berlin: Springer-Verlag.
- Meyer, H. K., Diehl, B. J., Ulrich, P. T. & Meinig, G. (1989). Änderungen der regionalen kortikalen Durchblutung unter Hypnose [Changes of the regional cerebral blood circulation under hypnosis]. *Zeitschrift Psychosom. Med. Psychoanalyse*, **35**, 48–58.
- Michel, C. M., Lehmann, D., Henggeler, B. & Brandeis, D. (1992). Localization of the sources of EEG delta, theta, alpha and beta frequency bands using the FFT dipole approximation. *Electroencephal. Clin. Neurophysiol.* **82**, 38–44.
- Miller, G. A., Galanter, E. H. & Pribram, K. H. (1960). *Plans and the Structure of Behavior*. New York: Holt, Rinehart & Wiston.
- Moret, V., Forster, A., Laverriere, M. C., Lambert, H., Gaillard, R. C., Bourgeois, P., Haynal,

- A., Gemperle, M. & Buchser, E. (1991). Mechanism of analgesia induced by hypnosis and acupuncture: Is there a difference? *Pain*, **45**, 135–140.
- Patterson, D. R., Adcock, R. J. & Bombardier, C. H. (1997). Factors predicting hypnotic analgesia in clinical burn pain. *Int. J. Clin. Exp. Hypn.*, **45**, 377–395.
- Perlini, A. H. & Spanos, N. P. (1991). EEG, alpha methodologies and hypnotizability: A clinical review. *Psychophysiol*, **28**, 511–530.
- Perlini, A. H., Spanos, N. P. & Jones, B. N. (1996). Hypnotic negative hallucinations: A review of subjective, behavioral & physiological methods. In R. C. Kunzendorf, N. P. Spanos & B. Wallace (Eds), *Hypnosis and Imagination* (pp. 199–221). Amityville, New York: Baywood Publishing.
- Pribram, K. H. (1991). *Brain and Perception: Holonomy and Structure in Figural Processing*. Hillsdale, NJ: Erlbaum.
- Price, D. D. (1988). *Psychological and Neural Mechanisms of Pain*. New York: Raven.
- Rainville, P., Duncan, G. H., Price, D. D., Carrier, B. & Bushnell, M. C. (1997). Pain affect encoded in human anterior cingulate but not somatosensory cortex. *Science*, **277**, 968–971.
- Roche, S. M. & McConkey, K. M. (1990). Absorption: Nature, assessment & correlates. *J. Personal. Soc. Psychol.*, **59**, 91–101.
- 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. *Am. J. Clin. Hypn.*, **38**, 71–79.
- Sabourin, M. E., Cutcomb, S. D., Crawford, H. J. & Pribram, K. H. (1990). EEG correlates of hypnotic susceptibility and hypnotic trance: Spectral analysis and coherence. *Int. J. Psychophysiol.*, **10**, 125–142.
- Santarcangelo, E. L., Busse, K. & Carli, G. (1989). Changes in electromyographically recorded human monosynaptic reflex in relation to hypnotic susceptibility and hypnosis. *Neurosci. Lett.*, **104**, 157–160.
- Schacter, D. L. (1977). EEG theta waves and psychological phenomena: A review and analysis. *Biolog. Psychol.*, **5**, 47–82.
- Schnyer, D. M. & Allen J. J. (1995). Attention-related electroencephalographic and event-related potential predictors of responsiveness to suggested posthypnotic amnesia. *Int. J. Clin. Exp. Hypn.*, **43**, 295–315.
- Sharav, V. & Tal, M. (1989). Masseter inhibitory periods and sensations evoked by electrical tooth-pulp stimulation in subjects under hypnotic anesthesia. *Brain Res.*, **479**, 247–254.
- Sheer, D. E. (1976). Focused arousal, 40 Hz EEG. In R. M. Knight & D. J. Bakker (Eds), *The Neuropsychology of Learning Disorders* (pp. 71–87). Baltimore: University Park Press.
- Spanos, N. P., Williams, V. & Gwynn, M. I. (1990). Effects of hypnotic, placebo and salicylic acid treatments on wart regression. *Psychosom. Med.*, **52**, 109–114.
- Spiegel, D. (1991). Neurophysiological correlates of hypnosis and dissociation. *J. Neuropsychiat. Clin. Neurosci.*, **3**, 440–445.
- Spiegel, D. (1993). *Living beyond Limits: New Hope and Help for Facing Life-threatening Illness*. New York: Times Books, Random House.
- Spiegel, D. & Albert, L. H. (1983). Naloxone fails to reverse hypnotic alleviation of chronic pain. *Psychopharmacol.*, **81**, 140–143.
- Spiegel, D., Bierre, P. & Rootenberg, J. (1989). Hypnotic alteration of somatosensory perception. *Am. J. Psychiat.*, **146**, 749–754.
- Spiegel, D. & King, R. (1992). Hypnotizability and CSF HVA levels among psychiatric patients. *Biolog. Psychiat.*, **31**, 95–98.
- Spiegel, D. & Vermuten, E. (1994). Physiological correlates of hypnosis and dissociation. In D. Spiegel (Ed.), *Dissociation: Culture, Mind & Body*. Washington, DC: American Psychiatric Press.

- Stea, R. A. & Apkarian, A. V. (1992). Pain and somatosensory activation. *Trends Neurosci.*, **15**, 250–253.
- Steriade, M., Gloor, P., Llinas, R. R., Lopes da Silva, F. H. & Mesulam, M. M. (1990). Basic mechanisms of cerebral rhythmic activities. *Electroencephal. Clin. Neurophysiol.*, **76**, 481–508.
- Sternbach, R. A. (1982). On strategies for identifying neurochemical correlates of hypnotic analgesia: A brief communication. *Int. J. Clin. Exp. Hypn.*, **30**, 251–256.
- Stevenson, J. B. (1978). Reversal of hypnosis-induced analgesia by naloxone. *Lancet*, **2**, 991–992.
- Swirsky-Sacchetti, T. & Margolis, C. G. (1986). The effects of a comprehensive self-hypnosis training program in the use of Factor VIII in severe hemophilia. *Int. J. Clin. Exp. Hypn.*, **34**, 71–83.
- Talbot, J. D., Marrett, S., Evans, A. C., Meyer, E., Bushnell, M. C. & Duncan, G. H. (1991). Multiple representations of pain in human cerebral cortex. *Science*, **251**, 1355–1358.
- Tebecis, A. K., Provins, K. A., Farnbach, R. W. & Pentony, P. (1975). Hypnosis and the EEG: A quantitative investigation. *J. Nerv. Ment. Dis.*, **161**, 1–17.
- Tellegen, A. & Atkinson, C. (1974). Openness to absorbing and self-altering experiences ('absorption'), a trait related to hypnotic susceptibility. *J. Abnorm. Psychol.*, **82**, 268–277.
- Ulett, G. A., Akpinar, S. & Itil, T. M. (1972a). Quantitative EEG analysis during hypnosis. *Electroencephal. Clin. Neurophysiol.*, **33**, 361–368.
- Ulett, G. A., Akpinar, S. & Itil, T. M. (1972b). Hypnosis: physiological, pharmacological reality. *Am. J. Psychiat.*, **128**, 799–805.
- Wallace, B. (1986). Latency and frequency reports to the Necker Cube illusion: Effects of hypnotic susceptibility and mental arithmetic. *J. Gen. Psychol.*, **113**, 187–194.
- Wallace, B. (1988). Hypnotic susceptibility, visual distraction and reports of Necker Cube apparent reversals. *J. Gen. Psychol.*, **115**, 389–396.
- Wallace, B. (1990). Imagery vividness, hypnotic susceptibility, and the perception of fragmented stimuli. *J. Personal. Soc. Psychol.*, **58**, 354–359.
- Wallace, B. & Patterson, S. L. (1984). Hypnotic susceptibility and performance on various attention-specific cognitive tasks. *J. Personal. Soc. Psychol.*, **47**, 175–181.
- Walter, H. (1992). *Hypnose: Theorien, neurophysiologische Korrelate und praktische Hinweise zur Hypnosetherapie [Hypnosis: Theoreis, neurophysiological correlations and practical tips regarding hypnotherapy]*. Stuttgart, Germany: Georg Thieme Verlag.
- Watkins, J. G. (1993). *Hypnoanalytic Techniques: The Practice of Clinical Hypnosis*, Vol. 2. New York: Irvington Publishers.
- Weitzenhoffer, A. M. & Hilgard, E. R. (1962). *Stanford Hypnotic Susceptibility Scale*, Form C. Palo Alto, CA: Consulting Psychologists Press.
- Yamaguchi, S. & Knight, R. T. (1990). Gating of somatosensory input by human prefrontal cortex. *Brain Res.*, **521**, 281–288.
- 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. (1994). Laser-induced pain-related brain potentials and sensory pain ratings in high and low hypnotizable subjects during hypnotic suggestions of relaxation, dissociated imagery, focused analgesia & placebo. *Int. J. Clin. Exp. Hypn.*, **42**, 56–80.
- Zachariae, R., Bjerring, P. & Arendt-Nielsen, L. (1989). Modulation of Type I and Type IV delayed immunoreactivity using direct suggestion and guided imagery during hypnosis. *Allergy*, **44**, 537–542.
- Zeller, M. (1944). The influence of hypnosis on passive transfer and skin tests. *Ann. Allergy*, **2**, 515–517.

International Handbook of Clinical Hypnosis. Edited by G. D. Burrows, R. O. Stanley, P. B. Bloom
Copyright © 2001 John Wiley & Sons Ltd
ISBNs: 0-471-97009-3 (Hardback); 0-470-84640-2 (Electronic)

PART III

The Psychotherapies

Injunctive Communication and Relational Dynamics: An Interactional Perspective

JEFFREY K. ZEIG

Milton H. Erickson Foundation, Phoenix, AZ, USA

Erickson's therapeutic communication relied heavily on indirection to guide his patient's associations. Employing his multilevel interspersal technique, Erickson (1966) could, on one level, speak about common everyday phenomena—the growth of a tomato plant from a seed—while on another, indirectly intersperse suggestions about controlling discomfort. These covert messages were meant to stimulate enough memories and associations of experiential learnings to 'drive' more effective patient behavior.

This ideodynamic effect, whereby associations drive behavior, is well known to practitioners of hypnosis. All of us have experienced ideodynamic activity in our everyday lives, such as when we find ourselves salivating while someone describes an especially tantalizing meal or dish. Eliciting ideodynamic effects is one of the hypnotherapist's key tasks. Erickson used multilevel communication, both within and outside trance, to stimulate constructive associations that could generate, through the patient's own initiative, more desirable behavior.

MULTILEVEL COMMUNICATION

A number of theorists have contributed to our understanding of multilevel communication. Bateson (Bateson & Ruesch, 1951) led the way with his identification of the dual nature of all communication. He postulated that all messages contain a report and a command. Even as information is transmitted (the report), a simultaneous, but covert, message is relayed, 'Do something with this information!' This command can take the form of a subtle imperative, for example 'Learn!, Appreciate!, Utilize!, or Move Closer!'

Berne (1966), in developing Transactional Analysis, argued that every communication consists of a social level and a psychological level. A cliché example of

this is the Lothario who says, 'Come up and see my etchings.' The social level appears to be a straightforward interest in fine art: the psychological level of this communication suggests something else entirely. For Berne, the outcome of communication was determined on the psychological level.

Chomsky (Bandler & Grinder, 1975) offered still another variation on communication dualities, suggesting that every communication has both a surface structure and a deep structure. Often, multiple transformations of surface structure can share the same underlying deep structure. It is the task of the receiver to decipher deep structure.

Finally, Watzlawick (1985) posited that communication is both indicative and injunctive, consisting of both denotation and connotation. He maintained that the *injunctive* aspect of communication promotes change. It is this prospect that Ericksonian therapists find most intriguing and pertinent to their work.

INJUNCTIVE COMMUNICATION

Erickson was a master of injunctive language. In fact, his style of therapy, and especially hypnosis, can be characterized as building responsiveness to injunctive communication. Applying Watzlawick's ideas to Erickson's work affords a useful insight into the mechanisms activated in a typical induction. A good illustration of this is Erickson's well-known early learning set induction (Erickson & Rossi, 1979). A close reading of the induction reveals an indicative level (how a child learns to write the alphabet), and an injunctive level (Erickson's implied instructions about hypnosis directed to the patient). Table 6.1 illustrates this.

The reader should note that in Table 6.1, the message sent is not necessarily the message received. Influence communication should be judged by the response it elicits, not by the cleverness of its structure. In his inductions, Erickson worked to develop responses to injunction. If the patient did not respond to his alembicated methods, he would modify his technique to promote that responsiveness.

Let's consider the covert messages contained in the early learning set induction to which the recipient could respond. The overall injunction, 'Go into a trance!' is presented nonverbally. Erickson offered this injunction by changing the locus and tone of his voice. When speaking to the floor in a 'hypnotic' style, Erickson indicated, 'The time for trance is now!' The allusion to the difficulty in learning to write is a parallel communication in which the patient could associate the difficulty of learning to write with perceived difficulty in achieving trance. At one time, learning to write was difficult; now it is second nature. In parallel, the same can be true of trance.

Questioning whether the child dotted the 't' or crossed the 'i' can confuse the patient. Confusion is part of every hypnosis induction (Haley, 1963), and is used to depotentiate conscious sets (Erickson & Rossi, 1979).

When Erickson queried, 'How many bumps *are* there in an "n" and an "m"?' he

Table 6.1 The early learning set induction

Indicative level	Injunctive level
1. Erickson looks to the floor, softens his voice, and slows his tempo.	1. Go into trance!
2. 'I am going to remind you of something that happened a long time ago ...'	2. Remember!
3. '... when you first learned to write the letters of the alphabet, it was an awfully difficult task ...'	3. Hypnosis may seem difficult at first, but it will become second nature!
4. 'Did you dot the "t" and cross the "i"?'	4. Be confused!
5. 'How many bumps are there in an "n" and an "m"?'	5. Be absorbed in the memory! The order of things may be unexpected and confusing!
6. 'Although you didn't realize it, slowly and gradually you formed mental images of those letters that were stored somewhere in your brain cells and stored there permanently.'	6. You will have permanent unconscious learnings as a result of this experience! Visualize!
7. 'And while I have been talking with you, your pulse rate has changed, your blood pressure has changed, your motor tone has changed ...'	7. You are responding correctly! You are demonstrating hypnotic patterns!

elegantly changed the injunction from 'Remember!' to 'Be absorbed in memory!' This was accomplished by the subtle shift in tense from past to present. Initially, he talked about the past, for example 'It *was* a difficult task' and '*Did* you dot the "t" ...?' Abruptly, he began speaking in the present, 'How many bumps *are* there ...?' as if the patient were reliving the childhood learning process. Subsequent injunctions covertly remind the patient that hypnotic learning can be gradual but permanent in a manner similar to learning to write. The patient is also encouraged to develop visual images.

Next, Erickson ratified the occurrence of physiological changes, thereby confirming the patient's ability to experience trance and hypnotic effects. Ratification is the process of reflecting back in simple declarative sentences the changes that occur as the patient becomes absorbed in the induction, for example, 'While I've been talking to you your pulse rate has changed ...' The injunction to the patient is 'You're responding!', 'You're responding correctly!', 'You are demonstrating hypnotic patterns!'

Please note that the above injunctions are deliberately written with exclamation points rather than as statements or questions. By their very nature, injunctions are subtle imperatives. The deliberate use of injunctions parallels the patient complaint, because patients customarily tell their stories to therapists with both overt

and covert exclamation points, for example 'I am depressed! Relieve my problem! I am helpless!' By communicating with imperatives through indirect injunctions, the therapist fights fire with fire. A primary injunction that should be communicated to all patients is, 'You can find within the resource you need to change or cope!' (For more information about the grammar of change, see Zeig, 1988a.)

Merely presenting injunctions is not therapy. The therapist must first elicit and build responsiveness to offered injunctions. For instance, in attempting to produce an arm levitation during trance, the therapist might enjoin the patient, 'Lift your arm.' But, even if the patient responds, this is no guarantee that hypnosis has occurred. On the other hand, if the therapist says to the patient, 'I want you to realise in a way that is *handy*, that hypnosis is an *uplifting* experience, in a way that is *right* for you,' and the patient lifts her or his right hand in a dissociated manner, the injunction has been understood and accepted. Because of the dissociated response garnered by the use of injunctive communication, the existence of hypnotic responsiveness can be surmised. The therapist's words and data do not so much promote therapeutic change, as does the patient's ability to hear and respond to what the therapist has said indirectly (Zeig, 1985a).

Hypnotic induction is essentially the elicitation of dissociative responsiveness to injunctions (Zeig, 1988b). During induction, the therapist maximally builds the patient's response to injunction. Once the patient consistently responds to injunction, the patient in effect communicates to the therapist, 'Okay, I am open to your influence.' At this point, the door to the constructive unconscious is unlocked and the treatment phase can begin. Subsequent hypnotherapeutic injunctions access the resources of the constructive unconscious (Zeig, 1985a, 1988b). Once responsiveness to injunction is developed by the hypnotic induction, then injunction-rich therapeutic communication can be used to help patients elicit constructive associations that 'drive' more effective behavior.

Injunctions *per se* are not therapeutic. Again, while the structure of injunctions may be interesting, it is the response to the injunction that must be elicited during induction before hypnotherapy can begin. The more responsiveness to injunction which can be established, the more effective the therapy. As I have previously argued, 'The success of hypnotherapy in general is proportional to the degree of responsiveness to minimal cues (injunctions) developed within the patient' (Zeig, 1988b, p. 358).

Communications not only contain underlying injunctions, they also possess a covert message about relationships.

COMPLEMENTARY VERSUS SYMMETRIC RELATIONSHIPS

Building on Bateson's work, Watzlawick, Beavin & Jackson (1967) defined how interactions tend to follow one of two patterns: symmetry or complementarity. 'Symmetric interaction is characterized by equality and the minimisation of

difference. Potential pathologies can be seen as an escalation in symmetry and/or rigidity in complementarity. In a complementary relationship, one participant is in the superior or “one-up” position, and the other is in corresponding “one-down” position’ (pp. 68–70). Since complementary relationships are far more common than symmetric, I will describe them first.

COMPLEMENTARY RELATIONSHIPS

According to Haley (1963), a complementary relationship involves two people exchanging different types of behaviors. ‘One gives and the other receives. One teaches and the other learns’ (p. 111). One-up people take charge, making decisions based on their own, internal preferences. One-down people, on the other hand, monitor their environment for cues before acting. They base their decision on external information, often responding to the overt and covert directions of the one-up individual. The observable manifestations of these traits include the steadier eye contact and bolder stance of the one-up individual, in contrast to the more tentative mannerisms of the one-down individual.

Essentially, the one-up person controls and defines the relationship. The implicit injunction of the interaction is: ‘I will determine the direction that the relationship takes . . . In this relationship, we will have fun (learn/be intimate/etc.)!’ The one-down person responds to the demands of the injunction.

Ideally, one takes either role depending on circumstances: flexibility is beneficial to a socially effective existence. For instance, a school teacher may assume a one-up position in the classroom during the day, but unconsciously switch to a one-down posture when taking a night course in a new subject.

We are not specifically taught this swing from one role to another. Neither do we customarily discuss or negotiate which position in the relationship we will assume. Rather, we automatically adopt one position or the other, entering into an unspoken interpersonal contract that is determined within seconds of an encounter. Couples quickly settle into complementary roles, but they can alter their roles depending on context. One partner, for instance, might be generally one-up in the social sphere, while the other may take command in financial matters. Complementary roles tend to be relatively stable, although they can be modified by circumstances.

A person’s inability to flexibly assume either one-up or one-down roles dependent on the contextual demands can pose difficulties for that individual, particularly if the individual has the habit of rigidly assuming one role under all circumstances. When an individual insists on maintaining a particular position, change can be impeded or even impossible to achieve. Telling a one-up person that he or she is inflexibly one-up is usually ineffective in bringing about change. Most rigidly one-up individuals have developed skillful manoeuvres for parrying overt challenges to their position.

Conversely, some people insist on being one-down, presenting themselves as

long-suffering victims of exaggerated shortcomings or the insensitivities of others. Notice the underlying dynamics in this hypothetical exchange:

GRANDSON: Grandma, how are you doing?

GRANDMA: Oh, I'm lonely.

GRANDSON: Why don't you go out and meet some people?

GRANDMA: Oh, my bones ache and it's too far to walk down the stairs.

GRANDSON: Why don't you call some people and have them come over?

GRANDMA: I would, but the house is such a mess and I don't have the energy to clean it up.

GRANDSON: Why don't you call people and just talk on the phone?

GRANDMA: I would, but I can't hear too well. Why bother?

While Grandma presents herself in a clearly one-down role, she is, however, controlling and defining the relationship in much the same way as a one-up person might. Bateson described this position as metacomplementary (Haley, 1963). A metacomplementary bind occurs when a person goes one-down in order to get one-up. It is a bind because these individuals do not experience themselves as one-up. All symptoms are to some extent metacomplementary binds. In traditional psychiatric nomenclature, this process is known as 'secondary gain.'

As is true in the one-up situation, discussing secondary gain with the patient does not seem to produce therapeutic change. During a graduate school internship, I treated a woman who was afraid of venturing into stores. Her fear put her one-down, but because her condition prevented her from doing the family shopping, a task her husband had to assume, she gained a measure of control in her marital relationship, and on this issue at least, she was the defining partner. When I confronted her about secondary gain, she replied, 'I don't want control. I just want to be able to shop.'

The one-up person not only controls and defines the relationship, but also induces roles in the one-down person which can be functional or maladaptive. The permitted roles for the one-down person could include martyr or helper, being stupid or ineffective. By assuming the one-up position, the clinician can direct therapy and elicit effective roles.

SYMMETRIC RELATIONSHIPS

Some people rigidly insist on an equal status in their relationships. Such a symmetrical relationship can, however, escalate and become problematic. Interaction can be tenuous and unsteady as the two parties attempt to resolve whether

one will dominate or attain a one-up status. Consider the following imaginary dialogue:

PERSON A: I've been studying Erickson's work.

PERSON B: Well, I've been studying Erickson.

PERSON A: I understand that Erickson's most important contribution to hypnosis is the development of the confusion technique.

PERSON B: But my understanding of Erickson suggests his most important contribution is the interspersal technique

PERSON A: Jay Haley says that confusion is a part of every hypnosis induction . . .

Or consider the couple who keeps a list on the refrigerator door of how much money each has spent. At the end of the week, they tally up the totals to ensure a fair exchange. Potentially conflicting conversation between this couple might sound like this:

HE: All right, last time we went out, you decided on the movie and I decided where to go to dinner. So this time, you decide where we go to dinner, and I'll decide on the movie.

SHE: Are you sure about that? I think you decided on both the movie and the dinner, now it's my turn.

This kind of relationship can be volatile, with frequent clashes and conflicts. Since many aspects of the relationship are open to negotiation, struggles become pervasive, spreading to mundane details of life.

Escalating symmetry can end in one of three ways:

- 1 By resolving itself into a complementary relationship whereby one person becomes one-up, the other one-down.
- 2 With an 'explosion' that breaks-off the relationship, sending the participants in separate directions. Explosions in marital relationships sometimes escalate to physical violence.
- 3 With the intervention of a 'governor' which allows conflict to escalate only to a certain level. The governor may be a simple nonverbal gesture, such as scratching one's head or scowling. Once the governor is activated, tensions diminish and participants revert to the beginning stages of symmetry.

A functional relationship between two high-powered individuals almost always contains a governor, although it may not be consciously recognized. The governor's existence is revealed through observable behaviors that are unconsciously understood. For instance, one partner may always light a cigarette at the point in which a symmetric escalation begins to verge on a serious communication breakdown.

Many therapists have difficulty working with couples in these sometimes explosive, symmetric relationships since the clinician essentially encounters a couple who bicker incessantly. Any suggestions that a couple are involved in a power struggle usually falls on deaf ears. One of the pair might respond with 'Power struggle? I'm not involved in a power struggle. She (he) may be in a power struggle, but not me!' Subsequently, the therapist might become embroiled in an escalating symmetrical relationship with one of the partners.

INTERVENTION STRATEGIES

Madanes (1984) has demonstrated that strategic therapy that modifies disturbed family hierarchies can remove symptoms. Straightforward discussions are usually of little value in changing relational power dynamics, primarily because the duel does not occur on the conscious, verbal level, but on an extraverbal level. People do not say to each other, 'Well, in this situation, I'm going to be one-up or one-down.' Nonverbal behavior such as demeanor, tone and posture signal these roles within the first few seconds of an encounter.

As a result, psychotherapy should be effected at the level of experience at which the problem is generated. If a problem is generated at a verbal level, it may be solved through discussions. If the problem is generated at extraverbal levels, therapy should be directed extraverbally. Because most problems are generated at the level of preconscious associations, 'right hemisphere' methods such as tasks and metaphors which pattern new associations and disconnect old rigid sets are the most effective psychotherapeutic techniques in cases with disturbed power balances.

Consider the case in *Uncommon Therapy* (Haley, 1973) of the couple who were involved in a rigid complementarity. The wife complained bitterly that her husband was incompetent, forcing her to tend to both the family and the family business. Erickson offered the wife a directive. He commented that she deserved some rest, a statement with which she would likely agree. Then he suggested that she could arrive at work 30 minutes late, indicating that her husband 'could not possibly do much damage in 30 minutes.' The wife arrived at the instructed later time and discovered that the husband had done a competent job without her presence. Over time, she went to the business later and later, and the relationship improved. The use of directive tasks to rearrange problematic hierarchies has been elaborated by Madanes (1984).

Erickson was acutely attuned to styles of complementarity and symmetry and he used strategic tasks, jokes and confusion techniques to disrupt inflexible patterns of behavior. Erickson also was consistently one-up in his relationships with patients because he held that it was essential for the clinician to be in control of the therapeutic relationship.

THE THERAPIST'S ROLE

One of the therapist's main goals is to induce more effective roles. As a result, it is important to diagnose rigid power dynamic styles, keeping in mind the power dynamics of the clinician–patient relationship itself. To induce change, the therapist must be one-up. If the patient is one-up, the therapy will not be successful. 'Right hemisphere' techniques are valuable for this because they work to unexpectedly disconnect habitual sets. The therapist can cripple his or her therapeutic effectiveness by adhering to inflexible, preordained expectations for change which can concede the one-up position to the patient. If the patient is consistently one-up, therapy should be terminated since there will be no leverage for change.

I am not promoting a Machiavellian stance for the therapist. The job of the therapist is to work on the patient's behalf to elicit change. This can only be accomplished when the therapist controls, defines and induces different roles by assuming the one-up position.

CONCLUSION

Keep in mind that it is the injunctive nature of the communication, not the actual words and actions of the therapist, that provides the pivotal stimulus for patient change. The therapist must work to develop an understanding of the covert messages to which the patient will respond.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the assistance of Brent Geary, PhD, and Jean M. Emery, MA, MFA, in the preparation of this chapter.

REFERENCES

- Bandler, R. & Grinder, J. (1975). *The Structure of Magic*, Vol. 1. Palo Alto, CA: Science and behavior Books.
- Bateson, G. & Ruesch, J. (1951). *Communication: The Social Matrix of Psychiatry*. New York: W. W. Norton.
- Berne, E. (1966). *Principles of Group Treatment*. New York: Grove Press.
- Erickson, M. H. (1966). The interspersal technique for symptom correction and pain control. *Am. J. Clin. Hypn.* **8**, 198–209.
- Erickson, M. H. & Rossi, E. L. (1979). *Hypnotherapy: An Exploratory Casebook*. New York: Irvington.
- Fisch, R., Weakland, H. H. & Segal, L. (1982). *The Tactics of Change: Doing Therapy Briefly*. San Francisco: Jossey-Bass.
- Haley, J. (1963). *Strategies of Psychotherapy*. New York: Grune & Stratton.

- Haley, J. (1973). *Uncommon Therapy*. New York: W. W. Norton.
- Madanes, C. (1984). *Behind the One Way Mirror: Advances in the Practice of Strategic Therapy*. San Francisco: Jossey-Bass.
- Watzlawick, P., Beavin, J. H. & Jackson, D. (1967). *Pragmatics of Human Communication*. New York: W. W. Norton.
- Watzlawick, P., Weakland, J. & Fisch, R. (1974). *Change: Principles of Problem Formation and Problem Resolution*. New York: W. W. Norton.
- Watzlawick, P. (1985). Hypnotherapy without trance. In J. K. Zeig (Ed.), *Ericksonian Psychotherapy*, Vol. 1: *Structures*. New York: Brunner/Mazel.
- Yapko, M. D. (1985). The Erickson hook: Values in Ericksonian approaches. In J. K. Zeig (Ed.), *Ericksonian Psychotherapy, 1: Vol I: Structures*. New York: Brunner/Mazel.
- Zeig, J. K. (1982). Ericksonian approaches to promote abstinence from cigarette smoking. In J. K. Zeig (Ed.), *Ericksonian Approaches to Hypnosis and Psychotherapy*. New York: Brunner/Mazel.
- Zeig, J. K. (1985a). *Experiencing Erickson: An Introduction to the Man and his Work*. New York: Brunner/Mazel.
- Zeig, J. K. (1985b). Ethical issues in Ericksonian hypnosis: Informed consent and training standards. In J. K. Zeig (Ed.), *Ericksonian Psychotherapy*, Vol. 1: *Structures*. New York: Brunner/Mazel.
- Zeig, J. K. (1988a). The grammar of change. *Int. J. Eclectic Psychother.*, 7(4), 410–414.
- Zeig, J. K. (1988b). An Ericksonian phenomenological approach to therapeutic hypnotic induction and symptom utilization. In J. K. Zeig & Stephen Lankton (Eds), *Developing Ericksonian Therapy: State of the Art*. New York: Brunner/Mazel.

International Handbook of Clinical Hypnosis. Edited by G. D. Burrows, R. O. Stanley, P. B. Bloom
Copyright © 2001 John Wiley & Sons Ltd
ISBNs: 0-471-97009-3 (Hardback); 0-470-84640-2 (Electronic)

PART IV

Specific Disorders and Applications

Hypnosis and Recovered Memory: Evidence-Based Practice

KEVIN M. MCCONKEY

University of New South Wales, Australia

INTRODUCTION

Memories can be accurate, inaccurate, incomplete, and malleable. They are sometimes detailed and specific, and sometimes fragmentary and vague. People sometimes remember things they had forgotten, and sometimes create accounts of things that never happened. We know that memory is influenced by cognitive and social events and that influence can occur during encoding, storage, and retrieval. As Bartlett (1932/1995) argued: 'Remembering is not the re-excitation of innumerable fixed, lifeless, and fragmentary traces. It is an imaginative reconstruction, or construction, built out of the relation of our attitude towards a whole active mass of organized past reactions or experience' (p. 213).

Memories reported in the clinical setting are usually autobiographical in nature. That is, they usually involve events or experiences that have played a significant part in the life of the individual. If we are to understand such memories, then we have to consider the purposes, processes, and products of autobiographical remembering, and we have to embed that remembering within its biological, affective, interpersonal, sociocultural, and historical contexts (Bruner & Feldman, 1996; Hirst & Manier, 1996; Rubin, 1996). In other words, remembering past experiences is a pervasive part of life, and changes in an individual's life can be associated with changes in remembering (Fivush, Haden & Reese, 1996; Neisser & Fivush, 1994). The critical place of memory in human experience is clear when we examine individual lives in their social context, and that point needs to be kept in mind when we consider the impact of hypnosis on memories reported in the clinical setting (McConkey, 1995).

There has been substantial debate about recovered memory in the clinical setting (e.g., Freyd, 1996; Herman, 1992; Loftus & Ketcham, 1994; Lynn & McConkey 1998; McConkey & Sheehan, 1995; Ofshe & Watters, 1994; Pezdek & Banks,

1996; Pope & Brown, 1996; Schacter, 1996; Spanos, 1996; Terr, 1994; Yapko, 1994), and I focus on the reporting of recovered memories of childhood abuse by adults who had not previously reported such memories. This type of reporting can be argued to involve the therapeutic recovery of repressed, true memories (Briere & Conte, 1993; Courtois, 1992; Freyd, 1994; Herman & Schatzow, 1987; Olio, 1989; Pope, 1996; Williams, 1994, 1995). This type of reporting, however, can be argued to involve the creation of false memories (Brenneis, 1994; Garry & Loftus, 1994; Lindsay & Read, 1994; Loftus, 1993; Lynn & Nash, 1994; Ofshe & Singer, 1994). As McConkey (1997; McConkey & Sheehan, 1995) pointed out, there are difficulties involved in achieving a balanced and practical position on the issues associated with recovered memory of childhood abuse. Nevertheless, it is important to work with clients in a way that is professionally defensible and therapeutically beneficial. To help in this, I comment on: (a) memory, repression, and recovered memory; (b) hypnosis and memory; and (c) guidelines for evidence-based practice.

MEMORY, REPRESSION, AND RECOVERED MEMORY

There is extensive evidence that memory is extremely susceptible to the influence of suggestion, postevent information, and source confusion (Belli & Loftus, 1996; Brainerd & Reyna, 1996; Conway, Collins, Gathercole & Anderson, 1996; Hyman & Pentland, 1996; McDermott, 1996; Mitchell & Zaragoza, 1996; Payne, Elie, Blackwell & Neuschatz, 1996; Read, 1996; Roediger, Jacoby & McDermott, 1996; Zaragoza & Mitchell, 1996). For instance, Zaragoza & Mitchell (1996) showed people a video of a burglary and then asked questions containing misleading suggestions, some of which were repeated; then, they tested memory for the source of the suggestions. Zaragoza & Mitchell (1996) found that, in comparison to subjects exposed to the suggestion only once, those exposed repeatedly were more likely to confidently remember the suggested events from the video and to claim they could recall witnessing the suggested events.

Despite the consistency and reliability of this type of finding, laboratory research has been rejected by some as irrelevant to the debate about recovered memory. For instance, Freyd & Gleaves (1996; Kristiansen, Felton & Hovdestad, 1996; van der Kolk, 1994; but see Roediger & McDermott, 1996) argued that laboratory research on memories of benign, artificially constructed stimuli tells us nothing about processes involved in memory for severely traumatic events. However, recognizing that memory is malleable does not mean recovered memories of childhood abuse are necessarily inaccurate; it simply means they are not necessarily accurate. Whereas there is clinical observation and personal anecdote that individuals may avoid or be unaware of threatening memories (Martinez-Taboas, 1996), such memories can be influenced by various cognitive and social events (Loftus, 1993). In other words, there is no strong reason or evidence why memory for traumatic events should follow entirely different psychological principles from those followed

by memory for nontraumatic events (Kihlstrom, 1994, 1995); equally, memory should follow the same principles whether or not hypnosis is involved (Kihlstrom & Barnhardt, 1993). Notably though, at a biological level, the release of neural hormones during trauma may enhance the consolidation and storage of memory for that event (Cahill, Prins, Weber & McGaugh, 1994; but see Bremner, Krystal, Charney & Southwick, 1996). Also, the experience of trauma may be more likely to lead to the occurrence of recurrent and intrusive memories than to the forgetting of that experience (Frankel, 1994; LeDoux, 1991; LeDoux, Romanski & Zagoraris, 1989).

Discussion about the recovery of memory for traumatic events typically shows various views about repression (McConkey, 1997). In general, repression can be said to involve the motivated forgetting of information that is threatening to the self. Repression and related constructs such as dissociation, however, have been conceptualized in a variety of ways and that variation is one of the problems of the debate on recovered memory (Bowers & Meichenbaum, 1984; Lynn & Rhue, 1994; Singer, 1990; Spiegel, 1994). Notably, analyses of the original concept of repression in the writings of Freud have highlighted its internal inconsistencies and its limited value beyond a very general description of assumed processes (Holmes, 1974, 1990; Macmillan, 1997; for a summary of empirical work, see Pope & Hudson, 1995). The relative impreciseness of the concept of repression and the difficulty of testing it led Holmes (1990) to say that 'despite over sixty years of research . . . there is no controlled laboratory evidence supporting the concept of repression' (p. 96). Further, he suggested that those who use the notion should warn 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' (Holmes, 1990, p. 97). Notwithstanding this view, clinical observation suggests that thoughts about and memories of important personal events can be set aside from normal awareness, and concepts such as repression or dissociation may be of heuristic value in helping to understand that process (Bower, 1990; Davis, 1990; Erdelyi, 1993; Nemiah, 1984; Weinberger, 1990). Although such concepts may have some value, this does not mean that if 'repressed' or 'dissociated' thoughts and memories are reported, then they are necessarily accurate representations. That is, accepting a notion of repression does not necessarily mean that recovered memories are historically accurate. Even if a memory has been forgotten for a time, this does not mean that it is not influenced by the constructive and reconstructive features of memories in general (Bowers & Farvolden, 1996).

We should not assume that freshly reported material indicates the lifting of repression that is linked to traumas of childhood. Rather, the fact that people sometimes remember events they had forgotten does not mean those events were traumatic, nor does it mean those particular memories were repressed. In other words, much of the nonreporting 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, it does not seem to be possible to distinguish between people who do not report abuse and those who do not remember it; among the latter, it does not seem possible to distinguish forgetting that reflects repression, dissociation, other pathological processes, and benign processes (Kihlstrom, 1995). Nevertheless, when clinicians are faced with clients who experience themselves remembering a previously forgotten trauma, they must recognize the clinical relevance of this; equally, however, clinicians need to recognize that memories are affected by factors like suggestion, transference, personal values, social interactions, and fantasies associated with the event and its remembering (Nash, 1994).

Whatever their nature, it is clear that memories and the meaning placed on them change during therapy in various ways. For instance, Foa, Molnar, and Cashman (1995) examined the memory reports of female rape victims during therapy, and found that their length increased across treatment, the percentage of reported actions and dialogue decreased, and the percentage of thoughts and feelings increased. There was an increase in the number of thoughts that attempted to structure the memory of rape. Thus, their narratives changed with the imaginal reliving of the trauma, and the victims tried to restructure their memory to provide a sense of coherence. That coherence may give a strong feeling of narrative truth and may feel right for both the client and the clinician, but it may not be an indication of the historical truth of the event. The fact that narrative and historical truth (Spence, 1982, 1994) may not coincide is nonproblematic and manageable by clinicians with relevant knowledge and skill. However, it may be problematic in nonclinical settings, such as the courtroom, in which the processes, goals, and demands are very different from the clinical setting. As Spiegel & Schefflin (1994) noted, it is possible to convince oneself of a false belief, and memory alone cannot be trusted in the absence of independent corroboration.

Questions about the trust that can be placed in recovered memory and the utility of such memory in clinical and court settings have led to research on whether memories of childhood abuse can be recovered. While recognizing that childhood sexual abuse can cause significant physical and emotional harm (Janoff-Bulman, 1992; Kendall-Tackett, Williams & Finkelhor, 1993; Nash, Hulsey, Sexton, Harralson & Lambert, 1993; Romans, Martin, Anderson, O'Shea & Mullen, 1995), recovered memories of abuse cannot be seen as self-validating. Rather, the nature and accuracy of memories recovered during therapy need to be determined independently instead of being assumed by the client, the clinician, or others; this is especially the case when dealing with those therapies that may strongly bias the creation of illusory memories (Lindsay & Read, 1994). As Bowers & Farvolden (1996) noted, however, the situation becomes complicated if clinicians accept abuse memories at face value; sometimes clinicians do this because they feel they must serve the client by confirming each of his or her ideas, memories, and beliefs. This tendency by some clinicians is unfortunate not only because it may lead clients to assume the validity of memories that may not be accurate, but also because it conveys that the clinician knows the truth about the client. As Bowers & Farvolden

(1996) argued, however, neither the clinician nor the client has definite knowledge of the reasons for a particular problem. Of course, the clinician can have more or less plausible theories regarding that problem, but these theories should not be confused with absolute truth, however compelling they may seem. In other words, clinicians need to deal with recovered memories in terms of their clinical utility, without focusing on the truth or falsity of those memories (Fowler, 1994).

HYPNOSIS AND 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. The influence of hypnosis on memory generally has been the focus of substantial investigation and comment (American Medical Association, 1985, 1994; American Society of Clinical Hypnosis, 1995; Laurence & Perry, 1988; McConkey & Sheehan, 1995; Pettinati, 1988, Schefflin & Shapiro, 1989), 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, '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). 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 were not involved (McConkey & Kinoshita, 1988). Also, hypnotized individuals can accept subtle changes to their memory, incorporate those changes into their memory, and develop confidence in the accuracy of what they report; 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 (Nogrady, McConkey & Perry, 1985; see also Krass, Kinoshita & McConkey, 1988). Finally, hypnosis can lead to the creation of pseudomemory when a hypnotized person accepts a suggestion for false information and subsequently reports that information as a genuine memory (Barnier & McConkey, 1992).

Although some have debated the interpretation and relevance of experimental research on hypnosis and memory (American Society of Clinical Hypnosis, 1995), in their analysis of recovered memories of abuse Pope & Brown (1996) considered that 'because hypnotic technique can enhance suggestibility and lead to the development of pseudomemories in some individuals, its use as a memory enhancement or memory-retrieval strategy seems questionable at best' (p. 59). The importance of understanding the processes involved, as well as the possible risks

and benefits, when hypnosis is used to recover memory is thrown into bolder relief by a consideration of selected clinical material.

McConkey & Sheehan (1995; see also McConkey, 1995) presented the case of BT, who was 21 years old when she went to a clinician for help in remembering events that her older sister had said BT had witnessed about 10 years earlier. BT's sister had told police that their father had sexually abused her as a young adolescent, and had said that BT witnessed much of that abuse. BT could not remember this, but underwent four hypnosis sessions at the request of her mother and her sister. Early in Session 1, the following interaction occurred:

HYPNOTIST: Are you aware that in the case of your elder sister, in her relationship with her father, that there are various charges being brought about against him?

BT: Yes.

HYPNOTIST: Right. As her sister, I am asking you now, as to whether you are a witness in the past to any impropriety that your father may or may not have committed towards your sister?

BT: No.

By the end of Session 1, after using a series of techniques that focused on the father and his assumed acts of abuse, the following interaction occurred:

HYPNOTIST: Are you only aware for the moment at this your first subconscious session, are you only aware of that occasion when you walked into your father's room on a Saturday afternoon and were suddenly aware that [your sister] was in your father's bed with him under the blankets and sheets. Is this the only occasion that you noticed your father was not at all acting out the proper fatherly role?

BT: Yes.

In Sessions 2 and 3, the hypnotist used various techniques and metaphors to help BT feel secure and confident about whatever events came to mind. By the end of Session 3, BT was answering explicit questions about witnessing multiple sexual interactions between her father and sister. Moreover, she was giving details, such as the precise positioning and movement of the father's hands and genitals, that would have required extraordinary ability not only to witness (since they reportedly occurred under bedclothes), but also to remember so precisely (since they reportedly occurred approximately 10 years previously).

At the end of Session 3, the hypnotist summarized the progress they had made together, and ended treatment with the following interaction:

HYPNOTIST: Your subconscious mind is a memory bank, and you can entrust a third party to help you resolve all that you've seen, all that you've experienced, all that you as a Christian have been coerced to be witness to . . . You may feel

some satisfaction as you leave here, that your prayers to resolve issues that you've seen can be answered. You are a Christian, are you not?

BT: Yes.

HYPNOTIST: Yes. So through Jesus Christ, you can pray for this, that these issues be resolved for yourself, as a previous victim and now a survivor, for your sister, the victim but hopefully a survivor, through the grace of Jesus Christ. And you can say Amen.

BT: Amen.

HYPNOTIST: I'm going to count up from zero to five. On the count of five you will be wide awake, feeling really good. Really alive on the count of five. Knowing that through courage, through revelation, you can proceed on with your life.

BT subsequently made a detailed statement to police about various sexual assaults on her sister by her father. The prosecution, however, considered that the judge would not allow testimony by BT because of the way in which her memories had been recovered. This case highlighted not only how clinicians can get caught up in events, but also how they can have difficulty looking critically at their own behaviour in the clinical setting. Moreover, it highlighted the creativity, if not the recoverability, of memory; BT constructed a personal meaning around a possibility of unremembered events. When one looked at the processes that were involved in BT moving from reporting no memory to reporting exceptionally detailed events from 10 years hence, substantial doubt could be cast on the accuracy of BT's memory reports. Nevertheless, BT developed a strong belief in the accuracy of her memories, and this changed the way in which she thought about her self and other members of her family (McConkey & Sheehan, 1995).

The impact of hypnosis on memory and on self-representation can be seen clearly in cases involving the intentional hypnotic falsification of memory for therapeutic benefit. For example, Janet (1889/1973) believed that successful treatment was based on not only uncovering a traumatic childhood event, but also reconstructing or replacing the original memory with a false, and more acceptable, memory; that is, changing the way in which the client thought about themselves. Janet's famous case of Marie exemplifies this treatment approach (Janet, 1889/1973; see also Ellenberger, 1970). Marie suffered from anaesthesia of the left side of her face and blindness of her left eye, both of which had been present for many years. Janet determined through hypnotic age regression 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, Marie developed an almost identical impetigo as well as blindness. Janet hypnotically age regressed Marie to the time of the incident and reconstructed the memory. This treatment was successful, and five months later there were no signs of hysterical symptoms. As Janet (1889/1973) put it, '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' (pp. 436–440).

Contemporary examples also demonstrate the intentional hypnotic reconstruction of memory. Baker & Boaz (1983), for instance, reported the hypnotic treatment of a 30-year-old woman's severe dental phobia. During hypnotic regression, she described being taken to the hospital for a tooth extraction at 9 years of age and becoming terror stricken during the procedure; she could not recall being comforted by anyone. The clinician suggested that as the client thought about being taken into the operating room, she would remember the doctor holding her and stroking her forehead and telling her that she would not be afraid. The client said that she could hear the doctor comforting her, and subsequently reported that her fear was diminished as she re-experienced going into the operating room. A second session involved hypnotic age regression, and repetition of the suggestion that the doctor was comforting her; again, the client reported reduction of her anxiety. During follow-up, she recalled the implanted material as original memory, without 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 a new memory. The client became committed to the accuracy of the memory to the extent that the constructed events were indistinguishable from the original event and integrated into the understanding and knowledge that the client developed about herself.

Returning to the issue of recovered memory of childhood abuse, Smith (1996) presented the case of 'Cindy' whom he successfully treated by helping her 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 Cindy could recall a college rape incident and an abortion two years later, she had no memories of childhood abuse. However, the referring psychiatrist suspected that some traumatic sexual event may have occurred in childhood. To explore this, and to help Cindy access and master her emotions about present and past experiences, Smith introduced hypnosis into the treatment programme. Across a number of sessions, Cindy was hypnotically age regressed to childhood; during a regression to 8 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 from 12 or 13 years of age that involved being threatened with a knife. The 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 maintained at a 5-year follow-up.

From this client'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 (1996) 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' (p. 124). Nevertheless, these memories, whether accurate or inaccurate, appeared to offer a plausible explanation for Cindy's symptoms, and served as a useful and ultimately successful 'therapeutic leverage for recovery' (Smith, 1996, p. 124).

In commenting on this case, Lynn, Kirsch & Rhue (1996) argued that such memory recovery work can be a gamble, and that clinicians must consider both the risks and benefits of using hypnosis to recover memories; indeed, the emotional, societal, legal, and financial stakes can be very high in such cases. Further, Lynn, Kirsch & Rhue (1996) offered a number of recommendations to help clinicians decide whether the 'benefits of attempting to access potentially forgotten life experiences outweigh the potential risk of distorted memories' (p. 404). These 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. Such recommendations underscore the need for appropriate guidelines to assist in ensuring clinical practice is based on reasonable evidence and is consistent with acceptable standards.

GUIDELINES FOR EVIDENCE-BASED PRACTICE

Across a range of theoretical and therapeutic orientations, there is agreement about the need for evidence-based practice in the treatment of individuals who have or may recover memories of childhood abuse (Beutler & Hill, 1992; Bowers & Farvolden, 1996; Courtois, 1995; Enns, McNeilly, Corkery & Gilbert, 1995; Fowler, 1994; Lindsay & Read, 1994; Knapp & VandeCreek, 1996; Lynn & Nash, 1994; McConkey, 1997; Pope, 1996; Pope & Brown, 1996). To help in this regard, various statements and guidelines are available from professional bodies (American Medical Association, 1994; American Psychiatric Association, 1993; American Psychological Association, 1994; Australian Psychological Society, 1994; British Psychological Society, 1995) as well as from individuals (Bloom, 1994; Bowers & Farvolden, 1996; Lynn, Kirsch & Rhue, 1996; McConkey & Sheehan, 1995; Pope & Brown, 1996; Knapp & VandeCreek, 1996; Yapko, 1994). At a general level, Bowers & Farvolden (1996) highlighted two essential points, no matter what problem is being treated or what technique is being used. They argued that clinicians should not define healing in terms that require themselves

and their clients to understand the latter's problems in the same way; also, 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 cannot 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. In a more concrete way, Knapp & VandeCreek (1996) commented on risk management procedures for psychologists treating individuals who recover memories of childhood 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).

These comments highlight that clinicians need to know how to work in a setting of ambiguity, uncertainty, and differential demands. Moreover, 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, clinicians 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. Moreover, Pope & Brown (1996) set out specific questions that should be addressed by clinicians 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 question, of course, is whether the use of hypnosis will add anything to the treatment of the client.

CONCLUDING COMMENT

Overall, we need to recognize that work with individuals who report recovered memories of childhood 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 doing so, however, we need to maintain appropriate boundaries and use justifiable methods of diagnosis and treatment. If clinicians engage in evidence-based practice, then they will provide better treatment to their clients and will reduce the professional and legal risks to themselves (Knapp & VandeCreek, 1996). Kirsch, Montgomery & Sapirstein (1995) reported that in general hypnosis can enhance the effectiveness of therapy, but we must recognize that hypnosis also has a long history of misuse and a tendency toward controversy. Because of this, clinicians who use hypnosis must be especially careful not to engage in substandard thinking and practice. As Bloom (1994) and London (1997) noted, how a clinician behaves may profoundly shape the nature of any recovered memory as well as how that memory is subsequently used in the clinical setting and beyond. Given the importance of sound professional judgment and practice, the behaviour of the clinician must be consistent with scientifically based and clinically sound therapeutic intervention.

The use of hypnosis can lead to changes in memory, and this can lead to changes in our sense of self and our view of others. In other words, in altering memory, hypnosis can change how people think about themselves and others. This can be positive; it can also be negative. As clinicians, we need to keep in mind that individual memory serves a major role, and that ‘lives would be intolerable without some predicate, some ballast of identity, to provide a context for the wisps of thought and action that constitute our instantaneous selves’ (Albright, 1994, p. 21). When seeking to recover the past, with hypnosis or without, we need to appreciate that it is not just memory that we are dealing with, but rather the past and the future of a human life. That is the reason we need to know why and what we’re doing if we choose to use hypnosis to recover memory.

ACKNOWLEDGEMENTS

The preparation of this chapter was supported in part by a grant from the Australian Research Council to the author. I am grateful to Amanda Barnier for assistance in its preparation.

REFERENCES

- Albright, D. (1994). Literary and psychological models of the self. In U. Neisser & R. Fivush (Eds), *The Remembering Self: Construction and Accuracy in the Self Narrative* (pp. 19–40). Cambridge: Cambridge University Press.
- American Medical Association, Council on Scientific Affairs (1985). Scientific status of refreshing recollection by the use of hypnosis. *J. Am. Med. Assoc.*, **253**, 1918–1923. (Reprinted in *Int. J. Clin. Exp. Hypn.*, 1986, **34**, 1–12.)
- American Medical Association, Council on Scientific Affairs (1994). *Memories of Childhood Abuse*. CSA Report 5-A-94. (Reprinted in *Int. J. Clin. Exp. Hypn.*, 1995, **43**, 114–115.)
- American Psychiatric Association, Board of Trustees. (1993). *Statement on Memories of Sexual Abuse*. Washington DC: American Psychiatric Association.
- American Psychological Association (1994). *Interim report of the APA working group on investigation of memory of childhood abuse*. Washington DC: APA Public Affairs Office.
- American Society of Clinical Hypnosis, Hypnosis and Memory Committee (1995). *Clinical Hypnosis and Memory: Guidelines for Clinicians and for Forensic Hypnosis*. Des Plaines, IL: American Society of Clinical Hypnosis Press.
- Australian Psychological Society (1994). *Guidelines Relating to the Reporting of Recovered Memories*. Melbourne, VIC: Australian Psychological Society.
- Baker, S. R. & Boaz, D. (1983). The partial reformulation of a traumatic memory of a dental phobia during trance: A case study. *Int. J. Clin. Exp. Hypn.*, **31**, 14–18.
- Barnier, A. J. & McConkey, K. M. (1992). Reports of real and false memories: The relevance of hypnosis, hypnotizability, and context of memory test. *J. Abn. Psychol.*, **101**, 521–527.
- Bartlett, F. C. (1995). *Remembering: A Study in Experimental and Social Psychology*. Cambridge: Cambridge University Press. (Original work published 1932.)
- Belli, R. F. & Loftus, E. F. (1996). The pliability of autobiographical memory: Misinformation and the false memory problem. In D. C. Rubin (Ed.), *Remembering our Past: Studies in Autobiographical Memory* (pp. 157–179). New York: Cambridge University Press.
- Beutler, L. E. & Hill, C. E. (1992). Process and outcome research in the treatment of adult victims of childhood sexual abuse: Methodological issues. *J. Consult. Clin. Psychol.*, **60**, 204–212.
- Bloom, P. B. (1994). Clinical guidelines in using hypnosis in uncovering memories of sexual abuse: A master class commentary. *Int. J. Clin. Exp. Hypn.*, **42**, 173–178.
- Bower, G. H. (1990). Awareness, the unconscious, and depression: An experimental psychologist's perspective. In J. L. Singer (Ed.), *Repression and Dissociation: Implications for Personality Theory, Psychopathology, and Health* (pp. 209–231). Chicago, IL: University of Chicago Press.
- Bowers, K. S. & Farvolden, P. (1996). Revisiting a century-old Freudian slip—From suggestion disavowed to the truth repressed. *Psychol. Bull.*, **119**, 355–380.
- Bowers, K. S. & Meichenbaum, D. (Eds) (1984). *The Unconscious Reconsidered*. New York: Wiley.
- Brainerd, C. J. & Reyna, V. F. (1996). Mere memory testing creates false memories in children. *Develop. Psychol.*, **32**, 467–478.
- Bremner, J. D., Krystal, J. H., Charney, D. S. & Southwick, S. M. (1996). Neural mechanisms in dissociative amnesia for childhood abuse: Relevance to current controversy surrounding the 'false memory syndrome'. *Am. J. Psychiat.*, **153**, 71–82.
- Brenneis, C. B. (1994). Belief and suggestion in the recovery of memories of childhood sexual abuse. *J. Am. Psychoanal. Assoc.*, **42**, 1027–1053.
- Briere, J. & Conte, J. (1993). Self-reported amnesia for abuse in adults molested as children. *J. Trauma. Stress*, **6**, 21–31.

- British Psychological Society (1995). *Recovered Memories*. Leicester, UK: British Psychological Society.
- Bruner, J. & Feldman, C. F. (1996). Group narrative as a cultural context of autobiography. In D. C. Rubin (Ed.), *Remembering our Past: Studies in Autobiographical Memory* (pp. 291–317). New York: Cambridge University Press.
- Cahill, L., Prins, B., Weber, M. & McGaugh, J. L. (1994). B-adrenergic activation and memory for emotional events. *Nature*, **371**, 702–704.
- Conway, M. A., Collins, A. F., Gathercole, S. E. & Anderson, S. J. (1996). Recollections of true and false autobiographical memories. *J. Exp. Psychol: General*, **125**, 69–95.
- Courtois, C. A. (1992). The memory retrieval process in incest survivor therapy. *J. Child Sexual Abuse*, **1**, 15–31.
- Courtois, C. A. (1995). Scientist-Practitioners and the delayed memory controversy: Scientific standards and the need for collaboration. *Counseling Psychologist*, **23**, 294–299.
- Davis, P. J. (1990). Repression and the inaccessibility of emotional memories. In J. L. Singer (Ed.), *Repression and Dissociation: Implications for Personality Theory, Psychopathology, and Health* (pp. 387–404). Chicago, IL: University of Chicago Press.
- Ellenberger, H. F. (1970). *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry*. New York: Basic Books.
- Enns, C. Z., McNeilly, C. L., Corkery, J. M. & Gilbert, M. S. (1995). The debate about delayed memories of child sexual abuse: A feminist perspective. *Counseling Psychologist*, **23**, 181–279.
- Erdelyi, M. (1993). Repression: The mechanism and the defense. In D. M. Wegner & J. W. Pennebaker (Eds), *Handbook of Mental Control* (pp. 126–148). Englewood Cliffs, NJ: Prentice–Hall.
- Fivush, R., Haden, C. & Reese, E. (1996). Remembering, recounting, and reminiscing: The development of autobiographical memory in social context. In D. C. Rubin (Ed.), *Remembering our Past: Studies in Autobiographical Memory* (pp. 341–359). New York: Cambridge University Press.
- Foa, E. B., Molnar, C. & Cashman, L. (1995). Change in rape narratives during exposure therapy for posttraumatic stress disorder. *J. Traumat. Stress*, **8**, 675–690.
- Fowler, C. (1994). A pragmatic approach to early childhood memories: Shifting the focus from truth to clinical utility. *Psychother.*, **31**, 676–686.
- Frankel, F. H. (1994). The concept of flashbacks in historical perspective. *Int. J. Clin. Exp. Hypn.*, **42**, 321–336.
- Freyd, J. J. (1994). Betrayal trauma: Traumatic amnesia as an adaptive response to childhood abuse. *Ethics & Behavior*, **4**, 307–329.
- Freyd, J. J. (1996). *Betrayal Trauma: The Logic of Forgetting Childhood Abuse*. Cambridge, MA: Harvard University Press.
- Freyd, J. J. & Gleaves, D. H. (1996). ‘Remembering’ words not presented in lists: Relevance to the current recovered/false memory controversy. *J. Exp. Psychol.: Learn., Mem., Cogn.*, **22**, 811–813.
- Garry, M. & Loftus, E. F. (1994). Pseudomemories without hypnosis. *Int. J. Clin. Exp. Hypn.*, **42**, 363–378.
- Herman, J. (1992). *Trauma and Recovery*. New York: Basic Books.
- Herman, J. & Schatzow, E. (1987). Recovery and verification of memories of childhood sexual trauma. *Psychoanal. Psychol.*, **4**, 1–14.
- Hirst, W. & Manier, D. (1996). Remembering as communication: A family recounts its past. In D. C. Rubin (Ed.), *Remembering our past: Studies in Autobiographical Memory* (pp. 271–290). New York: Cambridge University Press.
- Holmes, D. S. (1974). Investigations of repression: Differential recall of material experimentally or naturally associated with ego threat. *Psychol. Bull.*, **81**, 632–653.

- Holmes, D. S. (1990). The evidence for repression: An examination of sixty years of research. In J. L. Singer (Ed.), *Repression and Dissociation: Implications for Personality Theory, Psychopathology, and Health* (pp. 85–102). Chicago, IL: University of Chicago Press.
- Hyman, I. E. & Pentland, J. (1996). The role of mental imagery in the creation of false childhood memories. *J. Mem. Lang.*, **35**, 101–117.
- Janet, P. (1973). *L'Automatisme psychologique*. [Psychological automatism.] Paris: Centre National de las Recherche Scientifique. (Original work published 1889.)
- Janoff-Bulman, R. (1992). *Shattered Assumptions: Towards a New Psychology of Trauma*. New York: Free Press.
- Kendall-Tackett, K. A., Williams, L. M. & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychol. Bull.*, **113**, 164–180.
- Kihlstrom, J. F. (1994). Hypnosis, delayed recall, and the principles of memory. *Int. J. Clin. Exp. Hypn.*, **42**, 337–345.
- Kihlstrom, J. F. (1995). The trauma–memory argument. *Conscious. Cogn.*, **4**, 63–67.
- Kihlstrom, J. F. & Barnhardt, T. M. (1993). The self-regulation of memory: For better and for worse, with and without hypnosis. In D. M. Wegner & J. W. Pennebaker (Eds), *Handbook of Mental Control* (pp. 88–125). Englewood Cliffs, NJ: Prentice-Hall.
- Kirsch, I., Montgomery, G. & Sapirstein, G. (1995). Hypnosis as an adjunct to cognitive behavioral psychotherapy: A meta-analysis. *J. Consult. Clin. Psychol.*, **63**, 214–220.
- Knapp, S. & VandeCreek, L. (1996). Risk management for psychologists: Treating patients who recover lost memories of childhood abuse. *Prof. Psychol.: Res. Pract.*, **27**, 452–459.
- Krass, J., Kinoshita, S. & McConkey, K. M. (1988). Hypnotic memory and confident reporting. *Appl. Cogn. Psychol.*, **2**, 35–51.
- Kristiansen, C. M., Felton, K. A. & Hovdestad, W. E. (1996). Recovered memories of childhood abuse: Fact, fantasy or fancy. *Women Ther.*, **19**, 47–59.
- Laurence, J.-R. & Perry, C. (1988). *Hypnosis, Will, and Memory: A Psycho-legal History*. New York: Guilford.
- LeDoux, J. E. (1991). Systems and synapses of emotional memory. In L. R. Squire, N. M. Weinberger, G. Lynch & J. L. McGaugh (Eds), *Memory: Organization and Locus of Change* (pp. 205–216). New York: Oxford University Press.
- LeDoux, J. E., Romanski, L. & Zagoraris, A. (1989). Indelibility of subcortical memories. *J. Cogn. Neurosci.*, **1**, 328–243.
- Lindsay, D. S. & Read, J. D. (1994). Psychotherapy and memories of childhood sexual abuse: A cognitive perspective. *Appl. Cogn. Psychol.*, **8**, 281–338.
- Loftus, E. F. (1993). The reality of repressed memories. *Am. Psychol.*, **48**, 518–537.
- Loftus, E. F. & Ketcham, K. (1994). *The Myth of Repressed Memory: False Memories and Allegations of Sexual Abuse*. New York: St. Martin's Press.
- London, R. W. (1997). Forensic and legal implications in clinical practice: A master class commentary. *Int. J. Clin. Exp. Hypn.*, **45**, 6–17.
- 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.
- Lynn, S. J. & McConkey, K. M. (Eds) (1998). *Truth in Memory*. New York: Guilford Press.
- Lynn, S. J. & Nash, M. R. (1994). Truth in memory: Ramifications for psychotherapy and hypnotherapy. *Am. J. Clin. Hypn.*, **36**, 194–208.
- Lynn, S. J. & Rhue, J. (Eds). (1994). *Dissociation: Clinical and Theoretical Perspectives*. New York: Guilford Press.

- Macmillan, M. (1997). *Freud Evaluated: The Completed Arc*. Cambridge, MA: MIT Press.
- Martinez-Taboas, A. (1996). Repressed memories: Some clinical data contributing toward its elucidation. *Am. J. Psychother.*, **50**, 217–230.
- 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 Press.
- McConkey, K. M. (1995). Hypnosis, memory, and the ethics of uncertainty. *Aust. Psychol.*, **30**, 1–10.
- McConkey, K. M. (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), *American Psychiatric Press Review of Psychiatry*, Vol. **16** (pp. 83–108). Chicago, IL: American Psychiatric Press.
- McConkey, K. M. & Kinoshita, S. (1988). The influence of hypnosis on memory after one day and one week. *J. Abnorm. Psychol.*, **97**, 48–53.
- McConkey, K. M. & Sheehan, P. W. (1995). *Hypnosis, Memory, and Behavior in Criminal Investigation*. New York: Guilford Press.
- McDermott, K. B. (1996). The persistence of false memories in list recall. *J. Mem. Language*, **35**, 212–230.
- Mitchell, K. J. & Zaragoza, M. S. (1996). Repeated exposure to suggestion and false memory: The role of contextual variability. *J. Mem. Language*, **35**, 246–260.
- Nash, M. R. (1994). Memory distortion and sexual trauma: The problem of false negatives and false positives. *Int. J. Clin. Exp. Hypn.*, **4**, 346–362.
- Nash, M. R., Hulse, T. L., Sexton, M. C., Harralson, T. I. & Lambert, W. (1993). Long-term sequelae of childhood sexual abuse: Perceived family environment, psychopathology, and dissociation. *J. Consult. Clin. Psychol.*, **61**, 276–283.
- Neisser, U. & Fivush, R. (1994). *The Remembering Self: Construction and Accuracy in the Self-narrative*. Cambridge: Cambridge University Press.
- Nemiah, J. C. (1984). The unconscious and psychopathology. In K. S. Bowers & D. Meichenbaum (Eds), *The Unconscious Reconsidered* (pp. 49–87). New York: Wiley.
- Nogard, H., McConkey, K. M. & Perry, C. (1985). Enhancing visual memory: Trying hypnosis, trying imagination, and trying again. *J. Abnorm. Psychol.*, **94**, 195–204.
- Ofshe, R. J. & Singer, M. T. (1994). Recovered-memory therapy and robust repression: Influence and pseudomemories. *Int. J. Clin. Exp. Hypn.*, **42**, 391–410.
- Ofshe, R. J. & Watters, E. (1994). *Making Monsters: False Memories, Psychotherapy, and Sexual Hysteria*. New York: Charles Scribner's Sons.
- Olio, K. A. (1989). Memory retrieval in the treatment of adult survivors of sexual abuse. *Transact. Anal. J.*, **19**, 93–100.
- Payne, D. G., Elie, C. J., Blackwell, J. M. & Neuschatz, J. S. (1996). Memory illusions: Recalling, recognizing, and recollecting events that never occurred. *J. Mem. Lang.*, **35**, 261–285.
- Pettinatti, H. M. (Ed.) (1988). *Hypnosis and Memory*. New York: Guilford Press.
- Pezdek, K. & Banks, W. P. (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? *Psychol. Med.*, **25**, 121–126.
- Pope, K. S. (1996). Memory, abuse, and science: Questioning claims about the false memory syndrome epidemic. *Am. Psychol.*, **51**, 957–974.
- Pope, K. S. & Brown, L. S. (1996). *Recovered Memories of Abuse: Assessment, Therapy, Forensics*. Washington DC: American Psychological Association.
- Read, J. D. (1996). From a passing thought to a false memory in 2 minutes: Confusing real and illusory events. *Psychonom. Bull. Rev.*, **3**, 105–111.

- Roediger, H. L., Jacoby, J. D. & McDermott, K. B. (1996). Misinformation effects in recall: Creating false memories through repeated retrieval. *J. Mem. Lang.*, **35**, 300–318.
- Roediger, H. L. & McDermott, K. B. (1996). False perceptions of false memories. *J. Exp. Psychol.: Learn., Mem., Cogn.*, **22**, 814–816.
- Romans, S. E., Martin, J. C., Anderson, J. C., O'Shea, M. L. & Mullen, P. E. (1995). Factors that mediate between child sexual abuse and adult psychological outcome. *Psycholog. Med.*, **25**, 127–142.
- Rubin, D. C. (Ed.) (1996). *Remembering our Past: Studies in Autobiographical Memory*. New York: Cambridge University Press.
- Schacter, D. L. (1996). *Searching for Memory: The Brain, the Mind, and the Past*. New York: Basic Books.
- Schefflin, A. W. & Shapiro, J.L. (1989). *Trance on Trial*. New York: Guilford Press.
- 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. (1996). *Multiple Identities and False Memories: A Sociocognitive Perspective*. 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. *Int. J. Clin. Exp. Hypn.*, **42**, 289–303.
- Spiegel, D. (Ed.) (1994). *Dissociation: Culture, Mind and Body*. Washington, DC: American Psychiatric Press.
- Spiegel, D. & Schefflin, A. W. (1994). Dissociated or fabricated? Psychiatric aspects of repressed memory in criminal and civil cases. *Int. J. Clin. Exp. Hypn.*, **42**, 411–432.
- Terr, L. (1994). *Unchained Memories: True Stories of Traumatic Memories, Lost and Found*. New York: Basic Books.
- van der Kolk, B. A. (1994). The body keeps the score: Memory and the evolving psychobiology of posttraumatic stress. *Harvard Rev. Psychiat.*, **1**, 253–265.
- Weinberger, D. A. (1990). The construct validity of the repressive coping style. In J. L. Singer (Ed.), *Repression and Dissociation: Implications for Personality Theory, Psychopathology, and Health* (pp. 337–386). Chicago, IL: University of Chicago Press.
- Williams, L. M. (1994). Recall of childhood trauma: A prospective study of women's memories of child sexual abuse. *J. Consult. Clin. Psychol.*, **62**, 1167–1176.
- Williams, L. M. (1995). Recovered memories of abuse in women with documented child sexual victimization histories. *J. Trauma. Stress*, **8**, 649–674.
- Yapko, M. D. (1994). *Suggestions of Abuse: True and False Memories of Childhood Sexual Trauma*. New York: Simon & Schuster.
- Zaragoza, M. S. & Mitchell, K. J. (1996). Repeated exposure to suggestion and the creation of false memories. *Psycholog. Sci.*, **7**, 294–300.

Hypnosis in the Management of Stress and Anxiety Disorders

ROBB O. STANLEY, TREVOR R. NORMAN and
GRAHAM D. BURROWS

University of Melbourne, Australia

Stress is a ubiquitous phenomenon, with which we are all familiar and yet the term is used in popular and clinical contexts without precision. 'Stress' is the process whereby this distress occurs, rather than the psychological and/or physiological distress response itself. The distress response resulting from the 'stress' process is a variable reaction that involves highly individual combinations of psychological or physiological distress.

Not all 'stress' is negative. As an acute response to the environment (and for some people even the repeated acute response) stress may be a motivating force to action, and may act as a useful stimulant to problem-solving and productivity. The concept of 'eustress' has also been introduced to describe the difference between this positive motivating pressure by which some thrive, and the 'distress' which we are commonly referring to in the clinical situation. While it may be agreed that events such as natural disasters are stressful for almost everyone, the majority of situations become part of a stress process only because of their significance to the individual. What may be simply problematic and challenging for one may be threatening and highly stressful for the next. 'Stress' then is neither a diagnosis nor an adequate description of psychological distress.

The stress process results in subjective distress and/or unpleasant physiological arousal, when the real or perceived demands being made on the person by the situation exceed, or are perceived by that individual as exceeding, their ability to cope. These perceptions of an imbalance between demand and coping result in the psychological or affective state of current or impending threat as well as a disturbance in physiological arousal that if persistent may damage the homeostatic functioning of bodily and psychological processes alike. The pattern of response to the stress process is variable and dependent on both genetic factors and learned response patterns. The personal relevance and availability of coping mechanisms

are key factors, making it more logical to define stress by the process resulting in the response, rather than the problematic situation. Thus overall the 'stress' response will depend on individual characteristics, life experiences; other problematic or challenging situations; the availability of suitable coping strategies to resolve problematic situations; the patient's confidence in putting these into effect and their ability to tolerate partial solutions to challenging situations.

Stress is implicated as a factor in precipitating a wide range of psychiatric and psychological disturbances. For some, the repeated or chronic perception of threat or inability to cope leads to anxiety, while for others it leads to a sense of helplessness and depression. It is probable, given the similarities between the anxiety and stress responses, that the same vulnerabilities to stress show up as vulnerabilities to anxiety disorders. Similarly in depression, psychologically confronting demanding and problematic situations repeatedly, or in the perceived absence of coping strategies, may lead to a sense of helplessness and contribute to a depressive response. The same neurotransmitter processes of the hypothalamic-pituitary axis and serotonergic and adrenergic mechanisms are implicated in both depressive disorders and stress vulnerabilities. To deal with chronic or severe acute stress patients self-medicate. The use of alcohol is a common strategy to reduce stress responses. Psychological dependence on this as the solution to chronic stress leads often to alcohol abuse with all its associated problems. The same problem occurs with marijuana and other illicitly obtained drugs that have some sedative effect. Benzodiazepine abuse and dependence in dealing with stress is common. Similarly other drug use such as nicotine can have an element of self-medication to dampen the physiological components of stress.

THE MANAGEMENT OF CHRONIC STRESS

The treatment of stress is divided into three phases (Stanley, Norman & Burrows, 1999). Firstly, the medical, psychiatric and psychological conditions that are the outcome of the stress experience are treated in their own right. Anxiety, depression or the effects of attempts to manage their psychological distress by alcohol or drug use require appropriate clinical management first. Secondly, the chronic hyperarousal is treated, and this 'arousal management' contributes to controlling the secondary psychological distresses. In the third phase, the patient is assisted with stress prevention by developing more effective strategies for dealing with life stressors as well as changing attitudes, habitual thought processes and learned behavioral patterns.

Hypnosis as a therapeutic approach contributes to all three of these components of stress management. The part hypnosis may play in cognitive/attitudinal change, arousal management and in the treatment of the psychological and physical consequences of stress, will be reviewed and the management of anxiety disorders that may result from chronic stress will be outlined.

PHASE ONE: MEDICAL, PSYCHOLOGICAL AND PSYCHIATRIC TREATMENT

Medical illnesses contributed to by the stress process require the same medical interventions as those conditions where stress has not contributed. In treating the condition the contribution of stress as a precipitant and exacerbating factor is noted. So cardiovascular disease is treated as cardiovascular disease is usually treated, respiratory disorders as any respiratory disorder.

The same applies to depression or anxiety disorders. With the diagnosis of a psychiatric or psychological disorder the treatment of choice may be either pharmacological or psychological or both. The nature and severity of the presenting condition will be considered in making this decision. Effective antidepressant medication or the judicious use of benzodiazepines may have a part to play in treating the outcome of the stress.

The psychological treatment of stress-related and anxiety disorders may involve a wide variety of techniques based on psychotherapeutic, behavioral and cognitive principles. Cognitive, behavioral and other psychotherapies are applied on the basis of their proven effectiveness in treating the particular presenting condition. If the treatment of choice for the particular condition precipitated by the stress experience is psychotherapy, this may be used with or without drug therapy. Hypnosis may enhance treatment as a result of being a particularly persuasive form of communication. Some of the phenomena of hypnosis may be used directly to enhance the psychological treatment.

PHASE TWO: COGNITIVE AND ATTITUDE CHANGE

This phase focuses on lowering stress-proneness and involves individualized treatment. Cognitive and attitude change takes into account personality characteristics, flexibility, life experiences, ongoing problem situations, the availability of suitable coping strategies to resolve problem situations and the patient's confidence in coping strategies. It may also need to consider the patient's ability to tolerate partial solutions to challenging situations. Stress prevention programmes are also individualized on the basis of the aetiological contributions to the particular stress responses the patient shows, or if carried out in a group setting they need to cover the full range of likely contributors. Patient education, concerning the nature of stress and the variety of stress responses, is an essential part of the programme. The patient is assisted in recognizing what events result in stress, including what is the impact of their lifestyle. Many are unwilling or unable initially to identify the events, interpretations or lifestyle contributions, and require encouragement to do so.

Interpretation of events and situations as threatening, an essential cause of attitudinal and cognitive causes of stress, requires the sufferer to be encouraged to challenge their assumptions about the nature of their current experiences. This is

done using the common cognitive-behavioral therapy approaches (Beck, 1995). Inappropriate interpretations are dealt with by the cognitive-behavioral approach of challenging automatic thoughts. When the process involves problem-solving strategies which are ineffectual, treatments focus on developing effective problem-solving strategies and on making them habitual. These approaches involve appropriate labelling of the problem as a challenge to be overcome, identifying the range of solutions available, choosing the solution that has the potential most likely to minimize discomfort and effect a resolution, and evaluating the outcome if the solution is not as desired. Passivity and problem avoidance must be overcome, and rather than seeing problems as threats, the patient must be encouraged to see them as part of the range of life's challenges.

Because personality characteristics such as perfectionism and obsessiveness get in the way, patients need to be encouraged to be flexible in evaluating the situation. They need to develop the ability to perceive the range of complete or partial solutions. They need to be assisted to choose between the possible solutions, in the knowledge that while they may desire to get it right, if they do not they will simply make another choice or consider it a learning experience. They need to see that their self-esteem or self-worth is not related to finding the perfect solution. Indecision and passivity are presented as being worse than trying an inadequate solution that can be changed later if unsuccessful. The realistic recognition that life is problematic and challenging is encouraged. Some experiences such as the death of a loved one are to be coped with and survived as part of the vicissitudes of life. A willingness to deal with the unsolvable is a necessary part of coping with the inevitable challenges life throws at us all.

Self-esteem and confidence in their ability to find and effect solutions need to be encouraged. Low self-esteem may reflect long-standing personal difficulties that require more extensive interventions. If necessary, psychotherapy may be recommended to free the patient from the 'ghosts' of the past that continue to colour the way they deal with their present life and therefore to sensitize them to exhibit stress responses in the present.

PHASE THREE: AROUSAL MANAGEMENT

The exaggerated physiological response to the particular difficulties and/or a habitually increased basal level of arousal may be treated in the initial phase with appropriate medication.

Longer term it is desirable that the patient can manage the exaggerated phasic and tonic arousal via other strategies such as relaxation, meditation, self-hypnosis, biofeedback or exercise programmes. Relaxation/meditation techniques if practised regularly have been shown to progressively lower the basal physiological arousal. There are many different approaches to meditation and relaxation (Jacobson, 1929; Benson, 1975), but they essentially involve similar principles. The patient needs to be motivated to persist as it is the alteration of a habitual basal or

phasic response that is being sought. Practice may be needed daily for 6–12 months and regularly after that time (maybe 2–3 times a week).

The modern use of hypnosis is a very effective technique in reducing inappropriate or prolonged arousal. Self-hypnosis can be used to alter the phasic responses or the habitual elevation in basal arousal levels (Stanley, Norman & Burrows, 1999). If the patient can use hypnosis and the therapist is properly trained in its use, it not only speeds up treatment (perhaps by as much as one-third) but also enhances the sense of self-control and problem resolution in the future, thereby becoming part of stress prevention as well. There are contraindications to the use of hypnosis and its inappropriate use can worsen the patient's condition (Stanley, 1994). Effective training is essential for the use of hypnosis to be safe (Stanley, Rose & Burrows, 1998).

Exercise and the maintenance of physical fitness also reduce the inappropriate arousal responses to stressful life events. The effects are reported immediately after exercise and following a regular exercise programme (Markoff, Ryan & Young, 1982; Ransford, 1982). Both basal and phasic physiological responses are reduced as a result of increased physical fitness. Once more motivation of the patient to maintain this programme is difficult even after the rationale is explained.

Where stress is not the result of challenges being turned into threats, stress management may need to consider lifestyle changes. Constant, ongoing stimulation (even positive stimulation) may accumulate to manifest itself in a hyperarousal stress response. The patient needs to accept the requirement for restoration of biological and psychological homeostasis, or in other words the reduction of basal arousal back into the middle of the range. Lifestyle and behavioral changes of this sort are difficult to achieve and maintain. It is rarely easy for patients to make the connection between constant stimulation of their lifestyle and the stress-related disorders they suffer or may likely suffer. They are often deriving such benefits from their current lifestyle, that they are ambivalent if not downright resistive to change. Even if they do make significant changes, they have difficulty in maintaining them as the pay-off is not clear (and the habitual behaviors that have more evident rewards return). Ongoing tangible or self-administered rewards for suitable lifestyle change may need to be built into the stress management. Effective time management, exercise programmes, relaxation, recreation, changes in diet, alcohol use and other drug use (including smoking) need to be considered. These are difficult to achieve until the patient makes the connection (and not just intellectually) between their lifestyle and their health. Even with this connection being made, motivation to change must be present or be cultivated. Hypnosis may be used to develop the individual motivation.

ANXIETY DISORDERS

While anxiety is a normal emotion experienced at some time by virtually all humans, 'pathological' anxiety, excessive or inappropriate to the situation, may

appear in the form of an anxiety disorder. The distinction between normal and 'pathological' anxiety needs to be established for each. Normal anxiety has a protective function in threatening situations and may enhance motivation to resolve the threat. On the other hand, pathological anxiety serves no useful purpose and is associated with an inability to function at a satisfactory level. It has been estimated that perhaps as many as 10% of the population may experience an anxiety disorder.

HYPNOTIZABILITY AS AN INFLUENCE IN ANXIETY DISORDERS

An association between hypnotic susceptibility and several anxiety disorders has been suggested. Frankel (1976) first presented evidence that phobic patients show greater hypnotic susceptibility than other patient groups and that a disproportionate number of his 24 phobic patients were in the highly hypnotizable range, when assessed using standardized assessments of susceptibility. There is some additional evidence supporting this observation (Frankel & Orne, 1976; Gerschman, Burrows, Reade & Foenander, 1979; Foenander, Burrows, Gerschman & Horne, 1980; Frischolz, Spiegel et al. 1982; Robney, Hollander & Campbell, 1983; John, Hollander & Perry, 1983; Kelly, 1984) but two studies, using different assessment techniques, have failed to find greater hypnotic susceptibility in phobic patients (Gerschman, Burrows & Reade, 1987; Owens, Bliss, Koester & Jeppsen, 1989). Frankel (1974) has also speculated that the heightened hypnotic susceptibility may be implicated aetiologically in the development and maintenance of phobic conditions.

TREATMENT OF ANXIETY

Management of the anxiety disorders may include psychotherapy, pharmacotherapy or both. The primary goals of psychological and hypnotically based therapies for the treatment of anxiety disorders are: the exposure of the patient (via imagery or reality) to the situation provoking the anxiety (thereby allowing deconditioning, habituation or desensitization); cognitive re-evaluations of the situation to alter the perception of threat; determining the personal significance (symbolic) of the stress or anxiety provocation; increasing the sense of self-efficacy in the patient's ability to deal with the stress-eliciting situation and the stress or anxiety symptoms; and the rehearsal of coping strategies. Despite the applicability and efficacy of hypnosis-based behavioral, cognitive and other psychotherapy interventions, there is a need to understand patient differences and to individualize treatment interventions (Jackson & Stanley, 1987). There is a need to bear this in mind when deciding on clinical interventions appropriate for individual patients. Insight-oriented psychotherapy attempts to assist the patient in finding, understanding and thereby changing the cause of the anxiety. In this approach anxiety is assumed to be symbolic of some other issue, which the patient is not facing or is not aware of. In contemporary therapy, insight-oriented therapy approach is less common, as

cognitive-behavioral psychotherapies have demonstrated their effectiveness, particularly in treating anxiety disorders. The principal components of cognitive-behavioral therapy are applied differently in the different anxiety disorders.

Arousal Management

With appropriate training the majority of patients can learn control of their anxiety response. This leaves them free to focus on problem-solving, or unlearning the connection between the anxiety and the anxiety-provoking situation. The anxiety-management techniques can have either or both of two purposes, the lowering of average—that is basal—anxiety levels, or the control of the acute anxiety response in the anxiety-provoking situation. Meditation, yoga and the many other forms of meditation can be of great assistance, particularly in lowering the average or basal levels of anxiety and arousal. These techniques may be of less use in treating situational anxieties.

There are numerous other approaches to training patients in the control of anxiety responses. All require the patient to practise the skill being acquired for a significant time, in order to have the degree of control over the anxiety necessary to deal with the anxiety disorder. The use of relaxation techniques to assist patients in learning to control their anxiety responses has a long history. Jacobson (1929) first introduced Progressive Relaxation which involved the patient learning discrimination of the muscle tension and control over it via a process of systematically tensing and relaxing the muscle groups of the body. An alternative, briefer and effective approach to training patients in anxiety control was introduced by Benson (1975).

Hypnosis, and in particular self-hypnosis, plays a very useful part in the treatment of anxiety disorders. Principally hypnosis is used to train the patient in cued rapid relaxation to be applied in the anxiety-provoking situation, as well as assisting in changes in perception about the nature of the perceived threat and the patient's confidence in their ability to cope with that situation. A detailed review of the various uses of hypnosis appears in Stanley, Judd & Burrows (1990), Stanley (1994), and Stanley, Norman & Burrows (1999).

When patients use self-hypnotic arousal reduction and relaxation it adds to their confidence in coping and their sense of self-control. They are able to influence what they previously thought unalterable. This shifts their locus of control beliefs and increases their sense of self-efficacy.

Cognitive-Behavioral Therapy

Cognitive therapy is based on the belief that it is the interpretation of the situation as threatening that is involved in the maintenance of the anxiety disorder (Beck & Emery, 1985). A three-stage schema-based information-processing model of anxiety has been proposed (Beck & Clark, 1997). Anxiety may result from the symptoms of the anxiety being interpreted as threatening, as in panic disorder.

Threat may be attributed to an animal, germs or blood, as in a specific phobia and some obsessive-compulsive disorders. The perceived threat may result from some aspect of a particular situation, as in social phobia, agoraphobia, or from reminders of past traumatic events, as in post-traumatic stress disorders. The cognitive approach has the patient challenge the beliefs about threat through helping the patient to examine the irrational thought processes and self-statements.

As a form of persuasive communication, hypnotically based treatments offer a powerful addition to the cognitive-behavioral strategies. The suspension of critical thinking in the hypnotic state may make the patient more susceptible to accepting the persuasive communications of cognitive-behavioral therapy.

Clients, who typically make critical and negative comments towards therapeutic communications, are essentially required by the hypnotic context to listen to persuasive messages from the therapist, in a way that they may not ordinarily do so; this process of attending and listening, without commenting, may make the clients more accessible to the content of the therapist's message. (McConkey, 1984, p. 80)

Additionally, alterations in cognitive processes may help patients accept alternative interpretations of events, their significance, their own coping abilities, and the expected outcome.

Exposure Based Unlearning

When anxiety is situation-specific, exposure-based treatments take a prominent role in cognitive-behavioral treatment. While the patient manages the anxiety by techniques detailed above, therapist-guided, or more commonly patient-guided stepwise exposure to the situation, is the basis of unlearning of the anxiety response. While there is no evidence that the exposure-based treatments need to be carried out in stepwise fashion, the gradual exposure of the stepwise approach maintains patients in treatment and prevents the therapy experience itself becoming traumatic.

Many psychotherapies use imagery and fantasy to facilitate the process of change. For some patients hypnotically assisted therapies may result in them being able to respond to imagery and fantasy as reality. Specifically, hypnosis may enhance a variety of interventions applied to the treatment of anxiety.

- (i) Systematic desensitization remains one of the most common treatments for specific phobic disorders. Lang (1979) showed that patients who benefit from systematic desensitization have a greater ability to generate emotional responses to the imagined items from a hierarchy. The more realistic the experience of the imagined situation, the more likely are such responses to be generated. Hypnosis offers an adjunct to desensitization that is potentially extremely powerful, since the attribution of realism to imagined events is a characteristic of the hypnotic state.

- (ii) The effectiveness of coping rehearsal may similarly be aided by the reality attributions effected through hypnosis. With the increased realism of fantasy rehearsal, and the uncritical acceptance of the implied message that this will occur, patients' expectations and motivations to expose themselves to the anxiety-provoking situation may be heightened. In the absence of self-defeating thoughts that maintain anxiety (Beck & Emery, 1985) successful coping may become a viable outcome.

Dissociation from Anxiety Symptoms and Situations

Patients with anxiety disorders frequently become over-absorbed in their anxiety. Their anxiety responses result in thoughts concerning the danger posed by the symptoms and their inability to cope. Dissociation from the symptoms via hypnosis can provide an adaptive and useful method of reducing this reactivity to the anxiety-producing situation and to the symptoms that may follow.

Treatment Approaches to Anxiety Disorders

The anxiety disorders have been variously subdivided. One widely accepted classification, the *Diagnostic and Statistical Manual of Mental Disorders* (4th edition) (American Psychiatric Association, 1994), subdivides the anxiety disorders into panic disorders with/without agoraphobia, social phobia, simple phobia, generalized anxiety disorders, post-traumatic stress disorder and obsessive-compulsive disorder. Management may include pharmacotherapy and/or a wide variety of psychological treatments.

Panic Disorders

The cardinal clinical characteristic of panic disorder is the rapid onset of anxiety symptoms, without apparent or clearly defined precipitating events.

With panic disorder the three priorities are firstly, the teaching of skills to lower average or basic anxiety level and to give specific control of the acute anxiety episodes. Often this may involve the relaxation techniques or self-hypnosis. Additionally, appropriate breathing techniques may be used to control the physiological signs of the panic disorder. The second component of the treatment of panic disorder involves realistic patient education and techniques of patient self-talk about the nature of their symptoms, as signs of the panic disorder rather than signs of threat to the patient's life, survival or well-being. That is, they are something unpleasant to be managed rather than something to be panicked about. Fears of embarrassment are dealt with in the same way that they would be dealt with in social phobia. The third component of treatment involves therapist-guided graded exposure to the situation the patient is most afraid of, be that situations that trigger the panic attacks, social situations where the fear may focus on what others will

think, but more commonly the anxiety symptoms themselves. Exposure to the symptoms may be brought about through the patient hyperventilating on instruction, and then managing the symptoms by means of the relaxation technique or breathing techniques previously taught to them.

Suggested strategies for dealing with the frequently present agoraphobic symptoms are detailed below. With sufficient practice, self-hypnosis techniques may assist in reducing the panic state and gaining control over symptoms. Rapid reduction in anxiety, and dissociation from fears of the panic state, may be used to truncate the secondary anxiety response (anticipatory anxiety) about having a panic attack.

Additionally hypnosis may be used with panic disorder patients to reinforce their belief that they can deal with intense anxiety states. Such improved self-efficacy (Frankel, 1974) and a shift to an internal locus of control may come about via hypnotic demonstrations of control (behavioral control) or through attitudinal shifts toward confidence in coping (cognitive control) encouraged by persuasive communications of exploring the precipitants of panic states, should any exist.

Agoraphobia

As avoidance and escape from anxiety are the key features of agoraphobia, whether with panic disorder or without, the priority is therapist-guided graded exposure to the situation the patient is anxious about. The patient, in a step-by-step way, approaches the situations that trigger anxiety and which they have been avoiding. Exposure to the anxiety symptoms themselves is also of importance, especially where panic disorder is involved with the agoraphobia. The acquisition of anxiety-management skills, while not essential, is helpful in facilitating the graded exposure and making treatment less threatening, by establishing specific control over acute anxiety. The anxiety-management skills may involve the patient in regular practice of either relaxation techniques or self-hypnosis, with or without imagery-based rehearsal of exposure to the anxiety-producing situations. Alternatively, breathing techniques may be taught to assist in the control of the physiological signs, if the agoraphobia is a secondary development of panic disorder. The third component of the treatment of agoraphobia involves the patient in realistic self-talk about the nature of their anxiety, the absence of real threat, and their acceptance of the anxiety symptoms as unpleasant experiences to be faced and coped with, not run away from.

Hypnotic interventions may assist the treatment of agoraphobia by re-establishing a sense of security and coping through a supportive therapist relationship, enhanced by hypnosis, establishing a sense of 'control' over physical symptoms and cognitive anxiety, thereby permitting exposure and changing self-efficacy perceptions, imaginal rehearsal of coping as a prelude to *in vivo* exposure, enhancing motivation and determination through the exploration of what freedom from the symptoms means to lifestyle ('Doing what they have always wanted to

do'), changing general self-image, and enhancing dissociation from the anxiety and self- or symptoms focus (a healthy dissociative mechanism).

Social Phobias

Social phobias present in a variety of forms with different aetiological implications: fears of public speaking, fainting, losing control of bladder or bowels, vomiting, or embarrassing oneself by inappropriate action or speech. Jackson & Stanley (1987) noted the variety of aetiological explanations which have been offered to account for social phobias, ranging from inadequately developed social skills to fears of incurring the displeasure or rejection of others and catastrophic assumptions concerning the outcome of such displeasure, and even to a general intolerance of discomfort. In addition, some cases of social phobia may occur as a secondary complication of panic disorder (Liebowitz, 1987).

With social phobias the main feature to be addressed is the patient's fear of the evaluation of others in the social situation. Their cognitive processes result in them turning embarrassments into disasters and their normal preference for the approval of others into almost a requirement for their survival. Cognitive therapy actively encourages them to explore and challenge their beliefs that the situation is any more than embarrassing. The three-stage schema-based cognitive model of anxiety proposed by Beck & Clark (1997) is a useful starting point for conceptualizing social phobias. The cognitive approach has the patient challenge the beliefs about threat through helping the patient to examine the irrational thought processes and self-statements, particularly in the social situation. Homework-based exposure to the feared social situations is mandatory in the treatment of the socially phobic. Exaggerated confronting of social anxiety by 'shame-attacking exercises' may also greatly assist the socially phobic patient if they can be encouraged to do them.

Apart from general anxiety reduction, hypnotic techniques may be applied to establish a sense of self-worth and self-esteem. For example, cognitive restructuring within the hypnotic state may sensitize patients to their positive characteristics and successes, while emphasizing that projected disasters do not occur, and that those problems which do can be coped with. Additionally, through the use of rapidly induced self-hypnosis, patients may develop control over bodily processes where they fear loss of control (Jackson & Stanley, 1987). Dissociation into a tranquil and relaxed state on a cue specific to social situations may be achieved, as may realistic coping through fantasy rehearsal.

Specific Phobias

With specific phobias, systematic desensitization, *in vivo* or in imagination, remains the mainstay of treatment. Treatment by exposure in reality is more effective than imagery-based treatment, but imagery-based treatments are of considerable importance where the situation of which the patient is fearful cannot

easily be produced (e.g. storms, earthquakes, injury, etc.). The therapist guides and encourages the patient through graded exposure to the phobic stimuli or situation. It is an advantage if the patient understands the ways in which phobias are acquired and the process of deconditioning. Phobic anxiety is learned as a result of one of four processes: traumatic experiences of the phobic situation (classical conditioning); observing role models acting with fear (observational learning); informational learning coming about through either a lack of reality-based information about the situation or being encouraged to believe the situation is threatening (cognitive learning); or the consequences of accidental anxiety reduction on leaving a situation, resulting in threat and anxiety being attributed to the situation (operant learning). This new insight results in the patient recognizing the phobic response as an adaptive anxiety response inappropriately attached to the phobic situation, and assists the patient not only in understanding the process of unlearning, but also in ceasing self-blame or criticism. While the graded exposure is not vital to unlearning phobic responses the approach is more acceptable to the patient and assists in their therapy commitment. Group support and treatment of a variety of phobias with a group of phobic patients also assists in normalizing the process of the acquisition and unlearning of specific phobias. The acquisition of the anxiety-management skills based on either relaxation techniques or self-hypnosis, and with or without imagery-based rehearsal of exposure to the anxiety-producing situations, while not essential, may facilitate the *in vivo* graded exposure.

Specific phobias, whether single or multiple in nature, may respond well to hypnotic interventions. As observed by Frankel (1974), phobic patients tend to be more hypnotizable than other patients or the general population. As well as facilitating imaginal desensitization via enhancement of the imagined stimuli and coping strategies (covert modelling), hypnotic techniques may be used to produce cognitive changes concerning feared situations. Enhancement of the sense of self-control, increased self-confidence and a reinterpretation of the phobic circumstances may also be achieved (Liebowitz, 1987). In addition, therapeutic dissociation from the fear-inducing situation may be developed via hypnosis to facilitate the exposure component of therapeutic interventions. This approach controls patients' tendency to become absorbed in their symptoms, a tendency which may accelerate their phobia response. The hypnotic technique of age regression may assist in exploring the symbolism of the feared object/situation, or in uncovering trauma where this is aetiologically involved (Clarke & Jackson, 1983).

Post-traumatic Stress Disorder

With post-traumatic stress disorder two issues require resolution. The first issue is dealing with the memories and affect of the traumatic experience. The patient with post-traumatic stress disorder attempts to avoid the memories and affect and may voluntarily or involuntarily use full or partial dissociation, as a coping mechanism. The dissociated affects and/or memories are then responded to as though they are

reoccurring when they intrude into consciousness. As well there is often a continuous level of anxiety associated with the impending intrusion into consciousness of the affects and memories. Hypnotic techniques and eye movement desensitization are used in dealing with this dissociative partial coping, with cognitive restructuring of the thoughts of the trauma being a primary goal (Spiegel, Hunt & Dondershine, 1988; Shapiro, 1989).

Secondly, the avoidance of stimuli associated with the traumatic events needs to be dealt with as a form of phobic avoidance with progressive exposure. Systematic desensitization, *in vivo* or in imagination, remains an important part of treatment. Treatment by exposure in reality is more effective than imagery-based treatment, but imagery-based treatments are of considerable importance where the traumatic associations cannot easily be produced. The therapist guides and encourages the patient through the graded exposure to the traumatic stimuli or situation. The acquisition of anxiety-management skills based on either relaxation techniques or self-hypnosis, and with or without imagery-based rehearsal of exposure to the anxiety-producing situations, while not essential, may facilitate the *in vivo* graded exposure.

Brett & Ostroff (1985) have argued that images play a central role in the maintenance of post-traumatic stress disorder. Stutman & Bliss (1985) noted that, amongst Vietnam veterans, victims of this disorder demonstrated higher hypnotic susceptibility and imagery vividness than those without the disorder. Kingsbury (1988) detailed the application of hypnosis to the treatment of post-traumatic stress disorder, including cognitive reframing of events, dissociation to distance the sufferer from the event and alterations of memories of the events. Similar applications of hypnosis to achieve both abreactive reactions and cognitive restructuring are often the treatment of choice (MacHovec, 1985).

The psychoanalytically oriented use of hypnosis in post-traumatic stress disorder has been described (Peebles, 1989). The use of age-regression and abreactive techniques permits therapeutic changes to occur.

Generalized Anxiety

With generalized anxiety disorder there are two specific goals of treatment; firstly the lowering of the average level of anxiety and secondly the changes in thoughts, perceptions and attitudes that reactivate the anxiety response. With appropriate training the majority of patients can learn to control their basal level of anxiety. There are numerous approaches to training patients in the control of anxiety responses. All require the patient to practise the skill being acquired for a significant time in order to have sufficient control over the anxiety necessary to deal with the anxiety disorder. The use of relaxation techniques to assist patients in learning to control their anxiety responses has a long history. Apart from the relaxation techniques commonly used (Jacobson, 1929; Benson, 1975), hypnosis and in

particular self-hypnosis, play a useful part in the treatment of generalized anxiety disorder (Stanley & Burrows, 1998).

Generalized anxiety may be reduced through the use of frequent brief self-hypnosis to decrease physiological arousal and to alter the absorption in anxiety symptoms. Through enhancement of a sense of self-control with hypnosis and cognitive restructuring, those with generalized anxiety can be assisted. Combined with age regression, cognitive restructuring may be useful in re-establishing a sense of 'safety in one's own company'.

CONCLUSION

Hypnosis offers an adjunct to the variety of strategies that are applied to the treatment of stress and anxiety disorders. The rationale for its role is supported by the observation that increased hypnotic susceptibility is present in phobic and post-traumatic stress disorders. The use of dissociation, altered perceptions, cognitions and memories, the enhanced control over anxiety symptoms, cued self-hypnosis, and hypnotic uncovering for psychodynamic psychotherapy may all be facilitated by this ancient and often neglected therapeutic modality.

REFERENCES

- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* 4th Edn. Washington, DC: American Psychiatric Association.
- Beck, A. T. & Emery, G. (1985). *Anxiety Disorders and Phobias: A Cognitive Perspective*. New York: Basic Books.
- Beck, A. T. & Clark, D. A. (1997). An information processing model of anxiety: Automatic and strategic processes. *Behav. Res. Ther.*, **35**, 49–58.
- Beck, J. S. (1995). *Cognitive Therapy: Basics and Beyond*. New York: Guilford Press.
- Benson, H. (1975). *The Relaxation Response*. New York: William Morrow.
- Brett, E. A. & Ostroff, R. (1985). Imagery and post-traumatic stress disorder: An overview. *Am. J. Psychiat.*, **142**, 415.
- Clarke, J. C. & Jackson, J. A. (1983). *Hypnosis and Behaviour Therapy: The Treatment of Anxiety and Phobias*. New York: Springer.
- Foender, G., Burrows, G. D., Gerschman, J. & Horne, D. J. (1980). Phobic behavior and hypnotic susceptibility. *Aust. J. Clin. Exp. Hypn.*, **8**, 41.
- Frankel, F. H. (1974). Trance capacity and the genesis of phobic behavior. *Arch. Gen. Psychiat.*, **31**, 261.
- Frankel, F. H. (1976). *Hypnosis. Trance as a Coping Mechanism*. New York: Plenum.
- Frankel, F. H. & Orne, M. T. (1976). Hypnotizability and phobic behavior. *Arch. Gen. Psychiat.*, **33**, 1259.
- Frischolz, E. J., Spiegel, D., Spiegel, H., Balma, D. L., & Markell, C. S. (1982). Differential hypnotic responsivity of smokers, phobics and chronic-pain control patients: a failure to confirm. *J. Abnorm. Psychol.*, **91**, 269.

- Gerschman, J. A., Burrows, G. D. & Reade, P. C. (1987). Hypnotizability and dental phobic disorders. *Int. J. Psychosom.*, **33**, 42.
- Gerschman, J. A., Burrows, G. D., Reade, P. C. & Foenander, G. (1979). Hypnotizability and the treatment of dental phobic illness. In: G. D. Burrows & D. R. Collison (Eds), *Hypnosis 1979*, pp. 33–39 Amsterdam: Elsevier.
- Jackson, H. J. & Stanley, R. O. (1987). The missing factors: Influences in choice of treatment strategies. *Aust. J. Clin. Exp. Hypn.*, **15**, 83.
- Jacobson, E. (1929). *Progressive Relaxation*. Chicago: University of Chicago Press.
- John, R., Hollander, B. & Perry, C. (1983). Hypnotizability and phobic behavior: Further supporting data. *J. Abnorm. Psychol.*, **92**, 390.
- Kelly, S. F. (1984). Measured hypnotic response and phobic behavior: A brief communication. *Int. J. Clin. Exp. Hypn.*, **32**, 1.
- Kingsbury, S. J. (1988). Hypnosis in the treatment of post-traumatic stress disorder: An isomorphic intervention. *Am. J. Clin. Hypn.*, **31**, 81.
- Lang, P. J. (1979). A bio-informational theory of emotional imagery. *Psychophysiol.*, **16**, 495.
- Liebowitz, M. R. (1987). Social phobia. *Mod. Probl. Psychopharmacol.*, **22**, 141.
- MacHovec, F. J. (1985). Treatment variables and the use of hypnosis in the brief therapy of post-traumatic stress disorders. *Int. J. Clin. Exp. Hypn.*, **33**, 6.
- Markoff, R. A., Ryan, P. & Young, T. (1982). Endorphins and mood changes in long distance running. *Med. Sci. Sport and Exercise*, **14**, 11–15.
- McConkey, K. M. (1984). Clinical hypnosis: Differential impact on volitional and non-volitional disorders. *Can. J. Psychol.*, **25**, 79.
- Owens, M. E., Bliss, E. L., Koester, P. & Jeppsen, E. A. (1989). Phobias and hypnotizability. A re-examination. *Int. J. Clin. Exp. Hypn.*, **37**, 207.
- Peebles, M. J. (1989). Through a glass darkly: The psychoanalytic use of hypnosis with post-traumatic stress disorder. *Int. J. Clin. Exp. Hypn.*, **37**, 192.
- Ransford, C. P. (1982). A role for amines in the antidepressant effect of exercise: A review. *Med. Sci. Sport and Exercise*, **14**, 1–10.
- Robney, J., Hollander, B. & Campbell, P. (1983). Hypnotizability and phobic behavior: Further supporting data. *J. Abnorm. Psychol.*, **92**, 390.
- Shapiro, F. (1989). Eye movement desensitization: A new treatment for post-traumatic stress disorder. *J. Behav. Ther. Exp. Psychiat.*, **20**, 211–217.
- Spiegel, D., Hunt, T. & Dondershine, H. E. (1988). Dissociation and hypnotizability in post-traumatic stress disorder. *Am J Psychiat.*, **145**, 301–305.
- Stanley, R. O. (1994). The use of hypnosis in the treatment of anxiety disorders—general considerations. In B. Evans (Ed.), *Hypnosis in the Management of Anxiety Disorders*. Melbourne: Monash University Press.
- Stanley, R. O., Judd, F. J. & Burrows, G. D. (1990). Hypnosis in the management of anxiety disorders. In M. Roth, R. Noyes & G. D. Burrows. (Eds), *Handbook of Anxiety*, Vol. 4. Amsterdam: Elsevier Science Publishers.
- Stanley, R. O., Norman, T. & Burrows, G. D. (1999). *Stress, Anxiety and Depression*. Melbourne: Adis.
- Stanley, R. O., Rose, L. & Burrows, G. D. (1998). Professional training in the practice of hypnosis—The Australian experience, *Am. J. Clin. Hypn.*, **41**, 29–37.
- Stutman, R. K. & Bliss, E. L. (1985). Post-traumatic stress disorder, hypnotizability, and imagery. *Am. J. Psychiat.*, **142**, 741.

Hypnosis and Depression

GRAHAM D. BURROWS and SANDRA G. BOUGHTON

University of Melbourne, Australia; University of Western Australia,
Australia

Depression is a frequently occurring disorder with estimates of the lifetime risk for Major Depressive Disorder varying from 10 to 25% for women and from 5 to 12% for men. Significant levels of depression are also associated with many other major disorders, such as chronic pain. There appears to be a widespread assumption that hypnosis has no role, indeed is inappropriate, in the management of depression. In Australia, over the past 10 years, material presented for examination by the Australian Hypnosis Society or for publication in the *Australian and New Zealand Journal of Hypnosis* has not included any detailed description of clinical or experimental work on the use of hypnosis in the treatment of depression. The understanding has been that expert opinion regards hypnosis as contraindicated for the management of individuals presenting with depression. It would seem that the situation has not significantly changed since Burrows (1980) concluded that

It would seem nevertheless that most experienced clinicians teach that severe depressive illness is a definite contraindication to hypnosis. Although they teach this, depressive illness appears to have received, for such an exceedingly common medical problem, minimal attention in most modern reference books on hypnosis. A possible interpretation is that the authors concerned may believe hypnosis has little place in the therapy of depression. (p. 167)

CURRENT OPINION ON THE RELATIONSHIP BETWEEN HYPNOSIS AND DEPRESSION

A review of the literature indicates that the consensus of opinion is not, in fact, strongly opposed to the use of hypnosis in the treatment of depression. Commentators vary, however, in their readiness to accept the use of hypnosis unconditionally. Yapko (1992) advocates a broad-based acceptance: 'As for the specific contraindications to the use of hypnosis, it may seem a bold statement to make, but I am aware of no such contraindications' (p. 186). Clarke &

Jackson (1983) adopt a similar viewpoint, suggesting that the notion that hypnosis has no place in the treatment of depression is a 'bit of clinical folklore'. Miller (1984) produces a chapter on the application of hypnosis to the treatment of depression without questioning the appropriateness of this approach. Crasilneck & Hall (1985) advocate a more conservative view, listing some contraindications but concluding that 'while hypnosis can be used in treating depression, we strongly advise that such use be only by therapists adequately grounded in psychodynamics; even then it should be used with caution and care' (p. 324).

Given that significant differences exist between respected authors in the area, what accounts for this variation?

THE NATURE OF DEPRESSION

In terms of DSM-IV criteria, a diagnosis of Major Depression requires evidence of at least one primary symptom and at least four associated symptoms lasting nearly every day for at least two weeks. Depressed mood and a distinct loss of interest or pleasure in most or all activities (anhedonia) count as primary symptoms. The secondary symptoms are: (a) appetite disturbance or weight change; (b) sleep disturbance; (c) psychomotor agitation or retardation; (d) fatigue or loss of energy; (e) feelings of worthlessness or guilt; (f) diminished concentration or decision-making ability, (g) thoughts of death or suicide.

DSM-IV distinguishes between Major Depression and a range of other mood disorders including Dysthymic Disorder and Bipolar I Disorder. This range of classifications attempts to encompass the variety of presentations of significant depressive mood. Current thinking (e.g. Parker, 1996) emphasizes that the notion of depression includes a range of disorders: 'As "depression" encompasses heterogeneous conditions, single answers should not be sought'. Parker (1996) distinguishes between melancholic and non-melancholic depression in his challenge to current thinking about responsiveness to antidepressant medication and other treatments for depression. He argues that: 'Any study which amalgamates separate depressive subgroups, rapid and slow remitters, will give limited information as the "group" trajectory subsumes a set of potentially distinctly different trajectories'. Such thinking warns us against responding to depression as if it were a unitary construct and against too readily attempting to make generalizations about individuals struggling with depression.

Very little useful comparison can be made between treatment accounts unless some objective measure of depression has been utilized. Whilst the Hamilton Depression Rating Scale (HDRS) and the Beck Depression Inventory (BDI) are extensively used in research studies, they are only rarely utilized in the body of case accounts that form the data base in this area.

THE DEFINITION OF HYPNOSIS

Yapko (1992) argues that the discrepancy in opinion about the value of hypnosis in the treatment of depression can, in part, be understood by variations in the model of hypnosis being utilized. He describes three general models: traditional, standardized, and utilization. Other workers distinguish between directive and non-directive or Ericksonian techniques. The opposition to the use of hypnosis in depression is primarily associated with the traditional, standardized or directive approaches and hence Yapko (1992) argues that the association is a function of the model of hypnosis used rather than of hypnosis *per se*. This point of view suggests the empirical question of whether one approach to working with depressed individuals is more useful than another.

THE GOALS OF HYPNOTIC INTERVENTIONS

Examination of published accounts suggests that, in addition to differences in hypnotic techniques, there is a great deal of variation in what therapists actually do with hypnosis in the management of depression. A review of the available documented case material indicates that there are a range of therapeutic goals either specifically stated or implied by the model of therapy associated with the use of hypnosis. Hypnosis is a tool, not a therapeutic model, and has been used to facilitate a range of different therapeutic approaches. The bulk of the published literature consists of case reports, often providing minimal detail of actual therapeutic practice and no objective documentation of outcome.

THE SUGGESTION OF SYMPTOM REMOVAL

Very few clinicians describe a direct, symptom removal approach to the management of depression. Crasilneck & Hall (1985) state that 'we are careful to avoid a symptom removal approach' (p. 323). Yapko (1992) considers that suggesting a symptom away is valid as it serves as 'pattern interruption' but is inappropriate therapy unless it is also accompanied by 'pattern building', the establishment of new choices and behaviours (p. 52).

Milton Erickson's (described by Alexander, 1982) approach to the management of suicidal depression in a young woman is an elegant, indirect approach allowing a suggestion about the relief of pain to generalize to 'the much more profound and deeply disturbing depression' (p. 219).

BEHAVIOR CHANGE OR SKILLS ENHANCEMENT

One of the most comprehensively described treatment strategies which includes these aspects is Alladin's (1994) Cognitive Dissociative Model of non-endogenous

unipolar depression (CDMD). Whilst primarily utilizing cognitive strategies, Alladin (1994) describes a multifactorial approach, including the use of posture modification, attention switching, social skills training and goal setting with rehearsal using hypnotic induction techniques.

COGNITIVELY RESTRUCTURING THE EXPERIENCE OF DEPRESSION

Alladin's (1994) Cognitive Dissociative Model utilizes the hypnotic process to facilitate cognitive restructuring. He describes a theoretical model linking hypnosis with depression and reports preliminary data finding no difference in outcome between this treatment methodology and Beck et al.'s (1979, 1985) cognitive therapy approach. However, subjects in the cognitive hypnotherapy group showed more rapid improvement, greater reduction in anxiety scores, and a significant increase in self-confidence.

Hypnosis has also been used to facilitate imagery techniques, from either a cognitive-behavioural or a psychodynamic theoretical framework. Fromm (1976) successfully used a metaphor of nature and new growth in her therapy with a woman following the deaths of her parents.

UNCOVERING, AGE REGRESSION APPROACHES, INTRAPSYCHIC CONFLICTS

The majority of the earlier case reports describing the clinical use of hypnosis with depressed individuals have utilized a psychodynamic framework. Rosen (1955) describes the use of hypnotically induced regression, Abrams (1964) discusses the uncovering of repressed material and Chambers (1968) describes a woman's compulsion to eat raw potatoes in psychoanalytic terms. Haley (1967) details a case report of Milton Erickson's use of hypnosis with automatic drawing in a case of obsessional depression.

A significant amount of more recent case material also utilizes hypnotic techniques within a psychodynamic framework. Alden (1995) reports the case of a 35-year-old man with long-standing symptoms of anxiety, depression and multiple traumas, involving the use of hypnosis to provide a 'safe, relaxing framework for the client's therapy and regression to traumatic events'. Gravitz (1994) describes a treatment method illustrated by three cases involving the retrieval and restructuring of past memories of traumatic experiences using hypnotic regression and revivification. Leistikow (1990) details the case of a male patient undergoing hypnoanalysis for depression using techniques such as word association, dream suggestion and age regression in conjunction with hypnosis. Griggs (1989) also describes the process of medical hypnoanalysis, using hypnosis in conjunction with dream analysis and age regression. Mendelberg (1990) used an uncovering technique in

association with corrective imagery and relaxation with a 12-year-old depressed, asthmatic girl referred after her second suicide attempt.

MANAGEMENT OF ANXIETY

Whilst a reduction in anxiety has been proposed as contributing to an increased suicide risk for the severely depressed (Crasilneck & Hall, 1985; Burrows, 1980), the use of hypnosis has been advocated for anxiety management for milder forms of depression. Burrows (1980) suggests that the relief of the patient's anxiety is a common approach. 'Direct suggestions of being able to feel less tense, relaxed, and ability to cope more realistically are useful' (p. 169).

INCREASING SELF-ESTEEM, EMPOWERMENT AND CONTROL

In discussing their clinical use of hypnosis for depression, Crasilneck & Hall (1985) state that 'our approach is to increase the patient's ego strength and to enhance his ability to deal with the problems leading to depression' (p. 324). Sachs (1992) describes the use of ego-strengthening achieved by hypnotically enhanced mental imagery, in conjunction with progressive relaxation in the management of cancer patients. McBrien's (1990) depression prevention programme utilizes self-hypnosis to produce an increased confidence in managing and reducing depressed feelings. Hypnosis is also used to increase the ability to experience positive thoughts and feelings that lead to an increase in pleasant events.

RESOLUTION OF UNDERLYING LOSS OR ANGER ISSUES

The postulated relationship between depression, loss and internalized anger has informed a number of case reports. Abrams (1964), for example, describes the use of hypnosis to create situations in which the individual could learn to express unacceptable angry feelings.

MODIFICATION OF SUICIDAL IMPULSES

Despite the concern expressed by some therapists that the use of hypnosis may increase suicide risk, other workers have attempted to use the technique to modify suicidal impulses. Hodge (1972, in Hammond, 1990) describes suggestions to deter suicide. These involve the use of direct suggestions to enter a trance and contact the therapist in response to suicidal ideation. 'In the trance you will be unable to commit suicide unless I give you permission; the trance itself may be just the factor you need to break up your suicidal thoughts and to help you to relax and find better ways to handle your problems' (p. 332). Wright & Wright (1987) describe the use of hypnotic techniques to develop a 'suicide fantasy' in which the suicidal images

and affect of the client were elicited and processed, enabling him to put these impulses aside to consider more adaptive life alternatives.

THE PROCESS OF HYPNOSIS

The process of hypnosis, in practice, is extremely variable. With a few exceptions (e.g. Yapko, 1992; Alladin, 1994) therapists rarely specify in any detail what they do in practice. It is clear that the comparison of treatment techniques and outcomes is extremely difficult when clinicians who describe their work broadly in terms of similar models are in practice doing very different things.

POTENTIAL PROBLEMS IN THE USE OF HYPNOSIS

The reluctance to utilize hypnotic techniques in the management of depression is associated with a range of concerns or factors which are seen as contraindications. These include the following.

SUICIDE RISK

It has been argued that the risk of suicide makes the use of hypnosis dangerous in the management of depression. Crasilneck & Hall (1985) argue that hypnosis is inappropriately used in an outpatient setting for this reason. The potential for increased suicide risk has been explained in a number of ways. Burrows (1980) argues that hypnosis may inappropriately relieve anxiety before depressive affect has significantly lifted, allowing the depressed individual sufficient energy and anxiety reduction to act on suicidal impulses. Crasilneck & Hall (1985) observe that this phenomenon is not confined to hypnosis but has also been described for the range of treatment methods including psychotherapy, antidepressant medication and electroconvulsive therapy (p. 323). The evidence to support this proposal is primarily in the form of clinical case material, making it difficult to counter the criticism that, given the significant rate of suicide in patients with major depression, such case material represents a chance correlation.

Spiegel & Spiegel (1978) suggest that the potential for suicide lies in the possibility that the depressed individual will place unrealistic hopes in the trance experience as a way of ending their depression. These unmet expectations may result in a suicide attempt. Meares (1979) argues a similar viewpoint when he expresses his concern that: 'A trial of hypnotherapy usually leads to disappointment and may involve the patient in an unnecessary risk of suicide' (p. 293) Yapko (1992) is critical of the Spiegels and other workers in the field who emphasize the formal assessment of suggestibility, arguing that this promotes a sense of success or failure which may enhance suicide potential. He argues that negative expecta-

tions are a core component of depression and rather than being seen as a risk factor, they need to be addressed in treatment using hypnosis.

The conclusion from this literature is that relief of anxiety without associated improvement in depression and unmet treatment expectations are potential predictors of suicide risk. In fact, prediction of suicide risk has been well researched and there appears to be good agreement about the primary factors involved. Beck and coworkers (Beck, Rush et al., 1979; Beck, Brown et al., 1990), reporting two large-scale prospective studies of suicide, found that hopelessness, as measured by the Beck Hopelessness Scale (1988), was a powerful predictor of eventual suicide. Fawcett, Schefter, Clark et al. (1987), again utilizing a predictive design, also found that hopelessness was a significant predictor, as was loss of pleasure or interest and 'mood cycling during the index episode'. Fawcett et al. (1987) also refer to the predictive value of a variable they describe as 'depressive turmoil'. It is not clear whether this is related to anxiety but certainly the findings are in the opposite direction to that suggested in the clinical literature, that is, increased turmoil was associated with increased suicidal risk while the clinical hypothesis predicts that decreased anxiety is associated with increased risk.

Given our understanding that hopelessness is the best predictor of suicide risk, the decision for the clinician becomes whether to avoid the use of hypnosis with patients high on this variable, or to utilize hypnosis as a tool for the modification of hopelessness. The cognitive-behavioural literature provides some data relevant to the field of hypnosis. For example, a study by Rush, Beck, Kovacs et al. (1982), showed that depressed patients treated with cognitive therapy showed a more rapid reduction in hopelessness scores than a comparison group of depressed patients treated with an antidepressant drug.

SEVERELY DEPRESSED INDIVIDUALS LACK THE CAPACITY TO UTILIZE HYPNOSIS

There is a range of variations to this hypothesis that either individuals with depression are less able to attend or are less hypnotizable.

Spiegel & Spiegel (1978) suggest that: 'Those with serious depressions may be so narcissistically withdrawn and devoid of energy that they cannot attend to the input signals' (pp. 148–149). Others point to the difficulties in concentration and attention associated with severe depression, suggesting that these individuals are unable to focus on the induction process. Yapko (1992) talks about the way in which depression impairs the client's ability to focus. Rather than seeing this phenomenon as a contraindication for therapy, Yapko (1992) spends some sessions 'providing some general relaxation and focusing techniques to help build an attention span adequate to utilize in therapy'. He advocates the repeated use of session tapes as ongoing practice increases ability to focus meaningfully (p. 47).

Studies which compare various clinical populations in terms of level of hypnotizability provide evidence on the question of whether depressed individuals are less

hypnotizable. Pettinati, Kogan, Evans et al. (1990) compared hypnotizability on two measures, the Hypnotic Induction Profile (HIP) and the Stanford Hypnotic Suggestibility Scale: C (SHSS: C) for five clinical and one normal college populations. The group with a diagnosis of major depression scored higher on the SHSS: C than the normal population and only marginally lower, although higher than the anorexia nervosa and schizophrenia groups, on the HIP.

HYPNOSIS MAY PRECIPITATE FURTHER DETERIORATION

This notion exists in a number of forms. Several commentators have suggested (e.g., Miller, 1979; Terman, 1980) that by focusing hypnotically on emotionally laden aspects of the individual's life, further disintegration of the ego may occur. Hypnosis has also been described as precipitating a more rapid development of 'transference' distortions which may result in the patient being over-reactive to specific therapy issues (Burrows, 1980). These issues appear to be related to the psychodynamic model of therapy which defines them rather than to hypnosis as a technique and there is no objective evidence to suggest that these are significant issues when the therapist is an experienced clinician.

PATIENTS MAY UTILIZE THE HYPNOTIC PROCESS TO REINFORCE DEPRESSION

Hammond (1990) discusses the use of age projection techniques with significantly depressed patients. He refers to Erika Fromm's belief that age regression procedures are contraindicated with seriously depressed and suicidal patients, despite Erickson's utilization of this method. Hammond urges 'great caution' in utilizing this technique with seriously depressed patients 'who may project themselves negatively into the future, stimulating further feelings of hopelessness' (p. 543).

CURRENT ISSUES

Michael Yapko (1989, 1992, 1994) is the most prolific current therapist to enthusiastically embrace the application of hypnotic techniques to the management of depression. Unfortunately, it is necessary to agree with recent reviewers of his work (Stanley, 1994; Council, 1993) that what is undoubtedly a 'flexible and creative approach to patient management' (Stanley, 1994) is accompanied by a relative disregard for empirical data. Others have levelled this criticism at the Ericksonian/brief therapy literature in general (Bloom, 1991). The criticism of a general lack of attention to theory, research and to standardize assessment, however, can validly be directed towards the body of published material in the area of hypnosis as a whole, which remains dominated by descriptive case material.

To make any useful statement about the value of hypnosis in the management of

depression, it is necessary to look more broadly at the wider research on depression and consider the ways in which hypnotic techniques may augment clinical approaches to the management of depression. The National Institute of Mental Health Treatment of Depression Collaborative Research Programme (TDCRP: Elkin, Parloff, Hadley & Autry, 1985) with its analysis and follow-up of 250 unipolar depressed outpatients at three different sites, randomly assigned to one of four treatment conditions (cognitive-behaviour therapy, imipramine plus clinical management, interpersonal psychotherapy and a pill-placebo control), contributes significantly to the current body of knowledge. The findings of this research and the ongoing debate (see, for example, Jacobson & Hollon, 1996) raise numerous significant issues for the area. As Shea, Elkin, Imber et al. (1992) point out, none of the treatments perform well in their capacity to promote lasting recovery. Major depression remains a challenge for all treatment approaches, including pharmacotherapy. Jacobson & Hollon (1996) also raise the important issue of therapeutic allegiance in this context, suggesting that therapists who have a commitment to a specific treatment modality are likely to more effectively implement that treatment and less effectively implement others. Such considerations represent both a challenge and a potential source of increased power.

COMBINING HYPNOSIS WITH CURRENT THERAPEUTIC APPROACHES TO DEPRESSION

As summarized earlier, numerous case studies have suggested ways in which hypnotic methods can be utilized in psychodynamic therapy. Yapko (1989, 1992, 1994) has described a variety of indirect and metaphoric techniques in a cognitive-behavioural framework. However, as Stanley (1994) has commented, he has made little use of the wide variety of well-documented, more directive cognitive-behavioural techniques. The Cognitive Dissociative Model of nonendogenous unipolar depression (Alladin, 1994) attempts to utilize hypnosis and cognitive-behavioural techniques in a multifactorial treatment approach. The way in which hypnotic techniques may augment a cognitive-behavioural management programme for depression represents a challenge for future research.

UTILIZING HYPNOTIC TECHNIQUES IN A COGNITIVE-BEHAVIOURAL MANAGEMENT PROGRAMME FOR DEPRESSION

A range of possibilities exists for the integration of hypnosis with cognitive-behavioural techniques. These include

- 1 A thorough assessment of depression, including records of activities, cognitions

and formal rating scales (such as the Hamilton Depression Rating Scale, the Beck Depression Inventory and the Beck Hopelessness Scale), is required so that an individualized treatment approach can be developed. It is highly likely that the severity of depression will be a significant factor in deciding the focus of treatment.

- 2 Hopelessness may need to be addressed before an individual experiencing major depression is able to engage in any other aspect of therapy. An understanding of hopelessness is a significant feature of cognitive-behavioural approaches to depression. The learned helplessness model of depression (Abramson, Seligman & Teasdale, 1978) emphasizes 'depressive' attributional style whilst Beck's (1979) theory of depression included a negative view of the future as one aspect of his depressive triad. Yapko (1992) describes several strategies to address hopelessness. Appendix A contains a description of a possible approach to the modification of hopelessness using a hypnotic process.
- 3 Ego strengthening techniques hold considerable promise for the modification of depression on theoretical grounds. A negative view of the self is one of the primary components of Beck's (1979) cognitive triad. Hartland (1971) popularized the concept of 'ego-strengthening' and utilized it in much of his therapy to reinforce self-reliance and a positive self-image. (see Hammond, 1990, for a useful discussion and a range of hypnotic approaches to ego-strengthening).
- 4 The process of cognitive restructuring may be facilitated by the use of hypnotic techniques. Alladin (1994) describes a process of cognitive restructuring under hypnosis. Trance is established and the client imagines a situation that normally causes distress. The client is then instructed to

focus on the dysfunctional cognitions and associated emotions, physiological, and behavioural responses. Encouragement is given to identify or 'freeze' (frame by frame, like a movie) the faulty cognitions in terms of thoughts, beliefs, images, fantasies, and daydreams. Once a particular set of faulty cognitions is frozen, the patient is helped to replace it by more appropriate thinking or imagination and then to attend to the resulting (desirable) 'syncretic' responses. This process is repeated until the patient can confidently restructure a set of faulty cognitions related to a specific situation. (p.283).

- 5 Hypnosis may be used to facilitate imagery and cognitive rehearsal strategies to deal with depressive thoughts and behaviours. Clarke & Jackson's (1983) method for the use of visualization and rehearsal strategies with hypnosis for assertive problems (p. 256) may serve as a useful starting point for the use of similar strategies for depression.

CONCLUSIONS

Hypnosis and depression have traditionally been regarded as 'forbidden friends' (Yapko, 1992). This taboo has prevented a serious assessment of whether hypnosis

has anything significant to contribute to the very common, challenging and disabling problem of depression. Closer examination suggests that there is little basis behind this lengthy separation, in fact there is considerable evidence of furtive meetings out of sight of mainstream books, journals and training courses. Both hypnosis and depression are heterogeneous constructs and a more useful association can be established by looking at questions related to the conditions under which various hypnotic approaches can be helpful for which aspects of what type of depression. The time for an open assessment of the strengths and weaknesses of this relationship is long overdue.

REFERENCES

- Abrams, S. (1964). Implications of learning therapy in treatment of depression by employing hypnosis as an adjunctive technique. *Am. J. Clin. Hypn.*, **6**, 313.
- Abramson, L. Y., Seligman, M. E. P. & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *J. Abn. Psychol.*, **87**, 49–74.
- Alden, P. (1995). Back to the past: Introducing the ‘bubble’. *Contemp. Hypn.*, **12**, 59–68.
- Alexander, L. (1982). Erickson’s approach to hypnotic psychotherapy of depression. In J. K. Zeig (Ed.), *Ericksonian Approaches to Hypnosis and Psychotherapy*. New York: Brunner/Mazel.
- Alladin, A. (1994). Cognitive hypnotherapy with depression. *J. Cogn. Psychother.: Int. Quart.*, **8**, 275–288.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* 4th edn. Washington, DC: American Psychiatric Association.
- Beck, A., Brown, G., Berchick, R., Stewart, B. & Steer, R. (1990). Relationship between hopelessness and ultimate suicide: A replication with psychiatric outpatients. *Am. J. Psychiat.*, **147**, 190–195.
- Beck, A., Rush, J., Shaw, B. & Emery, G. (1979). *Cognitive Therapy of Depression*. New York: Guilford Press.
- Beck, A., Steer, R., Kovacs, M. & Garrison, B. (1985). Hopelessness and eventual suicide: A 10 year prospective study of patients hospitalised with suicidal ideation. *Am. J. Psychiat.*, **142**, 559–563.
- Beck, A. T., Ward, C. H., Mendelsohn, M., Mock, J. & Erbaugh, J. (1961). An inventory for measuring depression. *Arch. Gen. Psychiat.*, **4**, 561–571.
- Bloom, P. B. (1991). Some general comments about Ericksonian hypnotherapy. *Am. J. Clin. Hypn.*, **33**, 221–224.
- Burrows, G. D. (1980). Affective disorders and hypnosis. In G. D. Burrows & L. Dennerstein (Eds), *Handbook of Hypnosis and Psychosomatic Medicine* (pp. 149–168). Amsterdam: Elsevier.
- Chambers, H. (1968). Oral erotism revealed by hypnosis. *Int. J. Clin. Exp. Hypn.*, **16**, 151–157.
- Clarke, J. C. & Jackson, J. A. (1983). *Hypnosis and Behaviour Therapy. The Treatment of Anxiety and Phobias*. New York: Springer.
- Council, J. R. (1993). Book Review: Yapko, M. D. (Ed.), *Brief Therapy Approaches to Treating Anxiety and Depression*. *Int. J. Clin. Exp. Hypn.*, **41**, 153–154.
- Crasilneck, H. R. & Hall, J. A. (1985). *Clinical Hypnosis: Principles and Applications*. New York: Grune & Stratton.

- Elkin, I., Parloff, M. B., Hadley, S. W. & Autry, J. H. (1985). NIMH Treatment of Depression Collaborative Research Programme: Background and research plan. *Arch. Gen. Psychiatry*, **42**, 305–316.
- Fawcett, J., Scheffter, W., Clark, D., Hedeker, D., Gibbons, R. & Coryell, W. (1987). Clinical predictors of suicide in patients with major affective disorder: A controlled prospective study. *Am. J. Psychiat.*, **144**, 35–40.
- Fromm, E. (1976). Altered states of consciousness and ego psychology. *Social Service Rev.*, **50**, 557–569.
- Fromm, E. & Nash, M. R. (Eds) (1992). *Contemporary Hypnosis Research*. New York: Guilford Press.
- Gould, R. C. & Krynicki, V. E. Comparative effectiveness of hypnotherapy on different psychological symptoms. *Am. J. Clin. Exp. Hypn.*, **32**, 110–117.
- Gravitz, M. A. (1994). Memory reconstructed by hypnosis as a therapeutic technique. *Psychother.*, **31**, 687–691.
- Griggs, N. (1989). The successful treatment of psychoneurosis and depression with medical hypnosis. *Med. Hypnoanal. J.*, **4**, 41–44.
- Haley, J. (Ed.) (1967). *Advanced Techniques of Hypnosis and Therapy. Selected Papers of Milton H. Erickson*. New York: Grune & Stratton.
- Hamilton, M. (1967). Development of a rating scale for primary depressive illness. *Br. J. Soc. Clin. Psychol.*, **6**, 278–296.
- Hammond, D. C. (1990). *Handbook of Hypnotic Suggestions and Metaphors*. New York: W. W. Norton.
- Hartland, J. (1971). *Medical and Dental Hypnosis and its Clinical Applications*, 2nd edn. London: Bailliere Tindall.
- Hodge, J. (1990). Hypnotic suggestions to deter suicide. In D. Hammond (Ed.), *Handbook of Hypnotic Suggestions and Metaphors*. New York: W. W. Norton.
- Jacobson, N. S. & Hollon, S. D. (1996) Cognitive-behaviour therapy versus pharmacotherapy: Now that the Jury's returned its verdict, it's time to present the rest of the evidence. *J. Consult. Clin. Psychol.*, **64**, 74–80.
- Leistikow, D. (1990). Rapid therapy. *Med. Psychoanal. J.*, **5**, 163–167.
- McBrien, R. J. (1990). A self-hypnosis programme for depression management. Special issue: *Hypnosis. Individ. Psychol. J. Adlerian Theory, Res. Pract.*, **46**, 481–489.
- Mearns, A. (1979). *A System of Medical Hypnosis*. New York: Julian Press.
- Mendelberg, H. E. (1990). Hypnosis with a depressed, suicidal, asthmatic girl. *Psychother. Private Pract.*, **8**, 41–48.
- Miller, H. R. (1984). Depression—A specific cognitive pattern. In W. C. Wester II & A. H. Smith (Eds), *Clinical Hypnosis. A Multidisciplinary Approach*. Philadelphia: J. B. Lippincott.
- Miller, M. (1979). *Therapeutic Hypnosis*. New York: Julian Human Sciences Press.
- Parker, G. (1996). On brightening up. Triggers and trajectories to recovery from depression. *Br. J. Psychiat.*, **168**, 263–264.
- Pettinati, H. M., Kogan, L. G., Evans, F. J., Wade, J. H., Horne, R. L. & Staats, J. S. (1990). Hypnotizability of psychiatric inpatients according to two different scales. *Am. J. Psychiat.*, **147**, 69–75.
- Rosen, H. (1955). Regression hypnotically induced as an emergency measure in a suicidally depressed patient. *Int. J. Clin. Exp. Hypn.*, **3**, 58–70.
- Rush, A. J., Beck, A. T., Kovacs, M., Weissburger, J. & Hollon, S. D. (1982). Comparison of the effects of cognitive therapy and pharmacotherapy on hopelessness and self-concept. *Am. J. Psychiat.*, **139**, 862–866.
- Sachs, B. C. (1992). Coping with cancer. *Stress Med.*, **8**, 167–170.
- Shea, M. T., Elkin, I., Imber, S. D., Sotsky, S. M., Watkins, J. T., Collins, J. F., Pilonis, P. A.,

- Beckham, E., Glass, D. R., Dolan, R. T. & Parloff, M. B. (1992). Course of depressive symptoms over follow-up: Findings from the National Institute of Mental Health Treatment of Depression Collaborative Research Programme. *Arch. Gen. Psychiat.*, **49**, 782–787.
- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment*. New York: Basic Books.
- Stanley, R. (1994). Book Review: Yapko, M. D., *Hypnosis in the Treatment of Depressions: Strategies for Change*. *Int. J. Clin. Exp. Hypn.*, **42**, 94–96.
- Terman, S. (1980). Hypnosis and depression. In H. Wain (Ed.), *Clinical Hypnosis in Medicine*. Chicago: Year Book Medical Publishers.
- Wright, M. & Wright, B. (1987). *Clinical Practice of Hypnotherapy*. New York: Guilford Press.
- Yapko, M. D. (Ed.) (1989). *Brief Therapy Approaches to Treating Anxiety and Depression*. New York: Brunner/Mazel.
- Yapko, M. D. (1992). *Hypnosis in the Treatment of Depressions. Strategies for Change*. New York: Brunner/Mazel.
- Yapko, M. D. (1994). *When Living Hurts: Directives for Treating Depression*. New York: Brunner/Mazel.

APPENDIX

A HYPNOTIC INDUCTION FOR THE MODIFICATION OF HOPELESSNESS

Individuals experiencing depression express a pervasive sense of hopelessness. The present is seen as negative and joyless and the future is just more of the same. It is important, in order to do any useful work, to attempt to modify this stable negative attribution that characterizes depressed thinking. Ideally the clinician will utilize material from the client to facilitate a trance induction aimed at the modification of hopelessness. Sometimes, in order to access a client's involvement in the process of change, it will be necessary to begin by working with little information other than the client's sense of hopelessness. The following script is one possible approach.

I wonder ... whether you can allow yourself to notice ... the heaviness of the depression ... like a heavy blanket of dark smoke ... Allow yourself ... to let go, not struggle ... to simply experience the weight of the depression that ties you down ... And as you look around in your mind's eye, it is as if a fire has been through the landscape and left nothing untouched ... it seems as if the blackness, the barrenness, reaches all the way to the end of your vision ... without change ... and there is no way ... to be less tired ... weighed down ... by the heavy dark cloud of depression ... There is such stillness that ... it seems as if ... no change is possible ... that there will always be ... the endless wait ... to be ... always tied. And you know ... that this heaviness has been with you for some time ... and you have come to believe ... that this is the pattern of your life ... that the future will be ... more of the same ... and there will be no way out.

And perhaps ... as you notice the heaviness of your body ... I wonder if you can discover ... that some of that heaviness that weighs you down ... is a sense of increasing relaxation ... and your wait ... can feel like an untying. Let yourself ... become aware ... of the point where the wait becomes ... the burden of curiosity ...

to know . . . what awaits you. As you allow yourself . . . to continue to experience . . . the comfortable weight . . . of a deep, relaxed tiredness. And perhaps now, perhaps in a short time . . . it becomes possible . . . to discover a part of you that begins to see another way . . . to be less tied . . . to discover . . . that tomorrow is not tied to today. That it is possible . . . to allow yourself to discover . . . that something else awaits you . . . and you can begin to untie this waiting and . . . find a way forward.

As you look around . . . in what seems like endless blackness . . . I wonder if you can look closely enough to see . . . the beginnings of new growth . . . Because you know . . . that Nature will always find a way . . . to renew. Even when the landscape . . . seems overwhelmingly barren . . . it is always possible . . . to find signs of change . . . Because change can move so gradually . . . perhaps you can begin to let yourself notice . . . how much the comfortable weight of relaxation can seem lighter . . . And the heavy darkness of night . . . becomes the lightness of day . . . because you know . . . that there will always be . . . a moving forward . . . And you can discover yourself less tied to the darkness . . . and increasingly aware of signs of the lightness ahead . . . More and more, it will be possible to be aware of renewal . . . of the growth of new beginnings . . . of patterns of light and shade . . . and the greater lightness that awaits.

Hypnosis, Dissociation and Trauma

DAVID SPIEGEL

Stanford University School of Medicine, USA

This chapter was initially prepared as part of a visit to the Oklahoma Psychiatric Association five months after the bombing of the Alfred P. Murrah Federal Office Building on 19 April 1995. A powerful bomb was exploded in front of the building that morning, killing almost 200 people, destroying the Federal Building, and damaging buildings within a 12-block radius. I will delineate the nature and prevalence of post-traumatic stress disorder symptoms in the aftermath of such trauma, the role of dissociative features in such symptoms, and treatment approaches, including the use of hypnosis.

THE AFTERMATH OF TRAUMA

The DSM-IV (APA, 1994) diagnostic criteria for acute and post-traumatic stress disorder (PTSD) involve intrusion, dissociative, avoidance, and hyperarousal symptoms in the aftermath of a traumatic stressor. A taxi driver in Oklahoma City said: 'Oklahoma lost its innocence in this attack, the sense of being the heartland, of being safe.' He added: 'I used to like driving downtown, but I don't work downtown much any more. It just doesn't have the same feeling that it used to.' A psychiatrist who was head of the disaster committee commented that things seemed so unreal to him that he had trouble recounting the details of what had happened that day afterwards: 'Although I was feeling like a fraud because the event and job seemed unreal, I was amazed at the universally receptive response to my calls. There was a feeling of relief, as though each contact was a symbolic bridge between islands' (Poarch, 1995, p. 9).

Post-traumatic stress disorder is a disturbingly common problem. For example, in the United States a study by Naomi Breslau and colleagues (Breslau, Davis et al., 1991; Breslau & Davis, 1992) demonstrated that 9% of the population of Detroit had post-traumatic stress disorder. The leading cause of deaths of young adults is automobile accidents and there is much associated physical and psycholo-

gical trauma in relation to that. Firearms are the leading cause of death for young people in Texas. Physical trauma is a major cause of mortality and morbidity in the United States and that means that psychological syndromes which accompany trauma are a very prevalent part of our collective psychological experience. There are estimates that 12 million adult women have been raped in the United States and another 10 million have been victims of aggravated assault. (Bowners, O'Gorman et al., 1991; Browne, 1993; Koss, 1993a, b; Koss, Heise et al., 1994). Edna Foa's work (Foa & Riggs, 1993), and that of others, suggests that some two-thirds of women who have been raped develop post-traumatic stress disorder, 45% have the disorder 3 months later, and among all rape victims regardless of time since the trauma, 15% suffer PTSD. It can be, it isn't always, but it can be a lifelong disorder. Similarly studies of Vietnam era veterans indicate that somewhere between 15 and 25% of veterans suffer from post-traumatic stress disorder (Keane & Fairbank, 1983). This is a huge proportion of the population. While the majority of people who have been through terrible trauma do not get post-traumatic stress disorder, a substantial minority do. This compels us to understand the phenomenology as a first step to diagnosis and treatment.

A BRIEF HISTORY OF PTSD

There has been a tendency to slip into one of two mistaken extremes in regard to PTSD. One is a cynical attitude which implies that most patients are making up their symptoms for secondary gain. An example is a case in which an armored car driver was shot in the chest three times during a robbery. His two colleagues were killed as they were walking out of an elevator. The company he worked for objected to providing treatment for post-traumatic stress disorder. This was not some fantasy of childhood sexual abuse: he took three bullets in the chest and saw two of his friends die and yet there was doubt that he had genuine psychiatric symptoms afterwards. One of our professional responsibilities is to have the kind of educated empathy to understand what it is like to go through this and be able to articulate that. Post-traumatic symptoms often involve considerable (and frequently inappropriate) guilt about imagined or real lapses during the traumatic event. This can generalize into a sense of shame, reducing the willingness of patients with PTSD to talk about their symptoms.

On the other hand, there is a victimology approach that can allow people to evade responsibility for all aspects of their lives because they have been victimized. For example, some patients with an axis II antisocial personality disorder may be looking for an excuse to blame everybody else for their problems in living.

The concept of post-traumatic stress disorder has had a rather checkered history. It has tended to emerge largely in the aftermath of war. During and after World War I there was discussion of 'shell shock'. The treatment then infantilized patients by removing those who could not function in combat as far from it as possible. They

usually remained emotional cripples much of their life because the premise was they had been so neurologically damaged that there was no repairing them. This turned out to be a mistake. So in World War II the term was changed to traumatic neurosis, and the idea there was to treat people 'within the sound of the guns' (Kardiner & Spiegel, 1947). This was a much better idea because it acknowledged the reality of intense reaction but did not presume that you had to consolidate it by pulling the soldiers away from their combat duties. Most were able to respond, which was a major advance. However, with the development of the psychoanalytic model there was more emphasis placed on early childhood development and less of the effect of proximate trauma. Indeed much has been made of Freud's abandonment of the trauma theory in the etiology of neuroses and the subsequent development of a metapsychology which emphasized the role of unconscious fears and wishes in developing symptoms rather than traumatic experiences. It came to be believed that the reason people got PTSD was because of developmental difficulties. This point of view can be seen as a denial of the reality of trauma. Indeed the idea that traumatic experience is less important than developmental history in the etiology of PTSD is problematic because it fits into a common fantasy that we control and therefore deserve whatever happens to us, thereby creating inappropriate guilt for events over which we have no control. Such thinking allows one to distance oneself from being in the category of potential victim. But this denies the existential reality that we are all in the category of potential victim.

However, the psychoanalytic domination of traumatology was ended in 1944 when Eric Lindemann wrote his classic paper on the symptomatology and management of acute grief (Lindemann, 1944[94]). He described the now-familiar symptoms of PTSD in his study of the aftermath of the Coconut Grove Night Club fire, in which hundreds of people were killed or badly wounded. He saw people who were agitated, restless, pacing, experiencing a sense of unreality, somatic discomfort, and intrusive recollections of the fire. He classified them into three groups: (a) people who had extreme symptoms: hyperactive, restless, unable to sleep, some became psychotic; (b) people who were acutely agitated and went through a very difficult period of adjustment but then recovered; (c) those who acted as though nothing had happened. An example of this last group is a man whose wife had been killed and the next day he went to work and said 'well she would want me to go on with things and I should just go on'. Lindemann found that people at either extreme did the worst. The ones who were the most severely agitated did very badly. But the ones on the other end of the symptom continuum, who pretended nothing had happened, also did very badly. A number had committed suicide within several years. Lindemann then describes how the principles of grief work as a means of working through and beyond trauma, which means mourning what was lost. He noted that it was necessary to decathect a loved one who had died before it was possible to recathect to someone new. Grief work may also involve the loss of a sense of personal invulnerability, or the loss of somatic function due to injury. This conceptualization makes it understandable why some people who appear to be

getting through a traumatic experience with little or no disturbance may be at elevated risk for subsequent psychiatric difficulties. Dissociative symptoms during and in the aftermath of trauma may interfere with this process of working through traumatic experiences (Spiegel & Cardena, 1991). Thus depersonalization, derealization, dissociative amnesia, or numbing may interfere with necessary emotional and cognitive processing in the aftermath of trauma. Thus the ones who look the best may actually be doing the worst. These people often don't ask for help, but need it.

With the Vietnam era there was renewed interest in post-traumatic stress disorder. PTSD was a special problem in Vietnam because of the lack of community support for the war, and the rotation system which meant that soldiers came and went alone for a fixed period of time, rather than with their units (Spiegel, 1981). Soldiers could be in the jungles dying with their comrades one day and 72 hours later they were back on the streets of their home town, alone, with no one to talk to. The fact that we lost the war complicated reintegration of combat experiences as well. Many Vietnam era veterans reported outright hostility from veterans of other wars. Thus PTSD was found to be relatively common and persistent long after the end of the Vietnam War (Keane & Fairbank, 1983).

PTSD: CURRENT DIAGNOSTIC CRITERIA

TRAUMATIC STRESS

Trauma can be understood as the experience of being made into an object, a thing, the victim of nature's indifference, of somebody else's rage. The key issue in trauma is neither fear nor pain, but rather helplessness. For a period of time one has no control over what is happening to their body. It is not uncommon for trauma victims to detach themselves emotionally and cognitively mentally from traumatic experience as it is occurring, as a means of protecting oneself from the reality of threat.

A young woman who was quite hypnotizable and was using self-hypnosis quite effectively to control anxiety related to her Hodgkin's Disease, described a prior hospitalization during a routine psychiatric interview: 'Well yes, I once fell off a third story balcony and fractured my pelvis.' I inquired whether she had been suicidal: 'Did you jump?' She said 'No, I was pushed.' I became concerned that she was paranoid. She then said, 'I was at this party and a big huge guy, twice my size, turned around suddenly with a beer in his hand and just knocked me over the railing. It was just a stupid accident.' When I said 'That must have been horrifying,' she said 'No, actually it was quite pleasant.' At this point I became even more concerned. I said 'What do you mean?' She said, 'I imaged it as if I was on another balcony watching a pink cloud float down to the ground. I felt no pain at all, and in fact I tried to walk back upstairs.'

More examples of this kind of extreme dissociative response to trauma emerged, leading to more systematic examination of the connection between trauma and dissociation. The phenomenology of post-traumatic stress disorder involves, first of all, a traumatically stressful event (APA, 1994). In the DSM-IV there are two components. The first is the actual experience: The person experienced, witnessed, or was confronted with an event or events that involved an actual or threatened death or serious injury, or a threat to the physical integrity of self or others (p. 209). The second requirement is 'the person's response involved intense fear, helplessness, or horror' (p. 209). The idea was to make it a stringent requirement. There are problems, however, with this definition in that some peoples' reaction to fear, helplessness or horror may come a long time after the trauma itself.

INTRUSION

Then there are three classes of symptoms. First are the intrusive symptoms. The persistent and unbidden reexperiencing of the traumatic event, which includes distressing recurrent images, recollections, flashbacks, dreams, nightmares, delusions or hallucinations. In the example given earlier of the armored car driver who was shot, he said: 'I don't just think about this guy. When an elevator door opens in front of me, I see that guy.' This kind of intense reliving of the event, as though it were happening, is typical of people with post-traumatic stress disorder, including 'intense distress at internal or external cues that symbolize or resemble an aspect of the traumatic event' (p. 210). Only one such intrusive symptom is required for the diagnosis.

AVOIDANCE

The second class of symptoms are the avoidance symptoms, like the Oklahoma City taxi driver who would not drive downtown much anymore: 'Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness' (p. 210). Examples include efforts to avoid thoughts or feelings about the event, efforts to avoid activities that arouse recollections, inability to recall important aspects of the trauma, feeling detached or estranged from others, diminished interest in usually pleasurable activities, restricted range of affect, and a sense of a foreshortened future (p. 21). Three such symptoms are required for the diagnosis of PTSD.

HYPERAROUSAL

The fourth criterion involves hyperarousal symptoms: trouble falling or staying asleep, irritability or outbursts of anger, difficulty concentrating, hypervigilance, and an exaggerated startled response. Two such symptoms are required. The reader may notice that in many ways these symptoms seem inconsistent. How can one be

numb, detached and avoidant and at the same time have intrusive flashbacks and nightmares? The crucial issue is that the cluster of PTSD symptoms is a combination of intrusion and avoidance. These sometimes come in sequence, sometimes with more intrusion, sometimes more avoidance. But the normal homeostatic equilibrium, the control of one's inner life, is very much disrupted by traumatic stressors. The worse the intrusions are, the more desperate are the efforts to avoid them. Indeed, the flashbacks and hyperarousal come to symbolically represent the traumatic circumstance itself, repetitively imposing distress just as the assailant, accident, or natural disaster did.

TRAUMA AND DISSOCIATION

There is growing interest in the overlap between hypnotic and dissociative states and post-traumatic stress disorder. Hypnosis has three main components: absorption, dissociation, and suggestibility (Spiegel, 1994). There is a clear analogy between these components of hypnosis and the above described categories of symptoms of PTSD.

ABSORPTION

Absorption involves an intense focus, like looking through a telephoto lens in a camera (Tellegen & Atkinson, 1974). When people are having flashbacks, that is all they are aware of. Elizabeth Loftus has written about what she calls the weapon focus in crime victims (Loftus, 1979). The police are frustrated when someone who has just been mugged gives them a brilliant description of the gun, but has no recollection of the face of the assailant. They were so focused on the thing that was threatening them that the ordinary peripheral awareness is something they don't have. There are studies that show that literally when people are aroused and stressed the things that are at the periphery of awareness just are not registered in the same way because they are so focused (Loftus & Burns, 1982). One part of the transformation and experience that occurs during trauma is this narrowing of the focus of attention.

DISSOCIATION

The second is detachment or dissociation. People tend to compartmentalize aspects of experience. Trauma can be thought of as a sudden discontinuity in experience. In traumatic circumstances, what is normally a smooth continuum of experience suddenly becomes a discontinuity. This can be reflected by a discontinuity in mental function. Often one's self-image is radically altered by the traumatic experience—the loss of control, sense of vulnerability, indignity, and fear can suddenly create a radically different view of self. This can lead to a compartmentalization of these different aspects of experience.

If the state of mind occurring at the time of the trauma is altered or hypnotic-like, the way memories are stored may be influenced by this narrowness of attentional focus. The range of associations may be more limited and therefore those that exist more intense. Strong emotion, for example, which is usually associated with traumatic memories, may influence both storage and retrieval (Cahill, Prins et al., 1994). There is evidence that congruence in mood between the state in which memories were stored and that in which they are retrieved improves recall (Bower, 1981). Similarly, another form of state dependency involves the dissociative state itself. To the extent that individuals do enter a spontaneous dissociative state during trauma, the memories may be stored in a manner that reflects this state (e.g. narrower range of associations to context). There may be fewer cross-connections to other related memories (Evans, 1988; Evans & Kihlstrom, 1973; Hilgard, 1986). Furthermore, retrieval should be facilitated by being in a similar dissociated state, for example hypnosis. Trauma can be conceptualized as a sudden discontinuity in experience. This may explain the reversibility of dissociative amnesia with techniques such as hypnosis (Spiegel & Spiegel, 1978; Loewenstein, 1991).

That such amnesia for traumatic events does occur is most convincingly demonstrated by Williams. She obtained hospital records of 129 women indicating emergency room contact for sexual or physical abuse, and interviewed them an average of 17 years later. The results were striking: 38% of the subjects did not report the abuse that had been recorded, nor did they report any sexual abuse by the same perpetrator. Indeed, 12% reported no abuse at all (Williams, 1994). An additional 16% (10% of the whole sample) of the women who did remember the abuse, reported that there was a period in their lives when they could not remember it (Williams, 1995). In fact, if the analysis was conservatively restricted to only those with recorded medical evidence of genital trauma and whose accounts were rated as most credible (in the 1970s), 52% did not remember the sexual abuse. It should be noted that this lack of memory was not diagnosed as a dissociative disorder, but the interviews were not designed to establish the presence or absence of any psychiatric disorder, merely the presence or absence of traumatic memories. It makes sense that mental processes which segregate one set of associations from another might well impair memory storage or retrieval (Kihlstrom, 1987).

SUGGESTIBILITY

The third component of hypnosis is suggestibility, a tendency to respond readily and uncritically to social cues. The hyperarousal states in PTSD are analogous to that. On the other hand, during trauma many people find themselves in a 'state of shock', responding in an automaton-like fashion. In a traumatic situation, as people narrow the focus of attention they tend to act without thinking about consequences. The police, for example, frequently do not believe a rape victim's story because she doesn't fit their image of what rape victims should look like. A supposedly classic

rape victim is bruised, with torn clothing and a tearful, hysterical demeanor. Most rape victims don't look like that. They are desperately trying to maintain some semblance of their dignity, emotional control, and their prior ordinary life. They wish it were a bad dream and it would all go away, and often overcontrol their affect rather than expressing it. At the same time, they are exquisitely sensitive to cues that may trigger recollection of the trauma—this hypersensitivity is a kind of suggestibility.

DISSOCIATION AND TRAUMA

There is growing clinical and some empirical evidence that dissociation may occur especially as a defense during trauma, an attempt to maintain mental control just as physical control is lost (Spiegel, 1984; Kluff, 1985; Putnam, 1985; Spiegel, 1988; Bremner, Southwick et al., 1992; Cardena & Spiegel, 1993; Koopman, Classen et al., 1994; Marmar, Weiss et al., 1994; Butler & Spiegel, 1997; Butler, Jasiukaitis, Koopman & Spiegel, 1997). Fifteen studies of immediate psychological reactions within the first month following a major disaster provide evidence of a high prevalence of dissociative symptoms, and some show that such symptoms are strong predictors of the development of post-traumatic stress disorder. These studies examined the experiences of survivors, victims and their families, and rescue workers in a variety of disasters: the Coconut Grove fire mentioned earlier (Lindemann, 1944[94]), the 1972 Buffalo Creek flood disaster caused by the collapse of a dam (Titchener & Kapp, 1976); automobile and other accidents and serious illnesses (Noyes, Hoenk et al., 1977; Noyes & Kletti, 1977; Noyes & Slyman, 1978); correctional officers' experience as hostages in a New Mexico penitentiary (Hillman, 1981); the collapse of the Hyatt Regency Hotel skywalk in Kansas City (Wilkinson, 1983); a lightning strike disaster that killed one child with others present (Dollinger, 1985) a 1984 tornado that devastated a North Carolina community (Madakasira, 1987); an airplane crash-landing (Sloan, 1988); an ambush in a war zone in Namibia (Feinstein, 1989); the 1989 Loma Prieta earthquake in the San Francisco Bay Area (Cardena & Spiegel, 1993); the Oakland–Berkeley firestorm (Koopman, 1994); witnessing an execution (Freinkel, Koopman et al., 1994); and shootings in a highrise office building (Classen, Abramson et al., 1997).

Survivors of these traumatic situations reported a variety of dissociative symptoms. Stupor, a dulling of the senses and decreased behavioral responsiveness have been described in survivors of automobile accidents (Noyes et al., 1977). Amnesia or memory impairment was reported by 29% of the Bay Area earthquake victims (Cardena & Spiegel, 1993) and by 8 out of 14 of the soldiers directly involved in the Namibia ambush (Feinstein, 1989). Impairment of memory or concentration was reported by 79% of the airplane crash-landing survivors (Sloan, 1988). One boy in the lightning strike disaster had total amnesia for the event (Dollinger, 1985).

Numbing, loss of interest, and an inability to feel deeply about anything, were

reported in about a third of the survivors of the Hyatt Regency skywalk collapse (Wilkinson, 1983), and in a similar proportion of survivors of the North Sea oil rig collapse (Holen, 1993). This is consistent with our findings among survivors of the Loma Prieta earthquake (Cardena & Spiegel 1993). A quarter of a sample of normal students reported marked depersonalization during and immediately after the earthquake, and 40% described derealization, the surroundings seeming unreal or dreamlike. While the most common reported memory problem was intrusive recollection, 29% of the sample reported difficulties with everyday memory.

Dissociative symptoms have also been retrospectively reported to occur during combat. Bremner et al. (1992) administered the Dissociative Experiences Scale (DES) to 85 Vietnam veterans, 53 with PTSD and 32 with medical problems. They found that the DES scores of 53 Vietnam veterans with PTSD were twice as high as those obtained among a comparison sample of 32 other veterans. Veterans with PTSD have been found to obtain higher scores on measures of hypnotizability as well (Stutman & Bliss, 1985; Spiegel, 1988).

DISSOCIATIVE SYMPTOMS AS PREDICTORS OF PTSD

Dissociative symptoms, especially numbing, have been found to be rather strong predictors of later post-traumatic stress disorder (McFarlane, 1986; Solomon, Mikulincer et al. 1989; Koopman et al., 1994, 1996; Classen et al., 1997). McFarlane found that the time course of dissociative symptoms is critical in the prediction of subsequent PTSD (McFarlane, 1997). Automobile accident victims' dissociation scores on the day of the trauma did not predict subsequent PTSD symptoms, their dissociation scores at 10 days did. Thus a failure to readjust quickly after trauma seems to place people at higher risk for later PTSD. Thus, physical trauma seems to elicit dissociation or compartmentalization of experience, and may often become the matrix for later post-traumatic symptomatology, such as dissociative amnesia for the traumatic episode. Indeed, more extreme dissociative disorders, such as Dissociative Identity Disorder, have been conceptualized as chronic Post-traumatic Stress Disorders (Spiegel, 1984, 1986; Kluff, 1985). Children exposed to multiple trauma are more likely to use dissociative mechanisms which include spontaneous trance episodes (Terr, 1991). Recollection of trauma tends to have an off-on quality involving either intrusion or avoidance (Horowitz, 1976) in which victims either intensively relive the trauma as though it were recurring, or have difficulty remembering it. Thus, physical trauma seems to elicit dissociative responses.

ACUTE STRESS DISORDER

This evidence reviewed above regarding the prevalence of dissociative and other symptoms in the immediate aftermath of trauma formed the basis for including

Acute Stress Disorder (ASD) as a new diagnosis in the DSM-IV (Spiegel & Cardena, 1991; Liebowitz, Barlow et al., 1994). It is diagnosed when high levels of dissociative, anxiety and other symptoms occur within one month of trauma, and persist for at least 2 days, causing distress and dysfunction. Such individuals must have experienced or witnessed physical trauma, and responded with intense fear, helplessness, or horror. This 'A' criterion of the DSM-IV requirements for ASD is identical to that of PTSD. The individual must have at least three of the following five dissociative symptoms: depersonalization, derealization, amnesia, numbing, or stupor. In addition, the trauma victim must have one symptom from each of the three classic PTSD categories: intrusion of traumatic memories, including nightmares and flashbacks; avoidance; and anxiety or hyperarousal. If the symptoms persist beyond a month, the person receives another diagnosis based on symptom patterns. Likely candidates are dissociative, anxiety or post-traumatic stress disorders.

TREATMENT

Three types of psychotherapy have been applied to PTSD: psychodynamic, cognitive-behavioral (CBT), and hypnotic-restructuring. In each of these approaches, telling and retelling the story of the trauma is an essential element, albeit with different methods and goals: clarification of unconscious themes and transference distortions in psychodynamic treatment, correction of cognitive distortions in CBT, and abreaction and the restructuring of traumatic memories with the help of hypnosis.

Psychodynamic treatment is rooted in the exploration of unconscious implications of traumatic loss, with the premise that the disorder is complicated by unconscious implications of the trauma (Horowitz, 1976; Horowitz, Wilner et al., 1980). At the same time it can help to strengthen ego function by bringing unconscious determinants of symptomatology into conscious awareness, thereby rendering the symptoms less overwhelming and facilitating coping (Marmar, Weiss & Pynoos, 1995; Menninger & Wilkinson, 1988).

The helplessness imposed at the time of trauma is seen as generalizing to encompass the self as helpless in other domains of life, a fate experienced as deserved. Ironically, fantasies of omnipotence reinforce rather than contradict this self-schema. Attempts to compensate for the lack of control imposed by traumatic stress often lead to guilt-inducing fantasies of unrealistic control: the accident or assault should have been foreseen and therefore avoided. Therefore it happened because of a lapse of judgment or personality defect rather than the randomness of life. Fantasized guilt at 'causing' trauma is for some more bearable than enduring the helplessness engendered by it.

Psychodynamic psychotherapy is aimed at unearthing and working through such unconscious determinants of symptoms, through retellings of the story of the

trauma, analysis of dreams and intrusive recollections, and exploration of transference issues. The 'traumatic transference' is important, since many trauma victims displace onto the therapist feelings they have about the trauma or traumatizer. They are also quite sensitive to apparent rejection by the therapist, feeling ashamed by their traumatic experience. Clarifying transference distortions can help patients accept and integrate traumatic experiences and repair damage to the self-concept.

Cognitive-behavioral approaches are based in part on the concept of systematic desensitization (Foa & Rothbaum, 1989; Foa, Davidson et al., 1995). Repeated reaccessing of traumatic memories in a more benign therapeutic context gradually deprives them of their affect-arousing qualities. Furthermore, distorting effects of the traumatically induced self-assessment are challenged: the fact that it happened does not imply that the victim deserved it, or that the victim deserves mistreatment in other situations. The retelling is intended to diffuse emotion and provide an opportunity for clarifying and correcting trauma-contaminated cognitions (Keane, Fairbank et al., 1989; Cooper & Clum, 1989).

Since the hypnotizability of Vietnam veterans with PTSD has been found to be higher than that of other populations (Stutman & Bliss, 1985; Spiegel, Hunt et al., 1988), it makes sense that techniques employing hypnosis should be useful. Especially if traumatized individuals with PTSD are in a spontaneous dissociative state during and immediately after the trauma, hypnosis is likely to be helpful in tapping traumatic memories by recreating a similar type of mental state. The literature on state-dependent memory (Bower, 1981) indicates that the content of memory is better retrieved when the individual is in the same mental state at the time of retrieval that he or she was in when the information was acquired. Therefore the ability to tolerate congruent (and painful) affect would seem to be a prerequisite for retrieval of traumatic memories. Similar to predominant affect, the structure of consciousness itself, such as being in a dissociative or hypnotic state, constitutes another mental state which can facilitate recollection.

Treatment employing hypnosis is now seen as involving not merely abreaction of traumatic memories, but working through them by assisting with the management of uncomfortable affect, enhancing the patient's control over them, and enabling him to cognitively restructure their meaning (Spiegel & Spiegel, 1978; Spiegel, 1981, 1992, 1997). Catharsis is a beginning, but it is not an end in itself, and can lead to retraumatization if the catharsis is not accompanied by support in managing affective response, control over the accessing of memories, and working them through. A grief work model (Lindemann 1944[94]) is useful. Observations of normal grief after trauma have led to a recognition that a certain amount of emotional discomfort and physical restlessness and hyperarousal is a natural, and indeed necessary, part of acknowledging, bearing, and putting into perspective traumatic memories (Spiegel, 1986; Spiegel & Cardena, 1990). This is often facilitated by using a hypnotic imaging technique, the 'split screen', in which the patient is asked to picture some aspect of the trauma on one side of the screen,

bearing the associated uncomfortable affect, and then to picture on the other side of the screen something he or she did for self-protection or to aid others. In this way the traumatic memory is acknowledged but restructured to encompass efforts at mastery as well as helplessness.

PRINCIPLES OF PSYCHOTHERAPY WITH HYPNOSIS

The principles of this kind of psychotherapy can be summarized with the following eight Cs:

Confrontation. It is important to confront the traumatic events directly rather than attribute the symptoms to some long-standing family or personality problem.

Confession. It is often necessary to help trauma survivors to confess deeds or emotions that are embarrassing to them and at times repugnant to the therapist. It is important to help these patients distinguish between misplaced guilt and real remorse. They may well be telling the therapist aspects of the traumatic event that they have discussed with no one else.

Consolation. The intensity of traumatic experiences requires an actively consoling approach from the therapist, lest he or she be perceived as being judgmental or as inflicting rather than treating trauma-induced pain. Appropriate expressions of sympathy and concern can be helpful in acknowledging and diffusing this common reaction.

Condensation. Find an image that condenses a crucial aspect of the traumatic experience. This representation can make the overwhelming aspects of the trauma more manageable by putting it in concrete, symbolic form. Furthermore, this approach can be used to facilitate restructuring of the experience by joining previously disparate images, for example, linking the pain associated with the death of a friend in combat with the happiness experienced during some earlier shared time. This allows patients to alter the pain of the loss by attending to positive aspects of the lost relationship that remain in memory.

Consciousness. Make conscious previously dissociated traumatic memories in a gradual manner that does not overwhelm the patient.

Concentration. Use the intense and focused concentration characteristic of the hypnotic state to reinforce the boundaries of the traumatic experience and the painful affect associated with it. Directing sharply defined attention on the loss also implies that when the hypnotic state is ended, attention can be shifted away from the traumatic experience.

Control. Because the most painful aspect of severe trauma is the absolute sense of helplessness, the loss of control over one's body and the course of events, it is especially important that the process by which the therapeutic intervention is conducted enhance the patient's sense of control over the traumatic memories. Structure the experience so that patients are given the opportunity to terminate the working through when they feel they have had enough, can remember as much

from the hypnosis as they care to, and feel they are in charge of the self-hypnosis experience. They should learn to use it on their own as a self-hypnosis exercise as well as with the therapist. Such procedures help patients to deal with traumatic memories with a greater sense of control and mastery.

Congruence. The goal is to help patients integrate dissociated or repressed traumatic material into conscious awareness in such a way that they can tolerate experiencing the memories as part of themselves. In this way the traumatic past is not incompatible with their present experience. Patients should emerge from therapy having reviewed not only what was done to them but what they did to protect themselves, not only what they lost but what they had valued and why.

CONCLUSION

Post-traumatic stress disorder is a challenge in many ways. It challenges patients' defenses, interferes with working through of traumatic experiences, and impairs function. It poses special problems for families as well as therapists who treat it. Working with survivors of trauma forces therapists to confront their own vulnerabilities as well. Maintaining an empathic connection with such patients is crucial to the treatment of people who feel ashamed and degraded, and yet it stimulates difficult emotions in those who do this work. When the traumatic stressor is a collective one, as in the Oklahoma City bombing, symptoms of intrusion, avoidance, and hyperarousal may affect the community as a whole. At the same time, community action and support can help to heal the wounds inflicted by the violence. People gathered and left mementos by the hundreds on the fence surrounding the damaged building: flowers, poems, stuffed teddy bears. One group showed photographs of the blasted shell of the building with cloudy 'figures' which they claimed represented the spirits of those who had died watching after injured children in the rubble. There is a strong human need to make some kind of sense out of tragedy. While some trauma defies meaning, psychotherapeutic techniques, including the use of hypnosis, can help in finding meaning and managing emotion in the aftermath of traumatic stress.

REFERENCES

- APA (1994). *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV*. DC: American Psychiatric Association, Washington.
- Bower, G. H. (1981). Mood and memory. *Am. Psychologist*, **36**(2), 129–148.
- Bowners, I. T., O'Gorman, E. C. et al. (1991). Assault characteristics and post-traumatic stress disorder in rape victims. *Acta Psychiat. Scand.*, **83**, 27–30.
- Bremner, J. D., Southwick, S. et al. (1992). Dissociation and post-traumatic stress disorder in Vietnam combat veterans. *Am. J. Psychiat.*, **149**(3), 328–332.

- Breslau, N. & Davis, G. C. (1992). Posttraumatic stress disorder in an urban population of young adults: Risk factors for chronicity. *Am. J. Psychiat.*, **149**(5), 671–675.
- Breslau, N., Davis, G. C. et al. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Arch. Gen. Psychiat.*, **48**(3), 216–222.
- Browne, A. (1993). Violence against women by male partners. Prevalence, outcomes, and policy implications. *Am. Psychologist*, **48**(10), 1077–1087.
- Butler, L. & Spiegel, D. (1997). Trauma and memory. In L. Dickstein, M. Riba & J. Oldham (Eds), *Repressed Memories*, (p. 71) Washington DC: American Psychiatric Press.
- Butler L. D., Jasiukaitis, P., Koopman, C. & Spiegel, D. (1997). Hypnotizability and traumatic experience: A diathesis-stress model of dissociative symptomatology. *Am. J. Psychiat.*, **153**(7), 42–63.
- Cahill, L., Prins, B. et al. (1994). Beta-adrenergic activation and memory for emotional events. *Nature*, **371**, 702–704.
- Cardena, E. & Spiegel, D. (1993). Dissociative reactions to the San Francisco Bay Area earthquake of 1989. *Am. J. Psychiat.*, **150**(3), 474–478.
- Classen, C., Abramson, S. et al. (1997). Effectiveness of a training program for enhancing therapists' understanding of the supportive-expressive treatment model for breast cancer groups. *J. Psychother. Prac. Res.*, **6**, 211–218.
- Cooper, N. A. & Clum, G. A. (1989). Imaginational flooding as a supplementary treatment for PTSD in combat veterans: A controlled study. *Behav. Ther.*, **20**, 381–391.
- Dollinger, S. J. (1985). Lightning-strike disaster among children. *Br. J. Med. Psychol.*, **58**(Pt 4), 375–383.
- Evans, F. J. (1988). Posthypnotic amnesia: Dissociation of context and content. In H. M. Pettinati (Ed.), *Hypnosis and Memory* (pp. 157–192), New York: Guilford Press.
- Evans, F. J. & Kihlstrom, J. F. (1973). Posthypnotic amnesia as disrupted retrieval. *J. Abnorm. Psychol.*, **82**(2), 317–323.
- Feinstein, A. (1989). Posttraumatic stress disorder: A descriptive study supporting DSM-III-R criteria. *Am. J. Psychiat.*, **146**(5), 665–666.
- Foa, E. B., Davidson, J. et al. (1995). Treatment of Post-Traumatic Stress Disorder. In C. O. Gabbard (Ed.), *Treatment of Psychiatric Disorders: The DSM-IV Edition*, vol. 11 (pp. 1499–1520) Washington DC: American Psychiatric Press.
- Foa, E. B. & Riggs, D. S. (1993). Posttraumatic Stress Disorder and Rape. In J. M. Oldham, M. B. Riba & A. Tasman, (Eds), *Review of Psychiatry* (pp. 273–303), Washington DC: American Psychiatric Press.
- Foa, E. B. & Rothbaum, B. O. (1989). Behavioral psychotherapy for post-traumatic stress disorder. *Int. Rev. Psychiat.*, **1**, 219–226.
- Freinkel, A., Koopman, C. et al. (1994). Dissociative symptoms in media eyewitnesses of an execution. *Am. J. Psychiat.*, **151**(9), 1335–1339.
- Hilgard, E. (1986). *Divided Consciousness: Multiple Controls in Human Thought and Action*. New York: Wiley.
- Hillman, R. G. (1981). The psychopathology of being held hostage. *Am. J. Psychiat.*, **138**(9), 1193–1197.
- Holen, A. (1993). *The North Sea Oil Rig Disaster*. New York: Plenum.
- Horowitz, M. (1976). *Stress Response Syndromes*. New York: Aronson.
- Horowitz, M. J., Wilner, N. et al. (1980). Signs and symptoms of posttraumatic stress disorder. *Arch. Gen. Psychiat.*, **37**(1), 85–92.
- Kardiner, A. & Spiegel, H. (1947). *War Stress and Neurotic Illness*. New York: Hoeber.
- Keane, T. M. & Fairbank, J. A. (1983). Survey analysis of combat-related stress disorders in Vietnam veterans. *Am. J. Psychiat.*, **140**(3), 348–350.
- Keane, T. M., Fairbank, J. A. et al. (1989). Implosive (flooding) therapy reduces symptoms of PTSD in Vietnam Combat Veterans. *Behav. Ther.*, **20**, 245–260.

- Kihlstrom, J. F. (1987). The cognitive unconscious. *Science*, **237**(4821), 1445–1452.
- Kluft, R. P. (1985). *Childhood Antecedents Of Multiple Personality*. Washington DC: American Psychiatric Press.
- Kluft, R. P. (1985). Dissociation as a response to extreme trauma. In R. P. Kluft (Ed.), *Childhood Antecedents of Multiple Personality*. (pp. 66–97) Washington DC: American Psychiatric Press.
- Koopman, C., Classen, C. et al. (1994). Predictors of posttraumatic stress symptoms among survivors of the Oakland/Berkeley, Calif., firestorm. *Am. J. Psychiat.*, **151**(6), 888–894.
- Koopman, C., Classen, C. et al. (1996). Dissociative responses in the immediate aftermath of the Oakland/Berkeley Firestorm. *J. Traum. Stress*, **9**(3), 521–540.
- Koss, M. P. (1993a). Detecting the scope of rape: A review of prevalence research methods. *J. Interpers. Violence*, **8**(2), 198–222.
- Koss, M. P. (1993b). Rape. scope, impact, interventions, and public policy responses. *Am. Psychologist*, **48**(10), 1062–1069.
- Koss, M. P., Heise, L. et al. (1994). The global health burden of rape. *Psychol. Women Quart.*, **18**, 509–537.
- Liebowitz, M., Barlow, D., Ballenger, J., Davidson, J., Foa, E., Fryer, A., Koopman, C., Kozac, M. & Spiegel, D. (1994). Final overview of the anxiety disorders section of the DSM-IV. *DSM-IV Sourcebook*. Washington DC: American Psychiatric Association.
- Lindemann, E. (1944[94]). Symptomatology and management of acute grief. *Am. J. Psychiat.*, **151**(6 Suppl), 155–160.
- Loewenstein, R. L. (1991). Dissociative amnesia and fugue. In A. Tasman & S. M. Goldfinger (Eds), *Psychiatric Press Review of Psychiatry*. (p. 10) Washington DC: American Psychiatric Press.
- Loftus, E. (1979). *Eyewitness Testimony*. Cambridge, MA: Harvard University Press.
- Loftus, E. F. & Burns, T. E. (1982). Mental shock can produce retrograde amnesia. *Mem. Cognit.*, **10**(4), 318–323.
- Madakasira, S. & O'Brien, K. F. (1987). Acute posttraumatic stress disorder in victims of a natural disaster. *J. Nerv. Ment. Dis.*, **175**, 286–290.
- Marmar, C., Weiss, D. S. & Pynoos, R. S. (1995). Dynamic psychotherapy of Post-Traumatic Stress Disorder. In M. J. Friedman & A. Y. Deutch (Eds), *Neurobiological and Clinical Consequences of Stress: From Normal Adaptation to Post-Traumatic Stress Disorder* (pp. 495–506) New York: Lippincott-Raven.
- Marmar, C. R., Weiss, D. S. et al. (1994). Peritraumatic dissociation and posttraumatic stress in male Vietnam theater veterans. *Am. J. Psychiat.*, **151**(6), 902–907.
- McFarlane, A. (1997). The prevalence and longitudinal course of PTSD: Implications for the neurobiological models of PTSD. In M. A. Yehuda (Ed.), *Psychobiology of posttraumatic stress disorder*. *Proc. New York Acad. Sci.*, **821**, 10–23.
- McFarlane, A. C. (1986). Posttraumatic morbidity of a disaster. A study of cases presenting for psychiatric treatment. *J. Nerv. Ment. Dis.*, **174**(1), 4–14.
- Menninger, W. W. & Wilkinson, C. B. (1988). The aftermath of catastrophe: The Hyatt Regency disaster [clinical conference]. *Bull. Menninger Clin.*, **52**(1), 65–74.
- Noyes, R., Jr., Hoenk, P. R. et al. (1977). Depersonalization in accident victims and psychiatric patients. *J. Nerv. Ment. Dis.*, **164**(6), 401–407.
- Noyes, R., Jr. & Kletti, R. (1977). Depersonalization in response to life-threatening danger. *Compr. Psychiat.*, **18**(4), 375–384.
- Noyes, R. & Slyman, D. (1978). The subjective response to life-threatening danger. *Omega*, **9**, 313–321.
- Poarch, J. E. (1995). Inside Job: Diary of an Oklahoma Disaster Response Coordinator. *Psychiatric Times*, July, 9.
- Putnam, F. W. (1985). Dissociation as a response to extreme trauma. In R. P. Kluft (Ed.),

- Childhood Antecedents of Multiple Personality.* (pp. 65–97) Washington DC: American Psychiatric Press.
- Sloan, P. (1988). Post-traumatic stress in survivors of an airplane crash-landing: A clinical and exploratory research intervention. *J. Traum. Stress*, **1**(2), 211–229.
- Solomon, Z., Mikulincer, M. et al. (1989). Combat stress reaction: Clinical manifestations and correlates. *Milit. Psychol.*, **1**, 35–47.
- Spiegel, D. (1981). Vietnam grief work using hypnosis. *Am. J. Clin. Hypn.*, **24**(1), 33–40.
- Spiegel, D. (1984). Multiple personality as a post-traumatic stress disorder. *Psychiatr. Clin. North Am.*, **7**(1), 101–110.
- Spiegel, D. (1986). Dissociating damage. *Am. J. Clin. Hypn.*, **29**(2), 123–131.
- Spiegel, D. (1988). Dissociation and hypnosis in post-traumatic stress disorder. *J. Traum. Stress*, **1**(1), 17–33.
- Spiegel, D. (1992). The use of hypnosis in the treatment of PTSD. *Psychiat. Med.*, **10**(4), 2130.
- Spiegel, D. (1994). In J. A. Talbot, R. E. Hales & S. C. Yudofsky (Eds), *Hypnosis. American Psychiatric Press Textbook of Psychiatry*. 2nd edn. (pp. 1115–1142) Washington, DC: American Psychiatric Press.
- Spiegel, D. (1997). Trauma, dissociation, and memory. In M. A. Yehuda (Ed.), *Psychobiology of posttraumatic stress disorder. Proc. New York Acad. Sci.*, **821**, 225–237.
- Spiegel, D. & Cardena, E. (1990). New uses of hypnosis in the treatment of posttraumatic stress disorder. *J. Clin. Psychiat.*, **51**(10), 39–43.
- Spiegel, D. & Cardena, E. (1991). Disintegrated experience: The dissociative disorders revisited. *J. Abnorm. Psychol.*, **100**(3), 366–378.
- Spiegel, D., Hunt, T. et al. (1988). Dissociation and hypnotizability in posttraumatic stress disorder. *Am. J. Psychiat.*, **145**(3), 301–305.
- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment: Clinical Uses of Hypnosis*. Washington DC: American Psychiatric Press.
- Stutman, R. K. & Bliss, E. L. (1985). Posttraumatic stress disorder, hypnotizability, and imagery. *Am. J. Psychiat.*, **142**(6), 741–743.
- Tellegen, A. & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ('absorption'), a trait related to hypnotic susceptibility. *J. Abnorm. Psychol.*, **83**(3), 268–277.
- Terr, L. C. (1991). Childhood traumas: An outline and overview [see comments]. *Am. J. Psychiat.*, **148**(1), 10–20.
- Titchener, J. L. & Kapp, F. T. (1976). Disaster at Buffalo Creek. Family and character change at Buffalo Creek. *Am. J. Psychiat.*, **133**(3), 295–299.
- Wilkinson, C. B. (1983). Aftermath of a disaster: the collapse of the Hyatt Regency Hotel skywalks. *Am. J. Psychiat.*, **140**(9), 1134–1139.
- Williams, L. M. (1994). Recall of childhood trauma: A prospective study of women's memories of child sexual abuse. *J. Consult. Clin. Psychol.*, **62**, 1167–1176.
- Williams, L. M. (1995). Recovered memories of abuse in women with documented child victimization histories. *J. Traum. Stress*, **8**, 649–673.

Conversion Disorders

C. A. L. HOOGDUIJN and KARIN ROELOFS

University of Nijmegen, The Netherlands

INTRODUCTION

Trillat (1986) concluded his *Histoire de l'hysterie* with the words, 'Hysteria is dead, that is clear. She has taken her riddles with her to the grave.' We must agree with Mace (1992a,b), however, that this is not entirely true. Patients still suffer from the often strange motor symptoms of conversion hysteria. Over recent years, patients have presented for treatment at our psychiatric outpatient unit specializing in such complaints with the following symptoms: attack-like swinging and swaying of arms and legs, shaking attacks of the head in which nodding and a side-to-side movement alternate, paralysis of one side of the body, paralysis of both legs, blindness, the loss of the sense of smell or taste, total loss of coordination of the muscles, pseudo fits, cramps in the hand or foot, the inability to open the eyes, numbness in both legs, inability to speak, the inability to speak above a whisper, pseudo spastic speech, the inability to swallow, tremors of the arms, legs or head, and assorted disorders relating to the senses and pain. What is remarkable is that these patients have often already been treated for many years outside the areas of psychiatry and psychology by a neurologist or rehabilitation specialist.

The terms 'hysteria' and 'conversion' have often been used interchangeably. 'Hysteria' comes from the Greek for womb. The ancient Greeks thought that the many starkly changing complaints were caused by the womb moving about within the body (Abse, 1974). Abse refers to Plato (c.360 BC) on the subject: 'and the same is the case with the so-called womb or matrix of women; the animal within them is desirous of procreating children, and when remaining unfruitful long beyond its proper time, gets discontented and angry, and wandering in every direction through the body, closes up the passages of the breath, and, by obstructing respiration, drives them to extremity, causing all varieties of disease.' The term 'conversion' was already in use as far back as the Middle Ages. There are descriptions from that period of women suffering from what was called 'suffocation of the womb' (Mace, 1992a) a syndrome which, following an emotional crisis, tended to develop into various other syndromes; that is, the one syndrome as it were

'converted itself' into another. It is not difficult to recognize in this echoes of hysteria.

In DSM-IV (APA, 1994), conversion disorder is defined as follows: the diagnosis 'conversion disorder' is applicable when the complaints consist of unexplainable disorders of the voluntary muscular tissue or of the sensory functions. The symptoms suggest a neurological or other physical disorder. However, no physical explanation for the complaints is discovered, so they are referred to as pseudoneurological. Moreover, psychological factors (e.g. stress) should be associated with the onset or an exacerbation of the complaints.

The theories which attempt to explain the onset of a conversion disorder are speculative in nature. Good empirical research is lacking, but theories that have stood the test of time have one important aspect in common—the underlying notion that conversion symptoms are brought on by particular events that are experienced as threatening or catastrophic. These can be either one-off calamities or threatening circumstances that persist over many years.

Support for this supposition has come from, for example, studies of incest victims and the incidence of conversion symptoms in men during wartime. Albach (1993) studied the incidence of conversion symptoms in victims of incest ($n = 97$) and in a control group ($n = 65$). The finding was that the women in the incest group exhibited these phenomena significantly more often. Paralysis, blindness, deafness and similar afflictions were shown by 26%, as against 0% in the control group. For fainting, the percentages were respectively 28 and 0%. For 'hysterical attacks'—the term used to cover episodes of kicking and screaming followed by imperfect memory of the event—the percentages were respectively 28 and 3%. These are impressive differences, though it must be noted that much could be said about the methodology employed in this study.

Farley, Woodruff & Guze (1968) also found a high incidence of conversion symptoms in 100 otherwise healthy mothers of new-born children. The percentages here were: paralysees, 22%; fainting, 5%; hysterical attacks, 4%. It should be noted, however, that the authors did not check for a history of incest.

The disorder is rare in men, except in wartime. 'We've never seen so much male hysteria,' commented Binswanger in his book on war hysteria, recounting his experiences of treating First World War soldiers (Binswanger, 1922). Carden & Schramel (1966) studied 12 Vietnam soldiers with conversion disorders. In each case, the conversion symptoms had come on quite soon (within hours or days) following a traumatic event (e.g. a bomb attack).

Recent research has pointed to a relationship between trauma and dissociation (Boon & Draijer, 1993; Chu & Dill, 1990; Vanderlinden, van Dyck, Vandereycken & Vertommen, 1993; for an overview, see Spiegel, 1993). Cognitive theorists such as Kihlstrom see conversion disorder as a dissociative disorder (Kihlstrom, 1992a) and indeed it is classified as such in ICD-10 (World Health Organization, 1992). There are indications that the way in which the memory of traumatic events is stored differs from the norm (Alpert, 1995; Christianson, 1992; Le Doux, 1993; van der Kolk, 1994;

van der Kolk & Fisler, 1995). Van der Kolk suggests that dissociation is a characteristic feature of traumatic memory (van der Kolk & Fisler, 1995). In extreme stress the 'memory categorization system'—in which the hippocampus plays a central role—may break down and, as a result, memories are stored as fragmented affective and perceptual states with little verbal representation (van der Kolk, 1994). When these individual sensory and affective imprints are incorporated into a coherent account, the result is a semantic and therefore explicit memory. The processing of perceptual features is more rapid than semantic processing. The former can take place on an implicit, unconscious level, whilst the latter, precisely because it is concerned with supplying meaning, is associated with consciousness (Kihlstrom, 1992b).

It may be concluded from the above that traumas play a significant role in the development of dissociative disorders. The same cannot be said with any certainty about the development of conversion disorders since, though they are frequently regarded as dissociative disorders, there is a lack of systematic research into the occurrence of traumas in their etiology.

Inconsistencies in the symptom pattern can be seen both in patients with a conversion disorder and in those with a dissociative disorder. An example of the former is that of a patient at our clinic who could not see, but was perfectly able to walk across a room full of furniture without bumping into any of it. She was also able to 'guess' how many fingers were being held up in front of her. She was asked to look in the direction of the fingers and call out the first figure between one and ten that came into her head. She never failed to give the correct answer. When asked, 'But how did you know that?', she replied, 'You'll have to explain it to me. I can't see anything and yet you tell me I keep getting the answer right.' There clearly is perception, however much the patient might not realize it (Kihlstrom, 1992b).

Various reports on these inconsistencies in dissociative disorders are reviewed by Kihlstrom, Tataryn and Hoyt (1990) and Schacter and Kihlstrom (1989). For example, Lyon (1985) describes a patient suffering from amnesia who was asked to dial a telephone number at random. The number she dialed turned out to be her mother's. In the same way, we asked a patient with total amnesia to give us her date of birth. She did not know the answer. Then we asked her to say the first date that came into her head, and it was her birthday.

It would seem from the above that, despite the patients' protestations that they cannot remember or have not seen things, these 'not remembered' or 'not seen' facts or events still influence their experiences, thoughts and behaviour (see Kihlstrom, 1992b).

CONVERSION DISORDER, DISSOCIATION AND HYPNOTIC TRANCE

The so-called dissociative phenomena are explained by Kihlstrom as follows. The information is not processed explicitly; the patient does not consciously perceive

an object or remember a happening. Implicitly, however, the stimuli do influence the patient's behaviour. These observations support the view that there are two memory systems: the explicit memory system and the implicit memory system (Schacter, 1987) or memory with and without awareness (Jacoby & Dallas, 1981). A similar distinction is suggested for perception (Kihlstrom 1992b). Alongside implicit memory and perception, Kihlstrom (1992b) talks of unconscious emotion and cognition as information processes that can influence ongoing experience, thought and action, outside of the phenomenal awareness.

Dissociation and the hypnotic trance are closely related. Hypnosis can be seen as an altered state of consciousness in which it is possible to focus the attention in a particular direction and thus easily achieve a state of muscle relaxation. During this procedure it is possible to change a subject's experience of pain, cold, heat and other sensory perceptions (Frankel, 1978). This kind of altered perception could also occur in patients with conversion symptoms. Patients feel their legs are paralysed and behave like someone whose paralysis has a physical cause. They see that they are paralysed and feel paralysed. Under hypnosis, disorders such those seen in conversion patients can be evoked and made to disappear again in very suggestible subjects.

Research carried out by Bliss (1984) revealed that patients who suffer from a conversion disorder are exceptionally suggestible. The Stanford Hypnotic Susceptibility Scale (Form C, range 0–12) was used to measure the suggestibility of 18 patients. Their average score was 9.7 ± 0.48 , significantly higher than that of a control group of cigarette smokers (6.6 ± 0.37). The conversion patients' average places them in the top 10% of the population with regard to suggestibility. This is the level of suggestibility required for a subject under hypnosis to have auditory hallucinations or negative visual hallucinations (not seeing things which are actually there). Bliss (1984) suggests that the ability to put oneself very rapidly into a state of trance (the hypnoid state) can be regarded as a primitive defense mechanism. The conversion symptoms might therefore be brought on by self-hypnosis.

A reflection of this can be found in the animal kingdom. When danger threatens animals might flee or, if they are suitably equipped, fight. There are times, however, when the enemy is too powerful, too strong or too fast. For these situations some animals have a third possibility, the 'Totstellreflex', or 'playing possum' as it is more commonly known in English. A good example of this is the mouse that appears to be dead when carried into the house by the cat, but who later runs away. The reaction can also be seen in insects such as the dung beetle, in spiders and in fish. Anglers are very familiar with the sight of a large bream floating on its side for a while without moving after having been caught and thrown back in the water. Similar behaviour can be found in birds, crocodiles, snakes, chickens and guinea pigs.

A reaction similar to the 'Totstellreflex' is the way some animals suddenly feign disability. Taylor (1986) describes, for example, how a curlew with young chicks

imitates the behaviour of a bird with a broken wing to distract a bird of prey away from the nest. Similar violent, almost uncoordinated motor reactions are also seen in various other animals exposed to extreme threat. When captured, a bee will buzz around as though demented; a bird caught in a room will flutter desperately, flying against walls and windows in its panic.

In animals these phenomena are survival mechanisms triggered by danger (cf. Hoogduin, 1988). In people, too, the dissociative reaction seems to be a way of coping with extreme circumstances.

The following points can be made in summary of the foregoing:

- Patients with conversion symptoms develop the disorder when they have been, either long term or momentarily, in severely threatening situations.
- There are indications that a similar mechanism lies at the root of both conversion disorder and dissociation
- Conversion symptoms resemble states or conditions that can be induced through hypnosis.
- Conversion symptoms resemble behaviours sometimes observed in animals at moments of extreme threat.

THE HYPNOTHERAPEUTIC STRATEGY (Hoogduin & van Dyck, 1990, 1992)

Van Dyck and Hoogduin (1989) divided hypnotic intervention into two broad categories: symptom directed and exploratory. The former is the older of the two and consists of the creation of a state of heightened suggestibility in order to influence symptoms in a favourable way. In the exploratory approach, techniques such as revivification or age regression are used in order to discover the possible cause of the symptoms. This may be followed by symptom-directed suggestions.

The procedures described here are a combination—where possible—of both these strategies. Firstly, investigations were carried out to discover whether the onset of the conversion symptoms had been preceded by some traumatic experience. If so, revivification was used, followed by an attempt to influence the symptoms both directly and indirectly. Where no psychological trauma was discovered, the approach was limited to direct and indirect influence of the symptoms.

The treatment strategy suggested here is therefore the following:

- A rationale, explaining that the symptoms are the result of strong emotions which the patient has been unable to deal with and that, by reliving the event which gave rise to the emotions, these will be re-experienced and dealt with, causing a reduction of the symptoms.
- Formal trance-induction with revivification during which the patient is encouraged to give free rein to any emotions.

- Post-hypnotic suggestions: at the end of the session, the post-hypnotic suggestion is made that the patient will be able to continue dealing with the emotions, e.g., at night during sleep in the form of dreams.
- The use of direct and indirect suggestions to reduce the symptoms.
- Training in autohypnosis using audio-cassettes.
- Face saving: this can be ensured by emphasizing the importance and gravity of revivification, preferably in the presence of the partner or parents of the patient. Giving the treatment an aura of importance and gravity ties in with the rationale of the patient's being unable to deal with such intense emotions earlier.
- Rehabilitation: when improvement occurs in symptoms which have existed for years, good physiotherapeutic rehabilitation and guidance are essential.
- Influencing stress factors which have contributed to the onset of the disorder.
- Influencing any possible reinforcement of the disorder by those close to the patient. This often involves correcting the attitude of the partner or parents who often play a significant role in sustaining the notion that the disorder is physical (Taylor, 1986).
- When no indication is found that revivification is necessary, this element is left out of the procedure. The rest of the treatment strategy remains the same, i.e., direct and indirect influence of the symptoms, a plausible rationale, formal trance-induction and post-hypnotic suggestions. Face saving, rehabilitation and influencing any possible antecedent or consequential factors also remain part of the treatment strategy.

THREE CASE HISTORIES

Treatment, by Revivification, of a Woman Suffering from Flaccid Paralysis of Both Legs

Mrs A is a 40-year-old teacher who feels that her life has not been easy. She sees her marriage and family as a heavy burden. Her relationship with her partner had been bad for about ten years. During this time, Mrs A had had back trouble and had undergone an operation for a slipped disc, but even after the operation, she had continued to feel pain in her back.

After a fearful argument one day, her husband decided to leave her. In desperation she went to run after him, whereupon she became paralysed in both legs and fell. Her husband came back to her that evening and there was no more talk of separation. The paralysis nevertheless persisted.

Various admissions to hospital and inpatient treatment for a year in a rehabilitation centre were of no avail; the patient was confined to a wheelchair and eventually moved into a house specially designed for people in this condition.

The years rolled by. Then, almost 9 years after the onset of the paralysis, a social worker who had heard that the condition of such patients can often be improved by the use of hypnosis, registered Mrs A for treatment.

On examination, it was found that the legs were completely paralysed from the knee down and that there was only minimal strength from the knee up. Various neurological tests provided no explanation. Conversion syndrome seemed to be a reasonable diagnosis. It was explained to the patient that sometimes when a person is subjected to extreme stress, the tensions and emotions experienced can manifest themselves by affecting a particular part of the body. It was then suggested that if such emotions are re-experienced and dealt with, normal function could possibly be restored to the part of the body affected.

In the second session, during an extremely emotional re-experience of the events of 9 years previously, the patient moved her foot a few centimeters. This happened again in the following session. She managed to move her foot intentionally by thinking back. Subsequently, with the help of post-hypnotic suggestion, the patient managed to move her foot when she was not in a state of trance.

Gradually she overcame the disability and, after about 6 months, was practically cured. On follow-up examination 6 months later, it was found that her condition had in no way deteriorated and she is now able to go for walks of about an hour's duration.

Treatment by Direct and Indirect Suggestions

Mrs B was 42 years old when she was referred for treatment for a clenched fist. She had had the condition for 11 months without intermission. It had first occurred 16 years previously. She had been riding her bike when suddenly, and possibly as a joke, a truck driver had sounded his horn very loudly. Her reaction had been to grip the handlebars very tightly and, as a result, both her hands had cramped up. She had managed to release the handlebars, but thereafter her left hand had remained cramped for some months. She had subsequently suffered from periods of cramping of shorter and longer duration. The last, which had occurred 4 years previously, had lasted for 8 months. Between these periods her hand was completely normal. Sometimes the clenched fist relaxed spontaneously, at other times it had to be treated by a hypnotherapist. However, for the 11 months prior to her referral to our outpatient clinic, treatment had been entirely unsuccessful.

The patient was married and had four healthy children. She said that she was not subject to stress or tension, and had no particular problems. She had never been, nor was she overburdened in any way.

The fist looked strange, quite unlike the sort of fist a person would normally make. The knuckles were sunken rather than protruding. The muscle tone in the arm was normal, even though it was impossible for the therapist attempting to open the fist, to move the fingers even by a millimeter. There was some movement, but only at the knuckle joints. The complaint was limited to the fingers (i.e. not the thumb) of her dominant left hand.

The only change in her life due to the handicap was that she could no longer peel potatoes. She was well able to carry out all her other household chores. Repeated

neurological examinations had revealed no abnormalities. Thorough investigation did reveal, however, that there had been many physical complaints in the past which conformed to the DSM-III-R diagnostic criteria for somatization disorder.

At the fifth session it was suggested to the patient that the object she was holding—a big plastic foam egg—was growing alternately bigger and smaller, so that the hand opened and closed a little. After an hour and a half, her fingertips were pink and the hand was relaxed and able to open. The patient was then told to come out of the trance with her arm still in a relaxed state. She did so and the symptoms had disappeared.

The session ended with a discussion of the possibility that the hand might close up again. The patient was told that if that happened, she must above all remain calm and that she would have to learn, through hypnosis, to gain control over the condition.

At the sixth session it was possible to evoke the condition and then make it go away again. The patient was then taught how to do this. She was asked first of all, while in a deep trance, to close her right hand and then to open it slowly, so as to teach her left hand to open. This suggestion appeared to work well. The depth of trance was then lessened during the exercises. Finally she managed to open the hand using the procedure outlined here and without formal hypnosis.

On follow-up a year later, the cramping was still causing her some problems, but she was managing to open the fist without help. At that time she was complaining of a burning sensation in the eye. She was seen by an ophthalmologist, who could not find a somatic cause for her complaint (Hoogduin, Akkermans, Oudshoorn & Reinders, 1993).

Reversed Hand Levitation in a Case of Pseudo-ataxia

Mrs C is a 40-year-old hairdresser who had been suffering from ataxia for about 7 years. She could not carry out coordinated, goal-directed movements of her hands. When she tried to bring her hands together, for example, they missed each other by several centimeters. Sometimes the action was so uncontrolled that she hit her hands against a wall or cupboard. She could barely eat or drink without help. She only managed to do the former by holding her face very close to the plate.

A second major complaint was a coordination disorder of the torso muscles. When Mrs C tried to stand up, for example, her torso swayed in all directions and she could not walk unaided. She managed to move about with the help of a walking-stick, but still with a swaying motion. This did not, however, cause her to fall. The complaints had come on suddenly. Some 7 years previously she had had to have an operation. She had been frightened by the idea of anaesthetization because a friend had previously spent a long time in a coma after having been anaesthetized. On the morning of the operation Mrs C had woken up completely paralysed and the operation had had to be cancelled. Muscle power had returned after a few days, but the patient had been left with the ataxic complaints, which had remained unex-

plained despite exhaustive and repeated neurological investigations. In the end the patient had been declared unfit for work. The complaints had remained unchanged for about 6 years. In addition to the complaints already described, she had arthritis of the right knee, as a result of which she was becoming less and less able to walk. The combination of the ataxia and the pain ended in the patient being confined to a wheelchair and this increasing invalidity prompted the treating neurologist to suggest referral.

During the intake procedure (at which her husband was present) the patient appeared to have little faith in the possibility that a psychiatrist could help her achieve an improvement in her condition. She had just undergone 2 years of treatment by hypnosis and had unsuccessfully tried many different medicines. She had in fact resigned herself to her invalidity and had only kept the appointment on the urgent entreaty of the neurologist who had referred her.

In her treatment use was made of catalepsy induction as described by Sacerdote. As an explanation for the complaints, the patient was told that it was evidently an obscure condition that probably had its origins in neuropsychological, psychological, neurophysiological and neurobiochemical processes—too subtle, therefore, to be detected via crude neurological diagnostic procedures. The treatment could simply consist of an investigation into the possibilities of regaining some control over the complaints, with the help of hypnosis; not the sort of hypnosis she had already had, which had been a kind of discovery hypnotherapy, but with a technique that worked directly on the muscles. Sacerdote's technique was then applied to the right hand. Within a few minutes the hand was cataleptic and the patient experienced the hand as dissociated. A demonstration of the resultant analgesia of the hand was used to emphasize how remarkable a state this was.

The next phase of the treatment was given over to teaching the patient to move the dissociated hand very carefully. In the first instance the suggestion was given that the hand could move its position a little by itself. Once this had been achieved and the hand was still, the patient could eventually move her right hand, albeit very slowly and stiffly.

Her husband was then taught how to help his wife achieve the feeling of dissociation of the hand and an exercise programme was devised in which the patient would gradually learn how to use the hand again to do some of the tasks about the house. This was a great success. After four sessions the patient was able once again to use both arms somewhat robotically but without ataxia.

The coordination disorders in the patient's torso were the second target for treatment. Here too, use was made of the Sacerdote technique. First, with the patient standing, a state of catalepsy was evoked in both arms. One of the patient's hands was then placed on the front of her hipbone. The therapist then put one hand on the patient's back and the other hand over the hand on her hip. By pushing the patient slowly backwards and forwards, applying pressure first to one hand and then to the other, it was possible to extend the cataleptic state to the whole body. In the end it was barely possible to push the patient off balance. She was then asked to

'spontaneously' slide her foot forward a little. She managed this, albeit rather sluggishly and woodenly. Finally, the patient was given a programme of exercises that she could do with her husband's help, so that she could progress from these stiff, robot-like first steps to once again being able to carry out normal movements.

Six treatment sessions later, Mrs C was able to walk for 15 minutes without ataxia. She still complained of tiredness, but the wheelchair was once and for all relegated to the attic. On follow-up 3 years later, she was still without complaints (Hoogduin & van de Kraan, 1987).

CONCLUSION

Although clinical treatment involving hypnosis appears to offer the possibility of a favourable result for patients with a motor conversion disorder, it is as well here to finish on a note of caution. It is important to remember that there is a very real chance that a patient who appears to have conversion symptoms could actually be suffering from a severe physical condition. The diagnosis 'conversion disorder' should only be considered when thorough somatic and neurological investigation has produced no explanation for the complaints and, even when this is the case, the therapist must remain alert to adverse changes. If there is any doubt, one should always seek further neurological examination. The patient will only appreciate such caution.

No less than 26–60% of patients diagnosed as having a conversion disorder later turn out to have a severe (neurological) disorder (Weintraub, 1983). Two patients provide sad illustration of this. The first was a 40-year-old woman who declared in a very theatrical manner that she had a bloated feeling in her abdomen. She also said she was experiencing some pain in her back and rather unpleasant sensations in her legs. Repeated (and also clinical) neurological investigations offered no explanation for the complaints. A few months later, after having been discharged from the neurological clinic, the patient was readmitted to hospital with a tumour on the spinal cord membrane.

A second patient who, also in a very theatrical manner, said that she could not talk properly and clearly tried to demonstrate this, was convinced that her symptoms were physical and refused to follow the directions given her by the psychotherapist. Indeed, she wanted nothing to do with him. She died a year later as a result of a tumour of the cerebellum.

A further note for caution is that it is not known for certain that hypnosis is an essential element in all the cases where treatment involving it leads to a favourable result. There is a great need for controlled research in this area. It is possible to be equally brief, however, in one's conclusions relating to other treatment strategies: there has been no controlled research. There are, however, some well-documented case descriptions from which it can reasonably be supposed that behaviour therapy

and physiotherapy achieve very positive results (Kop, van der Heijden, Hoogduin & Schaap, 1995; Hoogduin et al., 1993).

REFERENCES

- Abse, D. W. (1974). Hysterical conversion and dissociative syndromes and the hysterical character. In S. Arieti (Ed.), *American Handbook of Psychiatry*, Vol. 3: *Adult Clinical Psychiatry* (pp. 155–195). New York: Basic Books
- Albach, F. (1993). *Freuds Verleidendstheorie: Incest, Trauma, Hysterie*. Amsterdam: Academisch Proefschrift.
- Alpert, J. (1995). Trauma, dissociation and clinical study as a responsible beginning. *Consciousness and Cognition*, **4**, 125–129.
- APA (1994). *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV*. Washington, DC: American Psychiatric Association.
- Binswanger, O. (1922). Die Kriegshysterie. In O. von Schjerning (Ed.), *Handbuch der Arztlichen Erfahrungen im Weltkrieg 1914/1918*, 4th Edn, (pp 45–68). Leipzig: Barth Verlag.
- Bliss, E. L. (1984). Hysteria and hypnosis. *J. Nerv. Ment. Dis.*, **172**, 203–206.
- Boon, S. & Draijer, N. (1993). Multiple personality disorder in the Netherlands: A clinical investigation of 71 patients. *Am. J. Psychiat.*, **150**, 489–494.
- Carden, N. L. & Schramel, D. S. (1966). Observations of conversion reactions seen in troops involved in the Vietnam conflict. *Am. J. Psychiat.*, **123**, 21–31.
- Christianson, S. A. (1992). Emotional stress and eyewitness memory: A critical review. *Psychol. Bull.*, **112**, 284–309.
- Chu, J. A. & Dill, D. L. (1990). Dissociative symptoms in relation to childhood physical and sexual abuse. *Am. J. Psychiat.*, **147**, 887–892.
- Dyck, R. van & Hoogduin, C. A. L. (1989). Hypnosis and conversion disorders. *Am. J. Psychother.*, **43**, 1–14.
- Farley, J., Woodruff, R. A. & Guze, S. B. (1968). The prevalence of hysteria and conversion symptoms. *Br. J. Psychiat.*, **114**, 1121–1125.
- Frankel, F. (1978). Hypnosis and altered states of consciousness in the treatment of patients with medical disorders. In T. B. Karasu & R. I. Steinmuller (Eds), *Psychotherapeutics in Medicine*. New York: Grune & Stratton.
- Hoogduin, C. A. L. (1988). On the treatment of motor conversion disorder. *Directieve Therapie.*, **8**, 224–239.
- Hoogduin, C. A. L., Akkermans, A., Oudshoorn, D. & Reinders, M. (1993). Hypnotherapy and contractures of the hand. *Am. J. Clin. Hypn.*, **36**, 106–112.
- Hoogduin, C. A. L. & Dyck, R. van (1990). On the hypnotherapeutic treatment of motor conversion disorder. *Hypnos.*, **17**, 214–220.
- Hoogduin, C. A. L. & Dyck, R. van (1992). Open trial with patients with conversion paralysis: Results and follow-up. In W. Bongartz (Ed.), *Hypnosis: 175 Years after Mesmer; Recent Developments in Theory and Application*. Konstanz: Universitätsverlag.
- Hoogduin, C. A. L. & Kraan, V. van der (1987). Catalepsy applied in conversion disorders. *Directieve Therapie.*, **7**, 301–309.
- Jacoby, L. L. & Dallas, M. (1981). On the relationship between autobiographical memory and perceptual learning. *J. Exp. Psychol.*, **110**, 306–340.
- Kihlstrom, J. F. (1992a). Dissociative and conversion disorders. In D. J. Stein & J. E. Young (Eds). *Cognitive Science and Clinical Disorders* (pp. 247–270). San Diego, CA: Academic Press.

- Kihlstrom, J. F. (1992b). Implicit perception. In R. F. Bornstein & T.S. Pittman (Eds), *Perception without Awareness: Cognitive, Clinical and Social Perspectives* (pp. 17–54). New York: Guilford Press.
- Kihlstrom, J. F., Tataryn, D. J. & Hoyt, I. P. (1990). Dissociative disorders. In P. B. Sutker & H. E. Adams (Eds), *Comprehensive Handbook of Psychopathology* (pp. 203–234). New York: Plenum Press.
- Kolk van der, B. A. (1994). The body keeps the score. Memory and the evolving psychobiology of post-traumatic stress. *Harvard Rev. Psychiat.*, **1**, 253–265.
- Kolk van der, B. A. & Fislser, R. (1995). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. *J. Traum. Stress.*, **8**, 505–525.
- Kop, P. F. M., Heijden, H. P. van der, Hoogduin, C. A. L. & Schaap, C. P. D. R. (1995). Operant procedures applied to a conversion disorder. *Clinical Psychology and Psychotherapy*, **2**, 59–66.
- Le Doux, J. E. (1993). Emotion as memory: In search of systems and synapses. *Ann. New York Acad. Sci.*, **702**, 149–157.
- Lyon, L. S. (1985). Facilitating telephone number recall in a case of psychogenic amnesia. *J. Behav. Ther. Exp. Psychiat.*, **16**, 147–149.
- Mace, C. J. (1992a). Hysterical conversion I: A history. *Br. J. Psychiat.*, **161**, 369–377.
- Mace, C. J. (1992b). Hysterical conversion II: A critique. *Br. J. Psychiat.*, **161**, 378–387.
- Plato (c. 360 BC). *Timaeus*, extract from a translation by B. Jowett.
- Schacter, D. L. (1987). Implicit memory: History and current status. *J. Exp. Psychol. Learning, Mem. Cogn.*, **13**, 501–518.
- Schacter, D. L. & Kihlstrom, J. F. (1989). Functional amnesia. In F. Boller & G. J. Grafman, (Eds), *Handbook of Neuropsychology* (pp. 209–231). Amsterdam: Elsevier Science.
- Spiegel, D. (1993). *Dissociation and Trauma. Dissociative Disorders: A Clinical Review* (pp. 117–132). Baltimore: Sidran Press.
- Taylor, D. C. (1986). Hysteria, play-acting and courage. *Br. J. Psychiat.*, **49**, 37–41.
- Trillat, E. (1986). *Histoire de l'hysterie*. Paris: Seghers.
- Vanderlinden, J., Dyck, R. van, Vandereycken, W. & Vertommen, H. (1993). Dissociation and traumatic experiences in the general population in the Netherlands. *Hosp. Commun. Psychiat.*, **44**, 786–788.
- Weintraub, M. I. (1983). *Hysterical Conversion Reaction*. Lancaster, PA: Falcon House.
- WHO (1992). *The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Description and Diagnostic Guidelines*. Geneva: World Health Organisation.

Personality and Psychotic Disorders*

JOAN MURRAY-JOBSIS

Human Resource Consultants, Chapel Hill, NC, USA

HISTORICAL PERSPECTIVE

THE EARLY PERIOD: A PESSIMISTIC VIEW OF HYPNOSIS WITH SEVERELY DISTURBED PATIENTS

The current status of clinical hypnosis in the treatment of Personality and Psychotic Disorders has been evolving since the mid-1800s. The earliest notation of successful hypnosis with a psychotic patient was reported by Esquirol in 1838. In this report, Esquirol described experiments done by Abbe Faria and himself in 1813 and 1816 on the effects of magnetism in mental disease. Esquirol reported that he and Faria experimented on eleven women, either insane or monomaniac. He stated that only one of these eleven women responded to the magnetic influence (Lavoie & Sabourin, 1980).

Later, in 1868, Dr Andries Hoek, a practicing physician in The Hague, reported on his successful treatment of a psychotic patient with hypnosis in 1851 (van der Hart & van der Velden, 1987). Following this report by Hoek, the French psychiatrist Auguste Voisin also reported positive clinical work with psychotic patients (1884, 1887, 1897a,b). Voisin described work with patients with delusional psychotic conditions and was enthusiastic about the therapeutic results of the use of hypnosis with these conditions. Voisin estimated that 10% of the psychotic population was hypnotizable.

However, following these moderately encouraging reports of Esquirol, Hoek and Voisin, several subsequent clinical reports indicated varying and conflicting results with hypnosis and severe mental illness. Pitres (1891), reporting on his clinical studies with psychotics, concluded that persons suffering from nonhysterical delusions did not usually profit from 'suggestive therapy'. Terrien (1902) concluded from his studies that hypnotism was not useful in the treatment of severe mental

*See the Editor's Note on page 186.

illness in general. Tuckey (1902) also concluded that the possibility of hypnotism being successful in the treatment of severe mental illness was very poor. Gilles de la Tourette (1889) reported, in partial agreement with Pitres, that hypnosis was successful only with delusional hysterics or manic patients. Grasset (1916) concluded that hypnosis did some good for hysterical psychotics (if they were hypnotizable), but he did not feel that hypnosis was useful for psychotic disorders of attention, or 'true psychosis'. In general, many clinicians in the late 1800s and early 1900s held a rather pessimistic attitude toward the hypnotizability and use of hypnosis with psychotics, but nevertheless reported on some successful and useful individual cases (Lavoie & Sabourin, 1980).

However, an exception to this pessimistic attitude was presented by Wetterstrand (1902). With unusual perceptiveness and foresight for his time, Wetterstrand stated that the main difficulties in utilizing hypnosis with severely disturbed mental patients were the difficulty in obtaining consent of the subjects and the difficulty in maintaining their attention and cooperation over a sufficient time period. Wetterstrand concluded that hypnosis could be possible and useful in certain stages of psychosis depending on these factors of attention and cooperation. He further proposed that, in order to work successfully with psychotic patients with hypnosis, it was essential to reach the subjective world of the patient. Wetterstrand also reported some success in clinical hypnosis with psychotics in influencing various symptoms, including hallucinations and persecutory ideation.

Again sounding a more pessimistic note, Copeland & Kitching (1937) reported on a study utilizing hypnosis in the diagnosis and treatment of severely mentally ill hospitalized patients. They concluded, with somewhat circular reasoning, that 'true psychotics' could not be hypnotized. They stated that, 'If susceptibility to hypnosis developed, we were compelled to reverse the diagnosis'.¹

As recently as the mid-1900s, clinical reports continued to note the difficulty of utilizing hypnosis with psychotic patients (Schilder & Kauders, 1926 [1956]; Kraines, 1941; London, 1947). However, they also began more frequently to note limited, specific areas of successful hypnotic work with psychotic patients. Schilder and Kauders noted that cases of schizophrenia that initially presented the clinical picture of neurosis were frequently amenable to hypnotic intervention. London reported the uncovering of important clinical material in the hypnotic treatment of a paranoid condition.

THE TRANSITIONAL PERIOD: A MORE OPTIMISTIC VIEW OF HYPNOSIS WITH SEVERELY DISTURBED PATIENTS

A significant breakthrough in understanding the potential use of hypnosis with psychotic patients came in 1945 with the publication of Lewis Wolberg's book on the hypnoanalysis of Johan R. Johan R. had been confined on the chronic ward of a hospital with a diagnosis of hebephrenic schizophrenia when Wolberg first attempted to work with him. It took Wolberg more than a year to establish a

beginning therapy relationship with the patient. Beginning with traditional psychoanalytic techniques, Wolberg decided to experiment with hypnosis when the patient experienced difficulty with traditional free association. Initial attempts at hypnosis were unsuccessful. However, eventually dream interpretation allowed the patient to utilize hypnosis and ultimately to conclude a positive hypnoanalytic treatment. Johan R. was eventually discharged with no outward trace of mental disorder. A post-treatment Rorschach test revealed no evidence of anxiety and no neurotic or psychotic tendencies. A follow-up by Wolberg 16 years later indicated that Johan was continuing to live a productive, independent life.

Following Wolberg's landmark book, the work of Margaretta Bowers provided another major advance in our understanding of the clinical potential of hypnosis with psychotic patients. Bowers (Bowers, Berkowitz & Brecher, 1954) expanded the concept of the use of hypnosis for the severely disturbed patient from the unique individual case to the general class of severe mental illness. In 1954, Bowers reported on positive hypnotherapy work she had done with a series of 10 psychotic and other severely disordered patients. In later publications, she summarized hypnotic work with a series of 30 chronic, ambulatory schizophrenics and addressed the issues of the use of hypnosis with schizophrenic patients as a general group (Bowers, Berkowitz & Brecher, 1954; Bowers, 1961; Bowers, Brecher-Marer & Polatin, 1961; Bowers, 1964). Bowers also reported on her early use of hypnosis with positive clinical results with Multiple Personality Disorders (Bowers & Brecher, 1955; Bowers, Brecher-Marer et al., 1971). Bowers concluded that psychosis was a defense and that it was the task of the therapist to assist the healthy self to regain its lost dominance over the defensive facade presented by the psychotic patient. Bowers felt that hypnosis was a powerful tool to assist the therapist in this task of connecting with and reestablishing the dominance of the 'healthy self'.

Following the pivotal and pioneering work of Wolberg and of Bowers in the mid-1900s, a continual flow of clinical work utilizing hypnosis with severely disturbed patients was reported in the literature. Schmidhofer (1952) reported symptom relief in groups of psychotic war veterans through relaxation and suggestion. Danis (1961) reported that some of his schizophrenic patients were able to utilize hypnosis to help them to sustain and continue their ongoing therapy work. Stauffacher (1958) described the successful treatment with hypnosis of a paranoid schizophrenic male patient. Hypnosis was utilized to help the patient uncover repressed material. The patient was able to utilize the insight from these recovered memories and to achieve a complete remission of his illness.

Then in 1959, Gill and Brenman reported that while most schizophrenics in their studies were apparently not amenable to hypnosis, nevertheless some schizophrenics were paradoxically highly responsive to hypnosis. Gill and Brenman reported specifically on successful hypnotic therapy intervention with a 'severely disturbed schizophrenic girl, regarded by most of the staff as hopelessly psychotic'. The positive response and clinical improvement in this severely disturbed psychotic patient, as reported by Gill and Brenman, was unmistakable and impressive.

Abrams (1963) also described hypnotherapy work with a female inpatient diagnosed as 'schizophrenic reaction, chronic undifferentiated type'. Her symptoms included hallucinations and delusions. During previous treatment, she had not responded to psychotherapy, electroconvulsive therapy, or to drug therapy. With the introduction of hypnosis into her therapy treatment the patient exhibited a reduction of resistance which enabled her to discuss previously unapproachable/inaccessible traumatic material. Subsequently all symptoms were eliminated and the patient was able to establish an independent existence outside the hospital.

Illovsky (1962) reported interesting results utilizing hypnosis in group therapy with 80 chronic schizophrenics. These patients had been hospitalized for an average of 6–8 years. They were seen in large groups (sometimes 100–150 patients at a time) and were given suggestions for relaxation and ego-building. They were treated with tranquilizers in addition to the hypnotic intervention. The convalescent placement of the patients in the hypnotic treatment groups appeared to surpass the placement rate of the non-hypnotically treated patients.

In addition, Milton Erickson (1964, 1965), while developing and publishing his well-known work on the utilization of indirect techniques in hypnosis, also contributed two clinical accounts of hypnotic work with psychotic patients. In 1964 Erickson reported a case of successful use of hypnotic intervention with a 24-year-old paranoid schizophrenic woman with complaints of visual and auditory hallucinations. Utilizing the patient's resistance and employing indirect induction techniques, Erickson was able to engage this highly resistant patient in hypnosis. Subsequently, the patient was able to accept hypnosis as a positive resource for therapeutic intervention. In a second reported case employing the use of hypnosis with a psychotic, Erickson (1965) described his work with a 25-year-old psychotic male, whose main symptomatology included confusion and word salad. Indirect hypnotic techniques were employed to engage the patient in a relationship and ultimately in therapy.

In 1967, Biddle described a successful example of hypnotic work with a severely psychotic patient. The patient was a single woman in early adulthood at the time of her psychotic break. She was admitted to a hospital with symptoms of confusion, hallucinations, belligerent behavior, and generally inappropriate behavior including: smearing her feces, crawling on her hands and knees, and taking off her clothes. The hypnotherapy work focused on the exploration of sleeping dreams and hypnotically induced dreams. A description of 15 months of treatment was described by Biddle, with the successful reintegration of the patient into a responsible life outside the hospital, including a job and later marriage.

Guze (1967) formulated therapeutic guidelines for utilizing hypnosis with schizophrenics. He saw hypnosis as useful in eliciting patient symptoms of hallucinations, delusions and thought disorders and then reshaping them. He emphasized the necessity of guiding the patient's imagery in a healthy direction as early as possible. However, Guze also stressed that the patient should only move at a

pace he could handle. Guze also felt that hypnosis assisted the therapist in connecting with the patient's inner psychotic experience, thereby helping the patient both to validate the reality of that experience and to begin to shift to a healthier experience and reality.

Worpell (1973) reported an account of successful use of hypnosis with an hallucinating schizophrenic woman. The utilization of hypnotherapy produced a positive change in the patient's appearance and behavior. There was also a noticeable decrease in her hallucinations. Worpell noted that the use of appropriate medication was also an important factor in this case.

Zeig (1974) reported on his work with paranoid schizophrenics, utilizing informal hypnotic induction techniques. Zeig stated: 'In cases where I have used a more formal introduction to hypnosis and more formal induction with psychotic people, I have met with little success, seemingly due to resistance and fears which I have not easily allayed.' Zeig then described his indirect techniques of relaxation with the use of metaphor and puns. He reported that these indirect techniques were successful in helping paranoid schizophrenics deal with the control or removal of their 'voices'.

Scagnelli (1974, 1975, 1976, 1977) published a series of studies on the therapeutic integration of hypnosis into psychotherapy with schizophrenic and personality disorder patients. In the 1974 paper, Scagnelli reported successful clinical work with an acute schizophrenic male patient. The patient was diagnosed in two prior hospitalizations as an acute affective schizophrenic. He experienced alternating delusional patterns of grandiosity and threat. His threatening delusions centered around fears that he was about to die or that he was turning into an animal. His grandiose delusions centered around feelings that he was 'designated' to heal other patients. Hypnosis was utilized to help the patient access his anxiety-laden feelings of inadequacy. With the use of hypnosis the patient was able to access and reframe his past experiences. He was then able to build a more positive sense of self-esteem. Specific hypnotic techniques included: relaxation for the reduction of anxiety; hypnotic dreams for insight work; hypnotic imagery shifts to develop feelings shifts to a more positive self-concept; and hypnotic ego-building messages. After 7 months of hypnotherapy, the patient no longer experienced delusional thought patterns and was able to function in a part-time job.

Following that individual case study, Scagnelli (1975, 1976) published two summary reports of therapy with several severely disturbed patients. The 1976 paper described specific hypnotic work with four schizophrenic and four borderline patients. Three of the schizophrenic patients were seriously disabled and had been hospitalized several times. Three of the borderline patients had been hospitalized for periods ranging from 3 days to 3 months. All of the borderline patients had several years of therapy prior to the introduction of hypnosis. Specific problems that were likely to be encountered in the use of hypnosis with this patient population were enumerated: fear of loss of control; fear of closeness; and fear of

relinquishing negative self-concepts. Procedures for dealing with these fears were detailed. In addition, specific hypnotic techniques that could be used successfully with psychotic and borderline patients were outlined. Techniques for anxiety reduction were considered generally applicable to this patient population. Then with variations according to the needs of the individual patients, other hypnotic techniques could be employed. Techniques of ego-building, free association for insight, dream production and analysis, and the creation of imagery shifts were presented and their use detailed. Scagnelli also suggested that reevaluation of parental relationships and assertion training might lend themselves to use in future hypnotherapy with severely disturbed patients.

In 1977, Scagnelli published a case study of hypnotherapy with a patient with a schizoid personality disorder. In his original non-hypnotic therapy work the patient exhibited extreme anxiety and a tendency to withdraw and decompensate whenever attempts at insight were explored. However, when hypnosis with its potential for dream production and analysis was introduced, the patient was able to work productively in therapy with reduced anxiety and less decompensation. In hypnotic dream work, the patient dealt with intense anxieties about identity confusion, incorporation, and issues of castration and death. The emphasis on autohypnosis and on the technique of 'creator control' of the dream-imagery process appeared to be essential factors in giving the patient a feeling of being in control of the hypnotic process and in permitting him to deal with his psychotic-like material without being overwhelmed. The patient reported that the use of the hypnotic process with its imagery, symbolism and metaphor allowed him to communicate in ways that verbal language alone would not have permitted.

Throughout the remainder of the 1970s, additional case reports of successful work with psychotic and personality disorder patients continued to be published. A case report in 1977, by Berwick and Douglas, described the successful utilization of hypnosis with two paranoid schizophrenic woman. The first woman believed that her late husband was Satan, and that he was possessing her mind. The second woman believed that 'black magic' was being used against her to cause her misfortune. In both cases, a traditional induction technique of eye fixation was used. The therapists then entered the patients' delusional systems and suggested the enhancement of the patients' powers to overcome the external power. Both cases responded positively. Insight was not attempted, but the delusional systems resolved as they became irrelevant and unnecessary.

Sexton and Maddox (1979) reported hypnotic work with three psychotically depressed women. The women displayed symptoms of confused and delusional thought patterns, catatonic behavior, and some suicidal ideation. No formal induction was used. However, the patients were directed forward in time (age progression) to some future resolution of their problems (with God or a loved one in heaven). The authors reported a restitution of ego functioning and a decrease in psychotic symptomatology for all three patients.

*THE INTEGRATIVE PERIOD: THE ACCEPTANCE OF HYPNOSIS
AND THE INTEGRATION OF TECHNIQUE AND THEORY*

In the 1980s, the literature of clinical case reports of successful hypnotic work with both psychotic and personality disorder patients continued to grow. However, in addition to these clinical case reports, the literature began to present new hypnotic techniques for working with psychotic and personality disorder patients and the integration of these techniques into established psychological theory and conceptual models of hypnosis (Baker, 1981, 1983a, b; Brown, 1985; Brown & Fromm, 1986; Copeland, 1986; Fromm, 1984; Murray-Jobsis, 1984, 1985, 1986, 1988, 1989, 1991b, 1992, 1993, 1995, 1996; Scagnelli, 1980; Scagnelli-Jobsis, 1982; Vas, 1990; Zindel, 1992, 1996).

In 1980, Scagnelli reported on the use of trance by both the patient and therapist. Brief vignettes were presented of work with both psychotic and personality disorder patients. It was noted that patients with this severity of disorder frequently utilized hypnosis for ego strengthening and integration of their emotional and cognitive resources. However, it was also noted that some insight and uncovering work could be done by these patients. Both formal induction techniques and informal hypnotic techniques were found to be useful. In addition to the use of trance by the patient, Scagnelli stressed the particular usefulness of trance by the therapist as a valuable technique in working with the severely disturbed patient population. The author proposed that the use of an autohypnotic trance by the therapist (along with the patient's trance) heightened the therapist's empathy. This heightened empathy could facilitate the therapist in utilizing his own body, mind and feeling state to enhance his receptivity and understanding of the patient's feelings and experience. This heightened empathy could then help the therapist identify, verbalize and reframe feelings and experience for and with the patient. Several vignettes of case work with patients were presented, illustrating how such empathic contact and interpretation of feelings with the patient could be crucial to the progress of therapy.

In 1981, Baker presented a rationale for the use of hypnosis with psychotic patients, based on object relations theory. Baker developed a protocol of seven steps designed for the hypnoanalytic treatment of psychotic patients. He based this protocol on the deficits in object relatedness and in other ego functions associated with psychotic conditions. The seven-step protocol was designed to enhance the positive aspects of the emerging transference and to support the patient's capacity to maintain real connections with the external environment. A case example of a 23-year-old paranoid schizophrenic was presented illustrating these techniques. Baker's work was later elaborated on and extended by Fromm (1984) and Copeland (1986).

Baker also expanded on his own work in hypnotherapy with severely disturbed patients in two additional papers published in 1983. In his first paper, Baker (1983a) reported on work he had done with narcissistic, borderline, and psychotic patients, utilizing hypnotic dreaming as a transitional object to facilitate a connection with the therapist for the patient as he left the therapy session with his dream.

In addition, the hypnotic dream process could also be utilized by the patient outside of therapy to foster autonomy and independence. A case example of a personality disorder patient utilizing such hypnotic dream work as a transitional process was presented.

In a second paper, Baker (1983b) examined various aspects of resistance that became manifest in hypnotherapy with borderline, narcissistic and psychotic patients and gave specific suggestions for the management of this resistance. A brief vignette of a schizophrenic patient was presented to illustrate resistance due to a need for distance and the therapist's utilization of boundaries and separation to reduce patient anxiety.

Contemporaneous with the ongoing accumulation of clinical case reports and the development of specialized techniques for hypnotic work with the severely disturbed patient, consensus also was building concerning the capacity and usefulness of hypnosis for this patient population. In the early 1980s, three literature review articles were published supporting the conclusion that psychotic and personality disorder patients were susceptible to hypnosis and were capable of utilizing hypnosis productively and safely. In 1982, Scagnelli-Jobsis published a review of the experimental and clinical literature concerning the use of hypnosis with severely disturbed patients, concluding that the literature supported the view that psychotic and personality disorder patients were susceptible to hypnosis and were capable of utilizing hypnosis productively and safely.² In that same year a literature review by Pettinati (1982, Pettinati, Evans, Staats & Home) came to very similar conclusions, stating that, 'It can be concluded that a number of severely disturbed psychotic (typically schizophrenic) patients can be successfully hypnotized...'. In 1985, Lavoie & Elie published a review (building on work begun in 1978 and 1980) concurring with the conclusions of Scagnelli-Jobsis and of Pettinati concerning the hypnotic capacity of psychotic patients. Specifically, Lavoie and Elie found that 'schizophrenic patients do present mean susceptibility scores essentially similar to ones obtained by normal Ss of comparable age.' Thus, the early 1980s marked a watershed period when it became generally accepted that psychotic and personality disorder patients were potentially capable of safe and productive utilization of hypnosis.

In 1984, Murray-Jobsis published a chapter (in Wester & Smith) summarizing the consensus concerning the applicability of hypnosis with severely disturbed patients and describing the necessary treatment techniques and adjustments required by this population. Induction techniques, specific treatment techniques and special considerations for this patient population were presented and discussed. The chapter outlined and described in detail the integration of hypnosis into traditional treatment techniques and then clarified any necessary adjustment to these techniques for use with the severely disturbed patient. In addition, new hypnotic techniques developed especially for the severely disturbed patient were introduced and explained. A case example utilizing and demonstrating some of the techniques was presented.

Brown & Fromm (1986) also presented specific hypnotic techniques for treating psychotic and borderline patients. Their techniques were based on developmental theory and were intended to promote the formation of boundaries and body image, the development of object and self-representations, and the development of affect (Brown, 1985; Brown & Fromm, 1986).

Then, beginning in the late 1980s and extending into the 1990s, Murray-Jobsis further developed and expanded specialized techniques for working with the severely disturbed patient, based on a developmental/psychoanalytic framework and designed to supply missing developmental experiences. Building on therapy techniques and clinical work begun in 1976, Murray-Jobsis developed and elaborated techniques of nurturance in hypnotic imagery for the development of bonding and a positive relational capacity and for the formation of a positive self-image. In addition, imagery techniques utilizing hypnosis to foster separation-individuation based on mastery and competence rather than abandonment were also developed. These techniques were based on a developmental framework and emphasized the creation of 'healing scripts'. With these 'healing scripts' patients were encouraged to create positive imaginary past experiences as a restitution for missing or developmentally damaging past real-life experiences. (Murray-Jobsis, 1984, 1986, 1989, 1991b, 1992, 1993, 1995, 1996; Scagnelli, 1976).

CURRENT STATUS OF CLINICAL HYPNOSIS WITH PERSONALITY AND PSYCHOTIC DISORDERS

The majority of the experimental research studies and clinical reports to date supports the conclusion that psychotic and personality disorder patients have hypnotic capacity and can utilize that capacity productively and safely. As with all patient populations, there will be some individual patients who will decline to work with hypnosis. Aside from these self-selected exceptions, the usefulness and safety of hypnosis with the severely disturbed patient depends primarily on the skills and sensitivity of the therapist for creating a positive relationship with this population. Accessing the hypnotic capacity and potential usefulness of hypnosis for the severely disturbed patient requires the development and maintenance of trust and a positive patient-therapist transference relationship. In addition, just as traditional psychotherapy with the severely disturbed patient requires special skills to provide firm limits within a supportive environment and special sensitivity to the pacing of therapy, so also does hypnotherapy with these patients require similar skill and sensitivity. Therefore a primary requirement for working with the severely disturbed population with hypnosis would be that the therapist already possesses knowledge and skills for working with this population in traditional therapy.

Although we might assume that clinical hypnosis could be potentially utilized by any personality disorder or psychotic patient within the framework of a positive,

supportive therapy relationship, the real therapy world is much more complex. As every therapist is aware who has worked with psychotic and personality disorder patients, the development and maintenance of a positive and constructive transference relationship can be extremely difficult and sometimes impossible. Therefore, the development of a therapeutic hypnotic process with these patients (dependent as it is on transference) can be equally difficult and sometimes impossible.

With the goal of developing and maintaining a positive and constructive transference relationship with the severely disturbed patient, hypnotic work with these patients will generally emphasize acceptance and support. However, within this framework of support the therapist must be able to set limits. These limits will most likely be viewed by the patient as non-supportive and may disrupt the positive transference. It is the therapist's job, then, to maintain reasonable and stable limits while trying to maintain as stable a positive transference relationship as possible. This is a difficult task to say the least. But it is the crucial task of any therapy with the severely disturbed patient. In addition, the therapist must also be able to monitor the dependency relationship and the support to ensure movement toward growth rather than promoting pathological dependency or helplessness.

In order to develop a positive relationship/transference with a severely disturbed patient sufficient to support the utilization of hypnosis, the particular issue of the patient's concerns and fears over control and trust in the relationship must generally be addressed. In all intimate relationships (and perhaps more so in the hypnotic relationship) there is potential for loss of control and for anxiety regarding such loss. In the case of the severely disturbed patient, these anxieties tend to express themselves as a fear of abandonment or an opposite fear of incorporation/engulfment (due in part to the significance of these fears in the pathology and history of these patients). In working with the severely disturbed patient, we have learned to mitigate these dual fears of abandonment and engulfment by utilizing autohypnosis, stressing patient autonomy and mastery in hypnosis, permitting eye-opening to check out physical separateness and control, maintaining limits that protect against merging, utilizing hypnotic imagery to create needed distance, and the therapist modeling the safety of the hypnotic trance.

In general, current hypnotherapy work with personality disorder and psychotic patients is based on a conceptual framework that is rooted in the psychoanalytic and developmental approaches to the treatment of severe disturbance. The symptoms of severe disturbance are considered to be best understood as manifestations of the patient's failure to progress along normal stages of human development (Baker, 1981; Baker & McColley, 1982; Bowers, 1961, 1964; Brown, 1985; Brown & Fromm, 1986; Kernberg, 1968; Kohut, 1977; Murray-Jobis, 1984, 1990, 1991b, 1992, 1993, 1996; Scagnelli, 1976, 1980; Winnicott, 1965).

Within the context of a developmental model, the symptoms of severe disturbance can be seen as being related to problems and conflicts around initial awareness of self and issues of separation-individuation. Thus, the symptoms of

personality and psychotic disorders can be understood to be manifestations of a failure to progress along normal stages of human development. Within this developmental framework, the task of therapy in general and of hypnotherapy in particular is to correct the developmental failures. The support and acceptance, along with the setting of reasonable and stable limits, are designed to provide the 'good enough' environment (relationship). This good enough relationship is designed to allow positive bonding and a positive self-concept; facilitate acceptance of separateness; promote a working through and acceptance of unresolved feelings of despair, anger, and anxiety; and promote growth into positive autonomy. Thus the current use of hypnosis in therapy with the severely disturbed patient is designed to correct and redo experiences, and to fill-in the missing life experiences in order to allow the severely disturbed patient to reclaim his potential for healthy growth and development.

Current use of hypnosis with psychotic and personality disorder patients also stresses pacing the therapy work according to the patient's capacity for insight and growth. The therapist follows the patient's lead empathically, promoting growth but not pushing for it. Allowing the patient to pace the therapy protects the patient from being overwhelmed by traumatic material from the past or by premature attempts at insight. This empathic contact between therapist and patient is perhaps essential to successful therapy with the severely disturbed patient whether working in traditional psychotherapy or hypnotherapy. However, such sensitive empathic pacing is perhaps more important in hypnotherapy where the patient is somewhat more vulnerable to therapist suggestion or pressure.

Concerning specific hypnotic techniques, virtually all traditional psychotherapy techniques can be adapted for use with hypnosis. Behavior modification techniques such as progressive relaxation, reciprocal inhibition and desensitization, and role rehearsal for competence and mastery can be utilized in hypnosis with rapid and effective results. Psychodynamic techniques can also be utilized in hypnosis with the personality disorder or the psychotic patient. Free association, dream production and analysis, and projective techniques are all dynamic techniques that blend naturally and easily with the imagery of hypnosis. In addition, some specialized hypnotic techniques such as age progression and age regression can be used with the severely disturbed patient. In working with age regression to access repressed or highly traumatic material, it is essential to follow the patient empathically pacing. It is also important, in utilizing techniques aimed at reaccessing traumatic experiences, that the therapist be prepared to handle intense affect, to contain affect to avoid retraumatizing the patient, to reframe or redo past traumatic experience as appropriate, and to create imagery shifts if imagery becomes too threatening.

In addition, current hypnotic techniques for utilizing hypnosis with the severely disturbed patient include specific techniques designed to deal with their specific developmental deficits. The technique of renurturing with hypnotic imagery is designed to create the capacity for initial bonding/relatedness and self-love, utilizing images of the adult patient and the therapist as a composite 'mother'.

Hypnotic imagery and scripts for developing the 'infant/child' through separation experiences with a sense of mastery rather than abandonment have been developed and are currently utilized. Finally, a generic technique of creating 'healing scripts' to redo or resolve old trauma has been developed and is utilized.

In summary, we now have an understanding of how to reach and help the severely disturbed patient, and we currently have a powerful arsenal of techniques to utilize within the scope of hypnotherapy.

NOTES

1. In later work Lavoie et al. (1976, 1978) noted this circular reasoning and concluded that Copeland and Kitching's work actually suggested that hypnotizability might be related to prognosis since among patients first diagnosed as psychotics, those who were easily hypnotizable were more likely to recover while those who were not hypnotizable had worse outcomes. Thus, Lavoie et al. agreed with the idea that hypnotizability may be related to prognosis, but did not agree that a diagnosis of psychosis should be revised when hypnotizability was present.
2. In this 1982 article, Scagnelli-Jobsis also presented a theoretical explanation/justification of how hypnosis could be utilized successfully by psychotic patients with presumably weak egos. This explanation was based on a model of hypnosis as a function of adaptive regression and built on the earlier works of Schilder and Kauders (Schilder & Kauders, 1926; Gill & Brenman, 1959; Lavoie et al., 1976; Fromm & Shor, 1979). In later years Murray-Jobsis expanded on the 1982 article and developed a theoretical model of hypnosis as adaptive regression and transference. This model provides a framework for understanding the clinically demonstrated capacity of personality disorder and psychotic patients to work with hypnosis (Murray-Jobsis, 1988, 1991a).

REFERENCES

- Abrams, S. (1963). Short-term hypnotherapy of a schizophrenic patient. *Am. J. Clin. Hypn.*, **5**, 237.
- Baker, E. L. (1981). An hypnotherapeutic approach to enhance object relatedness in psychotic patients. *Int. J. Clin. Exp. Hypn.*, **29**(2), 136–147.
- Baker, E. L. (1983a). The use of hypnotic dreaming in the treatment of the borderline patient: Some thoughts on resistance and transitional phenomena. *Int. J. Clin. Exp. Hypn.*, **31**(1), 19–27.
- Baker, E. L. (1983b). Resistance in hypnotherapy of primitive states: Its meaning and management. *Int. J. Clin. Exp. Hypn.*, **31**(2), 82–89.
- Baker, E. L. & McColley, S. (1982). Therapeutic strategies for the aftercare of the schizophrenic: an object relations perspective. *International Journal of Partial Hospitalization*, **1**(2), 119–129.
- Berwick, P. & Douglas, D. (1977). Hypnosis, exorcism, and healing: A case report. *Am. J. Clin. Hypn.*, **31**, 18–27.
- Biddle, W. E. (1967). *Hypnosis in the Psychoses*. Springfield, IL: Charles C. Thomas.
- Bowers, M. K. (1961). Theoretical considerations in the use of hypnosis in the treatment of schizophrenia. *Int. J. Clin. Exp. Hypn.*, **9**(2), 39–46.

- Bowers, M. K. (1964). The use of hypnosis in the treatment of schizophrenia. *Psychoanal. Rev.*, **51**(3), 116–124.
- Bowers, M. K., Berkowitz, B. & Brecher, S. (1954) Hypnosis in severely dependent states. *J. Clin. Exp. Hypn.*, **2**(1), 2–12.
- Bowers, M. K. & Brecher, S. (1955). The emergence of multiple personalities in the course of hypnotic investigation. *J. Clin. Exp. Hypn.*, **3**(4), 188–199.
- Bowers, M. K., Brecher-Marer, S. & Polatin, A. H. (1961). Hypnosis in the study and treatment of schizophrenia: A case report. *Int. J. Clin. Exp. Hypn.*, **9**(3), 119–138.
- Bowers, M. K., Brecher-Marer, S., Newton, B. W., Piotrowski, A., Spyer, T. C., Taylor, W. S. & Watkins, J. G. (1971). Therapy of multiple personality. *Int. J. Clin. Exp. Hypn.*, **19**(2), 57–65.
- Brown, D. P. (1985). Hypnosis as an adjunct to the psychotherapy of the severely disturbed patient: An effective development approach. *Int. J. Clin. Exp. Hypn.*, **33**(4), 281–301.
- Brown, D. P. & Fromm, E. (1986). *Hypnotherapy and Hypnoanalysis*. Hillsdale, NJ: Erlbaum.
- Copeland, C. L. & Kitching, E. H. (1937). A case of profound dissociation of the personality. *J. Ment. Sci.*, **83**, 719–726.
- Copeland, D. R. (1986). The application of object relations theory to the hypnotherapy of developmental arrests: The borderline patient. *Int. J. Clin. Exp. Hypn.*, **32**, 157–168.
- Danis, G. (1961). Methodical psychotherapy in general practice: Medical hypnosis as applied in 500 cases. *Br. J. Med. Hypn.*, **12**, 23.
- Erickson, M. H. (1964). An hypnotic technique for resistant patients: The patient, the technique and its rationale and field experiments. *Am. J. Clin. Hypn.*, **7**, 8–32.
- Erickson, M. H. (1965). The use of symptoms as an integral part of hypnotherapy. *Am. J. Clin. Hypn.*, **8**, 57–65.
- Esquirol, J. E. D. (1838). (Cited by Lavoie, G. & Sabourin, M. 1980.)
- Fromm, E. (1984). Hypnoanalysis with particular emphasis on the borderline patient. *Psychoanal. Psychol.*, **1**, 61–76.
- Fromm, E. & Shor, R. E. (Eds) (1979). *Hypnosis: Developments in Research and New Perspectives*. New York: Aldine.
- Gill, M. M. & Brenman, M. (1959). *Hypnosis and Related States: Psychoanalytic Studies in Regression*. Madison, CT: International Universities Press.
- Gilles de la Tourette, G. (1889). (Cited by Lavoie G. & Sabourin, M., 1980.)
- Grasset, J. (1916). (Cited by Lavoie G. & Sabourin, M., 1980.)
- Guze, H. (1967). Toward a theory of schizophrenia and schizophrenic process: The borderline of hypnosis. In M. V. Kline (Ed.), *Psychodynamics and Hypnosis: New Contributions to the Practice and Theory of Hypnotherapy* (pp. 146–164). Springfield, IL: Charles C. Thomas.
- Illowsky, J. (1962). Experience with group hypnosis on schizophrenics. *J. Ment. Sci.*, **108**, 685–693.
- Kernberg, G. (1968). The treatment of patients with borderline personality organization. *Int. J. Psychoanal.*, **49**, 600–619.
- Kohut, H. (1977). *The Restoration of the Self*. Madison, CT: International Universities Press.
- Kraines, S. H. (1941). *The Therapy of Neuroses and Psychoses*. Lea & Febiger, Philadelphia, PA.
- Lavoie, G. & Elie, R. (1985). The clinical relevance of hypnotizability in psychosis: With reference to thinking processes and sample variances. In D. Waxman, P. Misra, M. Gibson & M. A. Basker (Eds), *Modern Trends in Hypnosis* (pp. 41–64). New York: Plenum Press.
- Lavoie, G, Sabourin, M., Ally, G. & Langlois, J. (1976). Hypnotizability as a function of

- adaptive regression among chronic psychotic patients. *Int. J. Clin. Exp. Hypn.*, **24**(3), 238–257.
- Lavoie, G., Lieberman, J., Sabourin, M. & Brisson, A. (1978). Individual and group assessment of hypnotic responsivity in coerced volunteer chronic schizophrenics. In F. H. Frankel & H. S. Zamansky (Eds), *Hypnosis at its Bicentennial: Selected Papers*, (pp. 109–124). New York: Plenum Press.
- Lavoie, G. & Sabourin, M. (1980). Hypnosis and schizophrenia: A review of experimental and clinical studies. In G. D. Burrows & I. Dennerstein (Eds), *Handbook of Hypnosis and Psychosomatic Medicine* (pp. 377–419). New York: Elsevier/North-Holland Biomedical.
- London, L. S. (1947). Hypnosis, hypno-analysis and narco-analysis. *Am. J. Psychother.*, **1**, 443.
- Murray-Jobsis, J. (1984). Hypnosis with severely disturbed patients. In W. C. Wester & A. H. Smith (Eds), *Clinical Hypnosis: A Multi-disciplinary Approach* (pp. 368–404). Philadelphia: Lippincott.
- Murray-Jobsis, J. (1985). Exploring the schizophrenic experience with the use of hypnosis. *Am. J. Clin. Hypn.*, **28**, 34–42.
- Murray-Jobsis, J. (1986). Hypnosis with the borderline patient. In E. Thomas Dowd & J. M. Healy (Eds), *Case Studies in Hypnotherapy* (pp. 254–273). New York: Guilford Press.
- Murray-Jobsis, J. (1988). Hypnosis as a function of adaptive regression and of transference: An integrated theoretical model. *Am. J. Clin. Hypn.*, **30**, 241–247.
- Murray-Jobsis, J. (1989). Clinical case studies utilizing hypnosis with borderline and psychotic patients. *Hypnos*, **16**, 8–12.
- Murray-Jobsis, J. (1990). Renurturing: forming positive sense of identity and bonding. In D. C. Hammond (Ed.), *Handbook of Hypnotic Suggestions and Metaphors*. New York, W. W. Norton & Co. pp. 326–328.
- Murray-Jobsis, J. (1991a). An exploratory study of hypnotic capacity of schizophrenic and borderline patients utilizing SHSS and HIP in a clinical setting. *Am. J. Clin. Hypn.*, **33**, 150–160.
- Murray-Jobsis, J. (1991b). Hypnosis with a borderline and a psychotic patient: Two clinical case studies. Paper presented at the 33rd Annual Scientific Meeting of the American Society of Clinical Hypnosis, St. Louis, MO.
- Murray-Jobsis, J. (1992). Hypnotherapy with severely disturbed patients: Presentation of case studies. In W. Bongartz (Ed.), *Hypnosis: 175 years after Mesmer: Recent developments in theory and application. Proceedings of the 5th European Congress of Hypnosis in Psychotherapy and Psychosomatic Medicine* (pp. 301–307). Konstanz, Germany: Universitätsverlag Konstanz.
- Murray-Jobsis, J. (1993). The borderline patient and the psychotic patient. In J. W. Rhue, S. J. Lynn & I. Kirsch, (Eds), *Handbook of Clinical Hypnosis*. Washington DC: American Psychological Association.
- Murray-Jobsis, J. (1995). Hypnosis and psychotherapy in the treatment of survivors of trauma. In G. D. Burrows & Robb Stanley (Eds), *Contemporary International Hypnosis*. Chichester, UK: Wiley.
- Murray-Jobsis, J. (1996). Hypnosis with a borderline patient. In S. J. Lynn, I. Kirsch & J. W. Rhue (Eds), *Casebook of Clinical Hypnosis*. Washington, DC: American Psychological Association.
- Pettinati, H. M. (1982). Measuring hypnotizability in psychotic patients. *Int. J. Clin. Exp. Hypn.*, **30**(4), 404–416.
- Pettinati, H. M., Evans, F. J, Staats, J. M. & Horne, R. L. (1982). The capacity for hypnosis in clinical populations. Paper presented at the 9th International Congress of Hypnosis and Psychosomatic Medicine, Glasgow, Scotland.
- Pitres, A. (1891). (Cited by Lavoie G. & Sabourin M. 1980.)

- Scagnelli, J. (1974). A case of hypnotherapy with an acute schizophrenic. *Am. J. Clin. Hypn.*, **17**, 60–63.
- Scagnelli, J. (1975). Therapy with eight schizophrenic and borderline patients: Summary of a therapy approach that employs a semi-symbiotic bond between patient and therapist. *J. Clin. Psychol.*, **31**, 519–525.
- Scagnelli, J. (1976). Hypnotherapy with schizophrenic and borderline patients: Summary of therapy with eight patients. *Am. J. Clin. Hypn.*, **19**, 33–38.
- Scagnelli, J. (1977). Hypnotic dream therapy with a borderline schizophrenic. *Am. J. Clin. Hypn.*, **20**, 136–145.
- Scagnelli, J. (1980). Hypnotherapy with psychotic and borderline patients: The use of trance by patient and therapist. *Am. J. Clin. Hypn.*, **22**, 164–169.
- Scagnelli-Jobsis, J. (1982). Hypnosis with psychotic patients: A review of the literature and presentation of a theoretical framework. *Am. J. Clin. Hypn.*, **25**, 33–45.
- Schilder, P. & Kauders, O. (1956). *Lehrbuch de hypnose. (A textbook of hypnosis)* In P. Schilder (Ed.), *The Nature of Hypnosis*, trans G. Corvin (pp. 45–184). Madison, CT: International Universities Press. (Original work published 1926.)
- Schmidhofer, E. (1952). Therapeutic relaxation. *Psychiat. Quart.*, **26**, 73.
- Sexton, R. & Maddox, R. (1979). Age regression and age progression in psychotic and neurotic depression. *Am. J. Clin. Hypn.*, **22**, 37–41.
- Stauffacher, J. C. (1958). Recovery from paranoid delusions following hypnotic uncovering of repressed episodes. *J. Clin. Psychol.*, **14**, 328.
- Terrien (1902). (Cited by Lavoie, G. & Sabourin M. 1980.)
- Tuckey, L. (1902). (Cited by Lavoie, G. & Sabourin M. 1980.)
- Van der Hart, O. and Van der Velden, K. (1987). The hypnotherapy of Dr Andries Hoek; uncovering hypnotherapy before Janet, Breuer and Freud. *Am. J. Clin. Hypn.*, **29**, 264–271.
- Vas, J. (1990). Mutually projective identification as a special way of communication between the schizophrenic patient and the therapist during hypnotherapy. Paper presented at the 5th European congress of Hypnosis in Psychotherapy and Psychosomatic Medicine, Konstanz, Germany.
- Voisin, A. (1884). Study on hypnotism and suggestions with a mentally ill patient. *Annal. Med. Psychologique*, **12**, 289–304.
- Voisin, A. (1887). On hypnotism and hypnotic suggestion in their application to the treatment of nervous and mental diseases, *Rev. l'Hypnotisme*, **1**, 4.
- Voisin, A. (1897a). *The Use of Hypnotic Suggestion in Certain Types of Insanity*. Paris: Bailliere.
- Voisin, A. (1897b). Treatment of certain types of insanity and related neuroses through suggestion during hypnotic sleep. *Rev. Med.*, **6**, 3–7.
- Wetterstrand, O. G. (1902). *Hypnotism and its Application to Practical Medicine*. London: Knickerbocker.
- Winnicott, D. W. (1965). *The Maturation Processes and the Facilitating Environment*. Madison, CT: International Universities Press.
- Wolberg, L. R. (1945). *Hypnoanalysis*. New York: Grune & Stratton.
- Worpell, D. F. (1973). Hypnotherapy with a hallucinating schizophrenic. *Am. J. Clin. Hypn.*, **16**, 134–137.
- Zeig, J. K. (1974). Hypnotherapy techniques with psychotic in-patients. *Am. J. Clin. Hypn.*, **17**, 56–59.
- Zindel, P. (1992). Hypnosis in psychotherapy of schizophrenic patients and borderline patients. In W. Bongartz (Ed.), *Hypnosis: 175 years after Mesmer: Recent developments in theory and application. Proceedings of the 5th European Congress of Hypnosis in Psychotherapy and Psychosomatic Medicine* (pp. 309–313). Konstanz, Germany: Universitätsverlag Konstanz.

Zindel, P. (1996). The Active Introjection of the Therapist as a hypnoanalytic technique for severely disturbed patients. Paper presented at the 7th European Congress of Hypnosis in Psychotherapy and Psychosomatic Medicine, Budapest, Hungary.

EDITOR'S NOTE

In the United States, the 1990s were declared the “decade of the brain”. Following intense and successful lobbying by the National Alliance for Mental Illness (NAMI) – a powerful group of family members and clinicians supporting patients with severe mental illness – the National Institute of Mental Health (NIMH) redirected its research away from the psychotherapies of the “mind” to the physiology of the brain in persons with schizophrenia and bi-polar illnesses. Neurotransmitters and the medications altering them were the battle cries.

Increased standardization of diagnostic criteria for psychotic illness and Axis II Personality Disorders became essential precursors to the proper selection of psychotropic and antidepressant interventions in the treatment of these illnesses. Fifteen (15) minute sessions with patients became commonplace, and psychopharmacologists replaced psychoanalysts as leaders of the treatment team.

Yet all clinicians know that these patients are still persons who suffer and struggle to make meaning out of their lives. The therapeutic alliance remains the *sine qua non* of all effective treatment whether or not drugs are used in treating these disorders. An illustrative example from the American psychiatric literature is illuminative.

In 1986, a young Harvard University undergraduate student wrote anonymously of his experience as a schizophrenic patient in psychotherapy. Despite repeated hospitalizations and medications, he asked his psychiatrist, “Can we talk?” His psychiatrist talked, maintained hope, taught coping skills, but above all else, he listened. The patient concluded in his article, “A fragile ego left alone remains fragile . . . medication or superficial support alone is not a substitute for the feeling that one is understood by another human being. For me the greatest gift came the day I realized that my therapist really had stood by me for years and that he would continue to stand by me and to help me achieve what I wanted to achieve. With that realization my viability as a person began to grow. I do not profess to be cured – I still feel the pain, fear, and frustration of my illness. I know I have a long road ahead of me, but I can honestly say that I am no longer without hope”.*

This chapter, written by an experienced psychologist gifted in her use of hypnosis in the seriously mentally ill, focuses her attention on the methods of establishing a therapeutic alliance, building ego strength, repairing old developmental deficits if present, and uncovering and integrating early traumatic experiences into the health part of her patients. To this end, she traces the use of hypnotic techniques over the centuries in treating patients who are psychotic and may also have severe personality disorders, and then describes its current use in today's therapeutic outpatient culture.

We invite the readers' interest in remembering that the severely ill patient is a person who in spite of, or in addition to, the major gains in psychophysiology and psychopharmacology, wishes to reach out to these oft forgotten and sometimes neglected souls. The pendulum keeps swinging back and forth. As we reach the limits of our current understanding of schizophrenia as brain disease, we will once again be asked by our patients, ‘Can we talk?’

* Anonymous [written by a recovering patient] (1986). “Can we talk?” The schizophrenic patient in psychotherapy. *Am. J. Psychiatry*, 143(1), 70. Copyright 1986, The American Psychiatric Association. Reprinted by permission.

Dissociative Disorders

RICHARD P. KLUFT

Temple University, PA, USA

TRADITIONAL ROLES OF HYPNOSIS WITH DISSOCIATIVE DISORDERS

Until fairly recently, hypnosis had been recommended rather unequivocally for use in the treatment of the dissociative disorders. The clear parallel between well-known hypnotic phenomena and the naturalistically-occurring phenomenology of the dissociative disorders (see Braun, 1983; Bliss, 1986); the argument that many manifestations of the dissociative disorders were the result of the unwitting abuse of autohypnosis (Breuer & Freud, 1955; Bliss, 1986); and the clear demonstrations that hypnotic interventions were therapeutically useful in work with amnesia and with dissociative identity disorder (from its first successful treatment [Despine, 1840]; numerous reports of the success of hypnosis in combat-related amnestic syndromes; and use of hypnosis with the first series of successfully treated dissociative identity disorder patients followed over time in the modern era [Kluft, 1982, 1984, 1986a, 1993a]) were among the arguments advanced in favor of utilizing hypnosis with this group of patients.

In the DSM-IV (American Psychiatric Association, 1994), the dissociative disorders consist of depersonalization disorder, dissociative amnesia, dissociative fugue, dissociative identity disorder, and dissociative disorder not otherwise specified. Dissociative trance disorder, currently classified as a form of dissociative disorder not otherwise specified, is an additional classification being studied for possible inclusion in future diagnostic manuals. It consists of either an apparent withdrawal into a trancelike state, or an episode of possession trance in which the customary sense of personal identity is replaced by a new identity. Currently these are classified as subtypes of dissociative disorder not otherwise specified.

In depersonalization disorder, hypnosis can play a role in reconnecting the afflicted individual with his/her body and/or his/her feelings. In dissociative amnesia, hypnosis traditionally has been used to retrieve memories for the period for which there is an absence of memory. In dissociative fugue, hypnosis can be utilized to access missing periods of time, and to attempt to contact an alternate identity should one be present. Such efforts frequently are only partially successful.

For dissociative identity disorder, hypnosis traditionally has been used to access alternate identities, to facilitate communication across alternate identities, to retrieve memories for periods of amnesia, to abreact traumatic experiences, and to facilitate integration. Hypnosis is used by the vast majority of therapists treating this group of patients (Putnam & Loewenstein, 1993). However, in recent years there has been an emphasis on the use of hypnosis for supportive and crisis prevention interventions (Fine, 1991; Kluft, 1988a,b, 1989, 1995a), for ego state therapy applications (Watkins & Watkins, 1997), and for doing the newer fractionated abreaction techniques (Kluft, 1988, 1990, in press; Fine, 1991), which are more easily tolerated by patients vulnerable to severe distress, if not decompensation, as they reexplore traumatic material. The uses of hypnosis for dissociative trance disorder involve interrupting pathological trance states and restructuring the dissociative experiences, often with the use of autohypnotic techniques, so that the patient becomes the master of his or her proclivity for slipping into trance, instead of remaining its hapless victim (Spiegel & Spiegel, 1978). With dissociative disorder not otherwise specified, the uses of hypnosis are likely to follow the usages applied to the discrete dissociative disorders a particular variant most closely resembles.

CONTROVERSIES SURROUNDING THE USE OF HYPNOSIS WITH THE DISSOCIATIVE DISORDERS

Many controversies currently surround the use of hypnosis with the dissociative disorders. Although they constitute an area of considerable interest, limitations of space preclude their extensive discussion here. The interested reader is referred to more thorough explorations elsewhere (Kluft, 1995b,c, 1997a).

Arguments for the efficacy of hypnosis in the treatment of the dissociative disorders have been countered by concerns that hypnosis has the capacity to play a role in the formation of pseudomemories or confabulations, that the recovery of memories of childhood traumatisations may not be possible, and that hypnosis may play a role in the iatrogenesis or worsening of dissociative identity disorder. Furthermore, it has been argued that trauma may not be at the root of many of these disorders, so that hypnotic searching for antecedents may generate confabulations with far-reaching consequences. At this moment in time, it is clear to those who are not dominated by ideological concerns and/or political agendas that no single polarised argument has succeeded in driving its opponent from the field. Although some evidence is more supportive of one stance than another, all perspectives have contributions to make to this complex area of study, and a rational view of the subject precludes the complete or peremptory discounting of either perspective. Scholars and clinicians who take into account all available data (e.g., Alpert, 1995a; Brown, 1995a,b; Brown, Schefflin & Hammond, 1997; Hammond, Garver, Mutter et al., 1995; Kluft, 1984, 1995b; Nash, 1994; Schacter, 1996; Schooler,

1994; Spiegel & Schefflin, 1994; van der Kolk, 1995; van der Kolk & Fislser, 1995), acknowledge from the first that once unavailable memories can be retrieved in some instances, and that there are occasions when pseudomemories may be encountered; they are disinclined to be peremptorily dismissive or to take extreme polarised positions.

With regard to the dissociative disorders, there are many expressions of opinion, but few relevant published studies. Numerous studies demonstrate that Dissociative Identity Disorder patients generally have experienced genuine trauma (Bliss, 1984; Coons 1994; Coons & Milstein, 1986; Hornstein & Putnam, 1992; Kluft 1995b), even if materials that they produce in therapy may not always have genuine historical antecedents (Kluft, 1996). Without making efforts that violated the frame of therapy, Kluft (1995b) was able to corroborate memories of abuse in 56% of 34 patients with dissociative identity disorder. Of those with confirmations 53% had always recalled the abuses that were documented. However, 68% obtained documentation of events that had not been in memory until they were retrieved in therapy. Of patients with memories retrieved in therapy 85% had retrieved the confirmed memory (ies) with the help of hypnosis. The study also found allegations of abuse could be disconfirmed in 9% of the patients; in none of these cases was the pseudomemory the product of heterohypnosis. This study demonstrates that a strong stance against the possibility of the retrieval of once-unavailable memories is not defensible. Nor is it possible to justify a stance that the use of hypnosis invariably is associated with the retrieval of confabulations.

Ross and Norton (1989) were able to show that the use of hypnosis does not have a major effect upon the phenomenology of Dissociative Identity Disorder. Nor does a clinician's interest in Dissociative Identity Disorder appear to make a significant impact upon the phenomenology manifested by his or her patients (Ross, Norton & Fraser, 1989). At this point in time, allegations that the use of hypnosis or the interest a clinician shows in the condition can lead to the iatrogenic creation of dissociative identity disorder continue to be made, but they remain unproven.

The argument that true dissociative identity disorder is rare, and therefore the discovery of many modern cases argues for iatrogenesis, is countered by the fact that studies made with reliable and valid structured instruments in several countries show that the condition is, in fact, fairly common. Ross and his colleagues in Canada (Ross, 1991); Saxe and his colleagues (1993) in the United States; Boon & Draijer (1993) and their associates in the Netherlands; Knudsen, Haselrud, Boe, Draijer & Boon (1995) at the Stavangar clinic in Norway, all have found that previously undiagnosed dissociative identity disorder patients constitute between 3 and 5% of psychiatric inpatients in acute settings. Additional similar studies are underway in Germany and Turkey. Here again, the allegation of iatrogenesis remains easy to make, but it is extremely difficult to elevate such allegations from the level of an accusation to the level of a proof or demonstration (Kluft, 1995c). Without denying the possibility that iatrogenic pressures can transiently induce some of the major symptoms of dissociative identity disorder, proof of the

iatrogenic creation of a full-fledged and stably established case of dissociative identity disorder remains to be presented. For example, Spanos' (Spanos, Weekes & Bertrand, 1985; Spanos, Weekes, Menary & Bertrand, 1986) experimental creation of some dissociative identity disorder phenomena under laboratory conditions does demonstrate that such a role can be induced, but it does not establish the actual condition. One must be cautious about behavioural manifestations being overinterpreted, lest, by analogy, those subjects induced by a stage hypnotist to enact the social role of a chicken be taken home and cooked for dinner!

OBSERVATIONS ON THE USE OF HYPNOSIS WITH DISSOCIATIVE DISORDERS TODAY

The challenge to contemporary practice is to preserve what is useful and solid, to refuse to be panicked into throwing the baby out with the bathwater, and to utilize all available information in a constructive effort to be of help to the dissociative patient. Not only has hypnosis been instrumental in the recovery of many dissociative patients—a strong argument can be made that since hypnosis is an inevitable aspect of their treatment, it is best that the treater be prepared to use it therapeutically.

Although dissociative patients in general have been thought to be highly hypnotizable, formal testing has established this only for dissociative identity disorder patients (Bliss, 1984; Frischholz, Lipman, Braun & Sachs, 1992). With any highly hypnotizable group of patients, one would be naïve indeed to assume that the only hypnosis that takes place is the heterohypnosis that occurs in therapy. Keen observers have long observed their proclivity for spontaneous trance and autohypnosis (e.g., Breuer & Freud, 1955; Janet, 1965; Bliss, 1986; Spiegel, 1986, 1991). Consequently, eliminating heterohypnosis leaves the clinician less than well prepared to confront a group of troublesome spontaneous trance and autohypnotic phenomena that could be restructured constructively with adroit hypnotic interventions (Kluft, 1992a,b; Spiegel & Spiegel, 1978).

Today's clinicians must consider whether there are any circumstances that would make it unwise to use hypnosis with a particular dissociative disorder patient. If the patient is involved in legal matters, or if such involvement is anticipated, it is best to withhold the use of hypnosis until it can be determined whether or not its use might compromise the patient's credibility as a witness in a matter of concern. The use of hypnosis may be held to have tainted if not destroyed the credibility of a patient's memory, and consequently, his or her testimony (e.g., Orne, 1979; Hammond et al., 1995).

Some patients belong to religious groups that understand hypnosis may lead to a weakening of the will so that evil may enter the patient's mind (e.g., Jehovah's Witnesses). Under these circumstances, the patient can be educated about hypnosis, but it may still be a better choice for the patient to avoid the use of hypnosis and the spiritual concerns its application might precipitate.

Under no (non-emergency) circumstances should hypnosis be employed prior to obtaining the patient's informed consent for its use. Although specific informed consent forms have been developed (e.g., Hammond et al., 1995; Brown, Schefflin & Hammond, 1997), there is much to be said for the concept of informed consent as a process, advocated by Appelbaum and Gutheil (1992). In this approach, it is assumed that matters that bear on the issue of informed consent emerge recurrently throughout the course of a therapy, and must be revisited and reexplained. This is especially valuable in work with dissociative identity disorder patients, whose treatment is prolonged, and whose identity and memory are fragmented, and who undergo an ongoing process of reconfiguration throughout their psychotherapy. A particularly crucial area of informed consent is making clear to the patient that any material recovered with hypnosis or any other intervention may be quite useful for the therapy, but cannot be assumed to be historically accurate without external confirmation. This caveat may require frequent reiteration over the course of the therapy. Often it is useful to apply a type of verbalization drawn from Appelbaum and Gutheil's ideas, and often taught by Gutheil in workshop settings for teaching patients about medication side effects, but modified for hypnosis by the author (e.g., Kluft, 1997b):

When we use hypnosis to explore this block in your memory, we will be looking for hypotheses for further exploration. If we find something, whatever we find will be the starting point for more ongoing work—not the end of a quest or search. The nature of your hypnotic experience may give whatever we come up with the personal experience that it is very real. That and the fact you may visualize it can make it seem like what you have actually experienced and seen it, but that can be real deceptive. We tend to think that if we see it it has to have occurred. But that is not the way it is. We can deceive ourselves. Remember, we're looking for hypotheses. Moses didn't come down the mountain with what you may find in hypnosis engraved on a slab of stone, but it can feel that way.

All in all, then, the clinician must make a circumspect assessment of the patient's needs and circumstances, and arrive at a veritable cost-benefit analysis vis-à-vis the use of hypnosis. At different moments in a given therapy, it may be that the clinician comes to different conclusions as to how to proceed.

HYPNOSIS AND THE TRIPHASIC TREATMENT OF TRAUMA

Dissociation is a commonplace reaction to trauma in psychiatric patients and in non-patient populations (Putnam, 1985; Spiegel, 1986, 1991). Without entering the complex domain of the relationship of dissociativity to hypnotizability, I will simply acknowledge that authorities disagree about their relationship, but most concur that they are difficult to distinguish when both are present to a high extent, and their copresence is commonplace in dissociative disorder patients. Conse-

quently, most traumatized persons with major dissociative manifestations are excellent candidates for the use of therapeutic hypnosis in the absence of contraindications.

In recent years Herman (1992) has advocated a triphasic approach to the treatment of the traumatized, building on similar observations made first by Janet, and subsequently by numerous others. Therapy begins with a phase of *safety*, in which the patient is made to feel secure, and can be both comforted and strengthened. Thus fortified and prepared, it proceeds to a phase of *remembrance and mourning*, in which the trauma is addressed and its impact and consequences are appreciated and grieved. Finally, in a phase of *reconnection*, issues of the reintegrations of one's identity, redressing interpersonal concerns, reentering one's social roles and obligations, and reestablishing normal coping are addressed.

In the phase of safety, hypnosis may play a role in relaxation, anxiety relief, symptom relief, ego-building, the creation of a safe place, affect regulation, accessing dissociated ego states, and the control of flashbacks and sleep disruption, among many other applications. Even suggestions of permissive amnesia have a role in some cases, in which the patient is totally devastated by what has befallen him or her, and is falling into a major regression, or becoming suicidal. In the phase of recollection and mourning, hypnosis may play an important role in relieving amnesia; the management of abreactions; the reconfiguring of ego states to ensure that work with one state's trauma does not mobilize others, leading to decompensation or alloplastic responses to painful material; and the containment and relief of the anguish associated with dealing with traumatic material. In the phase of reconnection, hypnosis can facilitate the blending of ego states, the integrations of ego-dystonic material, mastery of more adaptive coping, anxiety reduction, dealing with residual character and other issues, and has many other applications as well.

HYPNOSIS IN THE TREATMENT OF SPECIFIC CONDITIONS

DISSOCIATIVE AMNESIA

That most (but not all) dissociative amnesia patients have troubled childhood backgrounds is a relatively recent finding (Coons, 1992a,b). 72% have endured childhood trauma (Coons, 1992a,b). This may explain why although some dissociative amnesia resolve rapidly, others will require prolonged treatment because work with one area of difficulty rapidly spreads into other areas. Often a defensiveness with regard to childhood issues results in massive resistance to the exploration of a contemporary amnesic episode. In any case, profound intrapsychic stress and conflict with or without exogenous trauma has played an etiologic role.

Therapy is never simply a matter of getting back what has been forgotten. In any case one may assume that overwhelming affects and the personal meanings of the trauma reinforce the amnesia. Threats to one's former identity and disruption of

affect regulation often must be addressed. Hypnosis should be used to create a supportive environment and to reduce anxiety. Often this is sufficient to promote the spontaneous recovery of the amnesic material. Frequently the use of hypnosis for anxiety relief provides an excellent medium for the patient's developing a rapport and positive transference that will sustain the necessary therapeutic work.

A frequent complication on the use of hypnosis for other applications with such patients is the occurrence of either a precipitous return of the repressed material or the experiencing of panic as relaxation or some aspect of the induction leads the patient close enough to the as yet unrecovered material to become terrified by the affect and/or pain associated with it. The patient should be instructed to inform the clinician at once should either of these begin to occur. Usually, with calming suggestions and suggestions that the material stay back until it is timely for it to emerge, such episodes can be interrupted.

Hypnosis has a venerable history in the resolution of dissociative amnesia. There is currently much concern about confabulations of traumatic materials. Although it is possible to retrieve confabulations with this use of hypnosis, it is also possible for patients to recover well-being by working through a confabulated trauma. Since the recovery of the patient is the goal rather than the recovery of historical truth, this should not be a major concern in most instances, especially if one bears in mind that any other interpersonal influence that addresses the recovery of memory also may have had a distorting impact.

Traditionally, clinicians made efforts to help the patient have a full and often exhausting reexperiencing of what is recovered. However, contemporary clinicians are often reluctant to both explore and abreact at the same time. Usually they want to discover what they will have to help the patient come to grips with before moving right in to abreactive work (Kluft, 1991). It is often useful to use screen techniques when first exploring such areas, to allow the patient to have some distance from a potentially overwhelming reexperiencing of traumata. Within the conventions of screen techniques, it is often possible to make the images less large and less frightening, and to titrate the discomfort that is felt. Many therapists now begin with screen techniques, and, after some processing of difficult material, then move for the more traditional reexperiencing if it seems advisable.

Age regression to the missing period of time is a traditional usage. However, in dissociative identity disorder patients, it may have unexpected results because the particular personality with which the clinician is working may not have access to the material in question, and switch to the relevant alter cannot be assumed (Kluft, 1986b). Watkins' (1971) 'Affect Bridge Technique' can be very useful, even if one has no idea what one is searching for. One can try a number of dysphoric affects and see which one takes the patient to the missing material. In my own practice, before using these techniques I invariably use ideomotor signalling to get permission to carry out the exploration. Often I am given permission to make limited inquiries. When I remain within those boundaries, I am usually allowed to go further at a later date. I also have found it very useful to use a screen technique to

get a projective impression of the impact that the patient anticipates if the amnesia were to be lifted. I ask the patient to visualize how he or she feels she will react when he or she recovers what has been missing. If the fantasy involves decompensation or self injury, I will desist, and do further preparatory work.

In such hypnotic explorations one attempts to use questions that are not leading. My own favorite inquiry is 'Whatever's there'. However, some patients become so passive or distressed that it is difficult to remain in a format of open-ended inquiry. It is my practice to write down my questions as I go when I cannot be open-ended, so that I can review the process for potential errors at a later date.

When material is recovered, it is useful to document it in some manner, because the patient may remain amnesic out of trance, or may be so overwhelmed by it that permissive amnesia is the safest alternative. When dealing with situations that may prove sensitive or to have major impacts, such as when I anticipate that intrafamilial abuse may emerge, I often will tape the session. However, often one has no way of anticipating that one is on the verge of such material. For example, I was exploring an amnesic gap with a patient who had told me her father was overseas at the time of the gap. However, we immediately encountered an incest scenario. Ultimately, I learned that the conscious memory of the father's absence was a defensive confabulation.

As material is recovered and emerges spontaneously, hypnosis may be used to contain and titrate the distressing material, to facilitate the recovery of the material in an orderly and well-paced manner, to offer ego-strengthening to the patient, and to process and integrate the dissociated material. Not infrequently the memory will be retained, but in a depersonalized and derealized manner, shorn of affect. Hypnosis may be instrumental in recovering and processing the affect in an orderly manner. In the 1970s I developed hypnotic techniques of fractionated abreaction to employ when traditional complete abreactions were either potentially destabilizing or when patients repeatedly redissociate distressing material. In recent years I have described these techniques (Kluft, 1988a, 1990, in press; see also Fine, 1991). Hypnotic metaphors (such as the rheostat metaphor) can be developed and used to allow the patient to experience only, for example, 5% of the distress associated with the first 30 seconds of a misfortune. In fact, one can divide the trauma in the temporal dimension, one can dissociate physical pain from dysphoric affect (sensation from affect in Braun's [1988] BASK model), and, with dissociative identity disorder and allied forms of dissociative disorder not otherwise specified, one can isolate personalities from one another so it is possible to work with one without unsettling the remainder (Fine, 1991; Kluft, 1988a, 1990, in press). These methods minimize the likelihood of regression or redissociation.

DISSOCIATIVE FUGUE

Hypnotic approaches to dissociative fugue patients have much in common with the treatment of dissociative amnesia; in dissociative fugues in which an alternate

identity is encountered, techniques relevant to dissociative identity disorder may be applicable. Not infrequently there are considerable real world consequences associated with the life a patient has led while in an alternate identity or a confused state, or with the circumstances in the context of which the fugues occurred (such as leaving the scene of hazardous duty or important responsibilities). The recovery of amnesic periods associated with fugues is far less certain than the reversal of dissociative amnesia or amnesias in dissociative identity disorder.

In the unusual circumstance of working with a patient who is in the secondary identity, there are often opportunities to explore the dynamics of the patient with hypnoanalytic techniques. In my limited experience with such situations, I did not elect to attempt to restore the primary identity promptly because I reasoned from my work with dissociative identity disorder that to do so might prompt the secondary identity to 'fight for its life,' unduly complicating treatment. Instead, I worked to relieve the anxiety the patient felt as he began to appreciate his circumstances, and a spontaneous remission occurred. In the two cases I saw, I was unable to access the alternate identity on subsequent occasions. I am not sure whether there was a spontaneous integration, whether the identity evaded my efforts, or whether the alternate identity in these situations is so unlike those of dissociative identity disorder that my efforts were misdirected.

When the patient is being treated after returning to the primary identity, hypnosis often can recover aspects of the missing period, but the recovery is likely to be partial at best. Since fugues are often associated with profound intrapsychic conflict, hypnoanalytic exploration of the psychodynamics, and the use of techniques suggested by what is learned of those dynamics, including ego-building, may be productive.

The modern literature on fugue is small, and many older cases might have received other diagnoses from contemporary clinicians. There is little systematic or even anecdotal literature on the use of hypnosis with this disorder.

DISSOCIATIVE IDENTITY DISORDER

The treatment of dissociative identity disorder is the subject of a voluminous literature, most of which addresses the role of hypnosis to some extent. Numerous articles by the author, summarized in Kluft (1992a,b), and a more recent text by Phillips and Frederick (1995) focus on hypnotic approaches. Dissociative identity disorder involves lesions of identity, consciousness, and memory. Ideally, treatment should help the patient achieve a subjective sense of a unified identity by integrating the personality states, and eliminate amnesic gaps by both achieving a confluent identity in the here and now and by uncovering amnesia for the past so that the patient develops a coherent and cohesive sense of personal identity and personal history. It is understood that much of what emerges in such treatments cannot be verified, but nonetheless exercises a compelling degree of control over the patient. It is not assumed that all that emerges is accurate (Kluft, 1984, 1996),

but it is appreciated that the bulk of the available evidence (summarised in Kluft, 1997a) indicates that this is a genuinely traumatised population, regardless of whether the traumata uncovered in therapy are themselves historically accurate. It is well established that patients with documented trauma may not report that material, but may instead give reports of other traumata for which no verification is available (Williams, 1994).

Another approach to treatment popular in hypnosis circles is to use the ego-state model of Watkins and Watkins (1997) to bring about a more felicitous collaboration of the alternate identities. This may or may not progress to integration, and may or may not address trauma, depending on clinical circumstances. This approach is inherent in the more definitive therapies, especially in their early stages. However, many dissociative identity disorder patients are too unstable to be candidates for a definitive therapy, and can benefit considerably from this modality.

For dissociative identity disorder, the triphasic model described above is apparent in the more complex models put forth in the literature. For example, the model proposed by Kluft (1991) describes nine stages: (a) establishing the therapy, (b) preliminary interventions, (c) history gathering and mapping, (d) metabolism of the trauma, (e) moving toward integration/resolution, (f) integration/resolution, (g) learning new coping skills, (h) solidification of gains and working through, and (i) follow-up. Herman's (1992) stage of safety includes (a) through (c); remembrance and mourning is the equivalent of (d); and reconnection encompasses (e) through (i).

When a patient cannot achieve the goals of stages (a) through (c), he or she should not progress to systematic uncovering work with regard to trauma. When traumatic material breaks through, it should be contained and detoxified expeditiously, and therapy should return to a supportive and adaptation-oriented focus as rapidly as possible. The decision to begin the systematic exploration of traumatic material should not be made lightly. For some patients it will never be appropriate to go after traumatic material, and for some years of preparatory work may be necessary, and, if the patient becomes stable and functional with that preliminary work, it may be counterproductive to go forward, regardless. Guidelines to inform such decisions have been published (Kluft, 1997c).

The majority of hypnotherapeutic interventions will find a place in work with the polysymptomatic dissociative identity disorder population. Some which have proven useful on a regular basis are listed in Table 13.1, and several will be discussed briefly.

It is important to appreciate that most of these techniques are in the service of stabilization and making it possible to do abreactive work without risking massive regression. Modern practice is concerned with accessing alters in order to gain their collaboration and relieve the symptoms and behaviors associated with their impact, and less concerned with an aggressive search for traumatic material unless it is found in connection with exploring a dangerous or disabling symptom. Currently, most historical material is offered by the alters without the use of specific memory-

Table 13.1. Varieties of hypnotically-facilitated interventions useful with dissociative identity disorder

1	Accessing alters	12	Time sense alterations
2	Alter substitutions	13	Distancing maneuvers
3	Reconfigurations	14	Facilitating integrations
4	Ideomotor questioning	15	Temporary blendings of alters
5	Provision of sanctuary	16	Integration rituals
6	Bypassing or attenuating intense affect	17	Recheck protocols
7	Slow-leak techniques	18	Symptom relief and symptom substitutions
8	Curtailing abreactions	19	Teaching autohypnosis
9	Fractionated abreactions	20	Suppressive measures
10	Facilitating abreactions	21	Trance ratification
11	Gathering historical data	22	Relapse prevention

enhancing techniques, or emerges spontaneously when previously available material is processed. However, there remain many instances in which such explorations are appropriate.

It is important to be able to access alters because the most common cause of therapeutic stalemate is the presence of additional alters not known to the therapist. It is often essential in order to map the system in the service of planning the treatment. If one can access alters, one can request that a dysfunctional alter be replaced by one able to handle the situation (alter substitution). When the patient is chaotic and many parts of the mind are imposing their feelings and ideas at once, the patient may become overwhelmed. A more salubrious arrangement of the alters (reconfiguration) combined with taking painful affect away (bypassing or attenuating intense affect) plus or minus suggesting that upset alters sleep between sessions (an example of time sense alterations) may prevent decompensation.

It is useful to use safe place imagery to create a place for alters to go when they are overwhelmed or need rest, and/or a place to put child alters so they do not interrupt the treatment or the patient's life (provision of sanctuary). For example, a patient whose days were dominated by childlike behavior was restabilized by creating an imaginary playroom in the patient's 'inner world' in which the child personalities could play. Slow-leak techniques (Kluft, 1988a) suggest that traumata or painful affects come into awareness at a pace that the patient can tolerate. Fractionated abreaction techniques, discussed above, are exceptionally useful for the dissociative identity population, for which they were developed (Kluft, in press).

Bringing alters to be able to talk to one another, and to spend time in coconsciousness or even in joint control of the body (copresence), allows them opportunities to break dissociative barriers and become less strange and ego-alien to one another (facilitating integration). This makes the process of integration less threatening, and is a major component of Fine's (1991) cognitive approach. They can be allowed to blend temporarily to share skill and assets to address particular

problems (Fine, 1991). When alters have done their work and dealt with their issues, they may integrate with hypnotic suggestion if they have not done so spontaneously (integration rituals). Suggestions of merger and joining with imagery appropriate to the particular patient are often effective, and follow-up of hypnotically-facilitated integrations demonstrates good stability (Kluft, 1986a).

Often it is useful to touch bases with the alters not involved in day to day treatment in order to anticipate and preempt crises and to see whether alters represented as integrated have in fact become separate again (recheck protocols). Using ideomotor signals, a large number of alters can be asked if they have issues that need to be addressed in a very brief period of time. Cooperative patients can use autohypnotic techniques effectively, but some patients may subvert what they learn in the interests of resistance (Kluft, 1982). One use of autohypnosis is relapse prevention. Integrating patients can be taught techniques to stabilize themselves when intercurrent crises prove a threat to their hard-won integrations (Kluft, 1988b). Suppressive techniques were recommended by Allison (1974) in early papers. They are now a historical footnote, but retain relevance because they are often spontaneously used by patients to contain or confine alters that are deemed disruptive, and must be understood. Often complex negotiations with many alters prove necessary to deal with such internal 'solutions,' which may encourage ongoing hostility among the alters, with disastrous consequences in terms of self-harm or suicide attempts, often magically misunderstood by the alters as the attack of one separate individual upon another.

It is difficult to discuss the usefulness of hypnosis in the treatment of dissociative identity disorder patients simply in terms of the hypnotically-facilitated interventions that are undertaken. An awareness of hypnotic phenomena and a sensitivity to the fact that every interaction with such patients occurs in an ambience of hypnotic phenomena is a tremendous asset for the therapist to bring to his or her work with this patient population.

DEPERSONALIZATION DISORDER

Because depersonalization is an extremely common psychiatric symptom, it is essential to evaluate the patient thoroughly to be confident that depersonalization disorder, rather than depersonalization as a symptom of some other psychological or medical disorder, is present. The literature on the treatment of depersonalization disorder is anecdotal, with no one approach having achieved wide success. Kluft (1987) proposed that two categories of depersonalization disorder be appreciated—one a dissociatively-driven condition in patients with high hypnotizability, and another with obsessive and other defensive processes that estrange the patient from his or her sense of him or herself, and from a connection with one's feelings and body. The latter group consists of patients with a wide range of hypnotizability; many are not good hypnotic subjects. The former are quite amenable to direct

hypnotic interventions, while the latter may be approached with hypnoanalytic procedures and Ericksonian strategies, but may remain refractory to them.

With patients who have a high degree of hypnotizability, it often is possible to demonstrate to the patient that their symptoms can be both instigated and terminated by an hypnotic intervention. The patient can be taught autohypnotic strategies to bring on and to conclude relevant depersonalization symptoms. Hypnosis can be utilized to explore and to process the particular stressors that trigger depersonalization episodes. For example, a woman who became depersonalized when criticized was taught to counter this with autohypnotic relaxation. Often hypnotic suggestion of both the removal of sensations and the experiencing of sensations can begin the process of reconnecting the patient to his or her body. When the patient masters the skill of making himself numb and disconnected, often with techniques useful for pain relief, he or she may begin to achieve mastery of a symptom that had controlled him or her. Split screen techniques in which the patient can see him/herself in a distorted or disconnected manner and a normal and connected manner are often useful. The patient can be taught to envision him or herself in a connected and feeling manner to counter the distorted and disconnected self-perception. In a recent case, the author serendipitously was using the image of a beach scene to relax a man totally out of contact with his body, who always saw himself rather than experienced himself. When the man began to react strongly to the scene, the author suggested only that the sun was rising higher in the sky, and that noon was approaching. Within minutes, the man was perspiring profusely. The author did not address the depersonalization directly, but was able to build upon this experience to reconnect this man to his body and identity in short order.

DISSOCIATIVE TRANCE DISORDER

This diagnostic category includes both temporary marked alterations in the state of consciousness or loss of personal identity and instances in which another entity replaces the customary sense of personal identity. The former are considered the trance subtype, the latter the possession trance subtype. The former are world-wide. The latter are often determined by the mores and beliefs of particular cultures, and may constitute culture-bound syndromes.

Trance disorders often occur in the aftermath of trauma and extreme stress. The triphasic model described above should be applied. In the absence of contraindications, hypnosis may initially be used supportively. The patient, who is having spontaneous and/or triggered trance states, can be taught mastery of his or her autohypnotic talents and vulnerabilities by learning to enter and exit trance by choice. While practicing autohypnotic exercises, the patient learns to use this skill to reduce the tensions and pressures that precipitate trances, and to exit from and/or preempt spontaneous trance phenomena. This restores a sense of an internal rather than an external locus of control. As the patient feels increased control and strength, and feels less at the mercy of spontaneous or triggered trances, hypnosis

can be used to explore and alleviate the conflicts and/or traumata that precipitate trance phenomena, and to master new strategies of managing their residual impacts.

With regard to possession trance states, when the possession has been transient, it is crucial to deal with the precipitating stressors in a manner that demonstrates sensitivity to the unique cultural contributants. When the possession is ongoing or repetitive, some of the techniques used with dissociative identity disorder, modified with a sensitivity to cultural considerations, may prove effective.

DISSOCIATIVE DISORDER NOT OTHERWISE SPECIFIED

This category encompasses wide diversity, including cases with great similarity to dissociative identity disorder (often called ego-state disorders), derealization without depersonalization, the dissociative sequelae of coercive persuasion, dissociative trance disorder (see above), Ganser's syndrome, dissociative psychoses, some gender identity disturbances, and a mixture of dissociative symptoms of all sorts (American Psychiatric Association, 1994; Coons, 1992b). The use of hypnosis with such patients will parallel its use in patients with the conditions most akin to the symptom clusters in question. Coons' (1992b) study is a landmark contribution. Very little else has been written about the treatment of these patients, except for those forms most akin to dissociative identity disorder. The ego-state model of Watkins and Watkins (1997), which employs hypnosis to access and work with ego states, to negotiate among them, and to resolve their traumata, may be very effective with this group, as can be the interventions discussed above under dissociative identity disorder.

CONCLUDING REMARKS

Hypnosis is a remarkably useful approach with which to facilitate the treatment of the dissociative disorders. However, its use should be circumspect, and should await the achievement of informed consent whenever possible. Contraindications should be respected. Despite the controversies that have developed, especially in the context of concerns about the reliability of newly accessed and once unavailable memories, hypnotically-facilitated interventions remain a mainstay for the treatment of the dissociative disorders, which are a commonplace and increasingly recognised form of psychopathology.

REFERENCES

- Allison, R. B. (1974). A new treatment approach for multiple personalities. *Am. J. Clin. Hypn.*, **17**, 15–32.

- Alpert, J. L. (Ed.) (1995a). *Sexual Abuse Recalled: Treating Trauma in the Era of the Recovered Memory Debate*. Northvale, NJ: Aronson.
- Alpert, J. L. (1995b). Criteria: Signposts toward the sexual abuse hypothesis. In J. L. Alpert (Ed.), *Sexual Abuse Recalled: Treating Trauma in the Era of the Recovered Memory Debate* (pp. 363–396). Northvale, NJ: Aronson.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders, 4th edn*. Washington, DC: American Psychiatric Association.
- Appelbaum, P. S. & Gutheil, T. G. (1992). *Clinical Handbook of Psychiatry and the Law, 2nd edn*. Baltimore, MD: Williams & Wilkins.
- Bliss, E. L. (1984). Spontaneous self-hypnosis in multiple personality disorder. *Psychiat. Clinics N. America*, **7**, 135–148.
- Bliss, E. L. (1986). *Multiple Personality, Allied Disorders and Hypnosis*. New York: Oxford University Press.
- Boon, S. & Draijer, N. (1993). *Multiple Personality Disorder in the Netherlands*. Amsterdam: Swets and Zeitlinger.
- Braun, B. G. (1983). Psychophysiological phenomena in multiple personality and hypnosis. *Am. J. Clin. Hypn.*, **26**, 124–137.
- Braun, B. G. (1988). The BASK (behavior, affect, sensation, knowledge) model of dissociation. *Dissociation*, **1**(1), 4–23.
- Breuer, J. & Freud, S. (1955). Studies on hysteria. In *The Standard Edition of the Psychological Works of Sigmund Freud, Vol. 2*, ed. and trans. J. Strachey. London: Hogarth. (Original work published 1893–1895.)
- Brown, D. (1995a). Pseudomemories, the standard of science, and the standard of care in trauma treatment. *Am. J. Clin. Hypn.*, **37**, 1–24.
- Brown, D. (1995b). Sources of suggestion and their applicability to psychotherapy. In J. L. Alpert (Ed.), *Sexual Abuse Recalled: Treating Trauma in the Era of the Recovered Memory Debate* (pp. 61–100). Northvale, NJ: Aronson.
- Brown, D., Schefflin, A. & Hammond, D. C. (1997). *Memory, Trauma Treatment and the Law*. New York: Norton.
- Coons, P. M. (1992a). Psychogenic amnesia: A clinical investigation of 25 cases. *Dissociation*, **5**, 73–79.
- Coons, P. M. (1992b). Dissociative disorder not otherwise specified: A clinical investigation of 50 cases with suggestion for typology and treatment. *Dissociation*, **5**, 187–195.
- Coons, P. M. (1994). Confirmation of childhood abuse in childhood and adolescent cases of multiple personality disorder and dissociative disorder not otherwise specified. *J. Nerv. Ment. Dis.*, **182**, 461–464.
- Coons, P. M. & Milstein, V. (1986). Psychosexual disturbances in multiple personality: Characteristics, etiology, and treatment. *J. Clin. Psychiat.*, **47**, 106–110.
- Despine, A., Sr (1840). *De l'emploi du magnetisme animal et des eaux minerales dans le traitement des maladies nerveuses, suivi d'une observation tres curieuse de guerison de nevropathie*. Paris: Germer, Bailliere.
- Fagan, J. & McMahon, P. P. (1984). Incipient multiple personality in children: Four cases. *J. Nerv. Ment. Dis.*, **172**, 26–36.
- Fine, C. G. (1991). Treatment stabilization and crisis prevention: Pacing the therapy of the multiple personality disorder patient. *Psychiat. Clinics N. America*, **14**, 661–676.
- Frischholz, E. J., Lipman, L. S., Braun, B. G. & Sachs, R. G. (1992). Psychopathology, hypnotizability, and dissociation. *Am. J. Psychiat.*, **149**, 1521–1525.
- Hammond, D. C., Garver, R. B., Mutter, C. B., Crasilneck, H. B., Frischholz, E., Gravitz, M. A., Hibler, N. S., Olson, J., Schefflin, A., Spiegel, H. & Wester, W. (1995). *Clinical Hypnosis and Memory: Guidelines for Clinicians and for Forensic Hypnosis*. Chicago: American Society of Clinical Hypnosis Press.

- Herman, J. L. (1992). *Trauma and Recovery*. New York: Basic Books.
- Hornstein, N. L. & Putnam, F. W. (1992). Clinical phenomenology of child and adolescent multiple personality disorder. *J. Am. Acad. Child Adolesc. Psychiat.*, **31**, 1055–1077.
- Janet, P. (1965). *The Major Symptoms of Hysteria*. New York: Hafner. (Original work published in 1907).
- Kluft, R. P. (1982). Varieties of hypnotic interventions in the treatment of multiple personality disorder. *Am. J. Clin. Hypn.*, **24**, 230–240.
- Kluft, R. P. (1984). Treatment of multiple personality disorder. *Psychiat. Clinics N. America*, **7**, 9–29.
- Kluft, R. P. (1986a). Personality unification in multiple personality disorder: A follow-up study. In B. G. Braun (Ed.), *Treatment of Multiple Personality Disorder*. (pp. 29–60). Washington DC: American Psychiatric Press.
- Kluft, R. P. (1986b). Preliminary observations on age regression in multiple personality disorder patients before and after integration. *Am. J. Clin. Hypn.*, **28**, 147–156.
- Kluft, R. P. (1987). Dissociative disorders. In J. A. Talbott, R. E. Hales & S. C. Yudofsky (Eds), *American Psychiatric Press Textbook of Psychiatry* (pp. 557–586). Washington DC: American Psychiatric Press.
- Kluft, R. P. (1988a). On treating the older patient with multiple personality disorder: ‘Race against time’ or ‘make haste slowly.’ *Am. J. Clin. Hypn.*, **30**, 257–266.
- Kluft, R. P. (1988b). Autohypnotic resolution of an incipient relapse in an integrated multiple personality disorder patient: A clinical note. *Am. J. Clin. Hypn.*, **31**, 91–96.
- Kluft, R. P. (1989). Playing for time: Temporizing techniques in the treatment of multiple personality disorder. *Am. J. Clin. Hypn.*, **32**, 90–98.
- Kluft, R. P. (1990). An abreactive technique; A vigorous abreaction technique; The fractionated abreaction technique; The slow leak technique. In D. C. Hammond (Ed.), *Handbook of Hypnotic Suggestions and Metaphors* (pp. 526–530). New York: W. W. Norton.
- Kluft, R. P. (1991). Multiple personality disorder. In A. Tasman & S. M. Goldfinger (Eds), *American Psychiatric Press Review of Psychiatry, Vol. 10*, (pp. 161–188). Washington DC: American Psychiatric Press.
- Kluft, R. P. (1992a). Hypnosis with multiple personality disorder. *Am. J. Prevent. Psychiat. Neurol.*, **3**, 19–27.
- Kluft, R. P. (1992b). The use of hypnosis with dissociative disorders. *Psychiat. Med.*, **10**, 31–46.
- Kluft, R. P. (1993a). Treatment of dissociative disorder patients: An overview of discoveries, successes, and failures. *Dissociation*, **6**, 87–101.
- Kluft, R. P. (1993b). Clinical approaches to the integration of the personalities. In R. P. Kluft & C. G. Fine (Eds), *Clinical Perspectives on Multiple Personality Disorder*, (pp. 101–133). Washington, DC: American Psychiatric Press.
- Kluft, R. P. (1995a). New emphases in the use of hypnosis in the treatment of multiple personality disorder. In G. D. Burrows & R. Stanley (Eds), *Contemporary International Hypnosis*, (pp. 69–80). Chichester, UK: Wiley.
- Kluft, R. P. (1995b). The confirmation and disconfirmation of memories of abuse in dissociative identity disorder patients: A naturalistic clinical study. *Dissociation*, **8**, 253–258.
- Kluft, R. P. (1995c). Current controversies surrounding multiple personality disorder. In L. Cohen, J. Berzoff & M. Elin (Eds), *Dissociative Identity Disorder*, (pp. 347–377). Northvale, NJ: Aronson.
- Kluft, R. P. (1996). Treating the traumatic memories of patients with dissociative identity disorder. *Am. J. Psychiat.*, **153**, 103–110, Festschrift Supplement.

- Kluft, R. P. (1997a). The argument for the reality of the delayed recall of trauma. In P. S. Appelbaum, L. Uyehara, & M. Elin (Eds), *Trauma and Memory: Clinical and Legal Issues*, (pp. 25–57). New York: Oxford University Press.
- Kluft, R. P. (1997b). Overview of the treatment of patients alleging that they have suffered ritualized or sadistic abuse. In G. A. Fraser (Ed.), *The Dilemma of Ritual Abuse: Cautions and Guides for Therapists*. (pp. 31–63). Washington DC: American Psychiatric Press.
- Kluft, R. P. (1997c). On the treatment of traumatic memories of DID patients: Always? Never? Sometimes? Now? Later? *Dissociation*, **10**, 80–90.
- Kluft, R. P. (in press). The management of abreactions. In J. Turkus & B. Cohen (Eds), *Dissociative Identity Disorder: Continuum of Care* (in press). Northvale NJ: Aronson.
- Knudsen, H., Haselrud, J., Boe, T., Draijer, N. & Boon, S. (1995). Prevalence of dissociative disorders in a Norwegian general psychiatric department (inpatients and daycare). In O. van der Hart, S. Boon & N. Draijer (Eds), *Proceedings of the Fifth Annual Spring Meeting of the International Society for the Study of Dissociation*, (p. 79). Amsterdam: International Society of Dissociation.
- Nash, M. R. (1994). Memory distortion and sexual trauma: The problem of false negatives and false positives. *Int. J. Clin. Exp. Hypn.*, **42**, 346–362.
- Orne, M. T. (1979). The use and misuse of hypnosis in court. *Int. J. Clin. Exp. Hypn.*, **27**, 311–341.
- Phillips, M. & Frederick, C. (1995). *Healing the Divided Self: Clinical and Ericksonian Hypnotherapy of Post-traumatic and Dissociative Conditions*. New York: W. W. Norton.
- Putnam, F. W. (1985). Dissociation as a response to extreme trauma. In R. P. Kluft (Ed.), *Childhood Antecedents of Multiple Personality*, (pp. 37–67). Washington DC: American Psychiatric Press.
- Putnam, F. W. & Loewenstein, R. J. (1993). Treatment of multiple personality disorder: A survey of current practices. *Am. J. Psychiat.*, **150**, 1048–1052.
- Ross, C. A. (1991). Epidemiology of multiple personality disorder and dissociation. *Psychiat. Clin. N. America*, **14**, 503–518.
- Ross, C. A. & Norton, G. R. (1989). Effects of hypnosis on features of multiple personality disorder. *Am. J. Clin. Hypn.*, **32**, 99–106.
- Ross, C. A., Norton, G. R. & Fraser, G. A. (1989). Evidence against the iatrogenesis of multiple personality disorder. *Dissociation*, **2**, 61–65.
- Saxe, G. N., van der Kolk, B., Berkowitz, R., Chinman, G., Hall, K., Lieberg, G. & Schwartz, J. (1993). Dissociative disorders in psychiatric inpatients. *Am. J. Psychiat.*, **150**, 1037–1042.
- Schacter, D. L. (1996). *Searching for Memory*. New York: Basic Books.
- Schooler, J. W. (1994). Seeking the core; The issues and evidence surrounding recovered accounts of sexual trauma. *Conscious. Cogn.*, **3**, 452–469.
- Spanos, N. P., Weekes, J. R. & Bertrand, L. D. (1985). Multiple personality: A social psychological perspective. *J. Abnorm. Psychol.*, **94**, 362–376.
- Spanos, N. P., Weekes, J. R., Menary, E. & Bertrand, L. D. (1986). Hypnotic interview and age regression procedures in the elicitation of multiple personality symptoms: A simulation study. *Psychiat.*, **49**, 298–311.
- Spiegel, D. (1986). Dissociating damage. *Am. J. Clin. Hypn.*, **29**, 123–131.
- Spiegel, D. (1991). Dissociation and trauma. In A. Tasman & S. M. Goldfinger (Eds), *American Psychiatric Press Review of Psychiatry, Vol. 10* (pp. 261–276). Washington DC: American Psychiatric Press.
- Spiegel, D. & Schefflin, A. W. (1994). Dissociated or fabricated: Psychiatric aspects of repressed memory in criminal and civil cases. *Int. J. Clin. Exp. Hypn.*, **42**, 411–432.
- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment*. New York: Basic Books.
- van der Kolk, B. A. (1995). The body, memory, and the psychobiology of trauma. In J. L.

- Alpert (Ed.), *Sexual Abuse Recalled: Treating Trauma in the Era of the Recovered Memory Debate*, (pp. 29–60). Northvale, NJ: Aronson.
- van der Kolk, B. A. & Fisler, R. (1995). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. *J. Traum. Stress*, **8**, 505–525.
- Watkins, J. G. (1971). The affect bridge: A hypnoanalytic technique. *International J. Clin. Exp. Hypn.*, **19**, 21–27.
- Watkins, J. G. & Watkins, H. H. (1997). *Ego States: Theory and Therapy*. New York: Norton.
- Williams, L. M. (1994). Recall of childhood trauma: A prospective study of women's memories of sexual abuse. *J. Consult. Clin. Psychol.*, **62**, 1167–1176.

Eating Disorders—Anorexia and Bulimia

MOSHE S. TOREM

Northeastern Ohio Universities College of Medicine, USA

INTRODUCTION AND LITERATURE REVIEW

A review of the recent literature on eating disorders, including anorexia nervosa and bulimia, reveals a remarkable silence on the utilization of hypnosis as a therapeutic tool. It is evident, for example from the book chapters by Walsh (1997) and Yager (1994), as well as journal articles devoted to eating disorders such as that of Doyle (1996), and a whole issue of the *Psychiatric Clinics of North America* (edited by Yager, 1996) that includes 13 scientific articles on eating disorders. In this special issue, to my surprise, the subject of hypnosis or guided imagery is not even mentioned as a viable option in the treatment of eating disorders. The publications that have appeared in the past decade on the efficacy of hypnotic techniques in the treatment of eating disorders are not even mentioned or cited; the subject of hypnosis does not exist in this special issue. This phenomenon reflects a level of ignorance on this subject reminiscent of the old adage 'The eye sees only what the mind is prepared to comprehend'; in this case, modified to 'The traditional doctor writes only about what his mind is prepared to comprehend.' Nevertheless, the effectiveness of hypnotic interventions in patients with eating disorders has been recorded in the literature over and over again since the time of Pierre Janet (1907, 1919).

Numerous publications have pointed out the usefulness of hypnosis in the treatment of patients with eating disorders. Vanderlinden and Vandereycken (1988, 1990) provide a comprehensive and excellent review of the literature on the use of hypnosis with eating disorders. Janet (1907, 1919) described how by using hypnotic techniques he was able to change the patients' dissociative, fixed ideas about eating and their body image, and to promote a general mental synthesis. Janet also used cognitive restructuring techniques that were successfully augmented by hypnosis. The hypothesis that many patients with eating disorders may suffer from dissociative episodes, has been supported by the research of Pettinati, Horne and Staats (1982, 1985), as well as by Council (1986) and Torem (1986a, 1990). These studies

found that patients with bulimia were significantly more hypnotizable than patients with anorexia nervosa. Griffith (1989) reported the successful use of a hypnobehavioral model in the treatment of bulimia nervosa, and Gross (1984) reported the successful use of hypnosis in the treatment of patients with anorexia nervosa, thus indicating that patients bearing the diagnosis of anorexia nervosa should not automatically be ruled out as candidates for hypnotherapy.

This chapter will describe specific issues involved in effective assessment of the patient with an eating disorder before the decision to utilize hypnosis is implemented. Then follows a description of a variety of hypnotherapeutic techniques and their utilization in the treatment of patients with eating disorders.

PATIENT ASSESSMENT

The comprehensive and in-depth assessment of patients with an eating disorder is of great value for understanding the underlying dynamics of the condition, the patient's character, and the crafting of an effective treatment plan. The clinical literature identifies a variety of psychodynamics attributed to the psychopathology of eating disorders such as:

1. A fear of growing up and reaching full sexual maturation (Bruch, 1973, 1974; Gross, 1984).
2. Obsessive perfectionism and distorted body image (Bruch, 1973, 1974, 1978).
3. Family enmeshment and struggle for autonomy (Minuchin, Rosman & Baker, 1978).
4. A fear of pregnancy, a fear of acting out hostile impulses as well as a need for self-punishment (Evans, 1982).
5. An unresolved past trauma (Damlouji & Ferguson, 1985; Goodwin, 1988; McFarlane, McFarlane & Gilchrist, 1988; Torem & Curdue, 1988; Goodwin & Attias, 1993).
6. A dissociative mechanism (Pettinati, Horne & Staats, 1982, 1985; Pettinati, Kogan, Margolis et al., 1989; Schwartz, Barrett & Saba, 1985; Council, 1986; Sanders, 1986; Torem, 1986a,b, 1989a; Chandarana & Malla, 1989).
7. Underlying splitting and multiplicity (Torem, 1984; Torem & Curdue, 1988, Torem, 1989b, 1990, 1993; Kluff, 1991; Ross, 1989; Goodwin & Attias, 1993; Gutwill, 1994).

In listening to the patient I specifically explore the possibility of ambivalence and internal conflicts regarding the eating disorder symptoms and behaviors, looking for any clues that the behaviors are ego-dystonic. In previous publications (Torem, 1989a), I have delineated the following examples of clues to an underlying dissociative mechanism in the patient's description of her symptoms:

1. 'I sometimes do not know why I do it ... I am so confused ... It is not like me.'
2. 'Whenever food is put in front of me, I automatically become frightened, like a little kid. I know I need to eat but it is like an inner voice doesn't let me touch the food'.
3. 'A part of me wants to binge and another part of me hates it and is disgusted.'
4. 'Sometimes I feel like Dr Jekyll and Mr Hyde and it's not just about eating ... I don't know myself anymore.'
5. 'Look at this body ... isn't it a shame? ... she used to be a fine attractive girl and then this awful thing happened ... she is afraid of men, all men ... she hides behind the fat.'
6. 'When I get into a binge ... it feels so strange ... as if I am in a daze ... I don't know what comes over me ... and then I feel so guilty and I want to throw up.'
7. 'Doctor, you may not believe me, but at times I don't even remember bingeing ... my husband tells me that I do ... but I can hardly remember doing it.'
8. 'I look at my body and I know the scale says I have lost more than 25 pounds but yet my body feels too fat ... I know it doesn't make sense ... it is as if I hear this voice in my head telling me I am too fat.'
9. 'You know doctor, at times I am so confused ... sometimes I feel fat and sometimes I feel skinny ... sometimes I want to eat and other times I'm afraid ... I don't know what gets into me ... I am so confused.'
10. 'Doctor, my mother says I am weird ... she thinks that I am possessed by the Devil ... that is her way of explaining my anger at myself for eating too much ... and then wanting to throw up.'

An additional method for identifying a possible underlying dissociation in patients with eating disorders is the administration of a dissociation scale. The Dissociation Experiences Scale (DES; Bernstein & Putnam, 1986), is easy to administer and has been tested for its validity and reliability in large populations (Bernstein-Carlson, Putnam, Ross et al., 1993; Putnam, Bernstein-Carlson, Ross et al., 1996). The Perceptual Alteration Scale (PAS; Sanders, 1986) is also of use since it has a special focus on eating disorders symptoms. In a recent study (Torem, Egtvedt & Curdue, 1995), a high correlation between the Eye Roll Sign (ERS) and the dissociation scores measured by the PAS indicated a possible correlation between these two measurements of dissociation. Since the capacity to dissociate is correlated with the capacity for hypnosis, the clinician may therefore learn in advance whether a certain patient may benefit from the use of hypnotic techniques without having to use a more lengthy assessment of hypnotizability. To complement the above scales, Spiegel and Bridger's (1970) Hypnotic Induction Profile (HIP), may be used, being particularly suited to the clinical setting since it takes about 5–7 minutes to administer.

Many patients with eating disorders feel helpless, hopeless, and ashamed of having to seek psychological help. I use the principle of 'meeting the patient where the patient is at,' allowing patients to talk about any subject they wish to discuss, and letting them choose the priority of their concerns, even if at first it seems only remotely related to the eating disorder. I listen to metaphors in the patient's communication, being aware that people communicate simultaneously on two levels: manifest and latent. For example, an 18-year-old adolescent girl communicates in the first session her story about the fact that the house she is living in is crumbling and needs to be renovated and remodelled, and that she is determined to find the resources to accomplish this goal. This patient is talking on a manifest level about her own house, which in reality may need to be renovated and remodelled; however, on a latent level, she may be referring to her own body that needs to be repaired and restored to health. In fact, this girl had lost many teeth due to repeated self-induced vomiting, and in addition had an electrolyte imbalance, abnormal liver functions, and esophageal bleeding, requiring immediate medical and psychiatric care. The clinician's recognition that the patient communicates about her body in a metaphorical way makes the therapist an ally with the patient's subconscious mind, and creates an ideal setting for the effective use of hypnosis to facilitate the desired change.

THERAPEUTIC INTERVENTION WITH HYPNOSIS

When evaluating a new patient, I listen to the patient's communication regarding dysphoric feelings of helplessness, anxiety, hopelessness, inner tension, insomnia, fear, restlessness, and so on. I introduce the idea of using hypnosis by making it relevant to the patient's presenting symptoms, saying to the patient something like this, 'Would you like to learn an exercise of how to reduce your anxiety and promote a sense of calmness and relaxation?' Patients generally respond affirmatively. I then proceed by teaching the patient a self-hypnosis exercise loaded with suggestions and images of calmness and comfort, asking the patient to select a place associated in their mind with such feelings. Some patients select a mountain trail, an inland lake or a state park, many select an ocean beach.

Most patients respond positively to this exercise which, as mentioned before, can be tailored to the patient's choice of place. At its completion, the patients have an experience of success in replacing their feelings of anxiety and restlessness with new feelings of calmness and comfort. This success makes the patient into an ally and believer in the healing powers of self-hypnotic imagery and conveys to them a sense of new hope. To facilitate yet further the experience of success, suggestions and images for ego-strengthening are added.

EGO-STRENGTHENING

Ego-strengthening suggestions are an important part of most hypnotherapy interventions. The technique was named by John Hartland (1965, 1971), and further elaborated by Stanton (1975, 1979, 1989). In this intervention the patient follows a set of general hypnotic suggestions to promote healing, strength, a sense of well-being, competence and mastery. The following verbatim example may be used in patients with eating disorders:

As you are sitting here in this chair in a state of self hypnotic trance, and you allow yourself to experience such calmness and comfort, a state of inner harmony, you may allow yourself to accept, if you wish, whatever is necessary to promote your progress of healing and well-being, so you can go on with your life in a healthy, more mature and adaptive way. You learn to be free, live in the present as an effective, healthy, human being. Every day, in every way, you are getting better and better. You become physically stronger, more alert, more wide awake, more energetic, more resourceful, trustworthy, and trusting in your own wisdom and intelligence. Yes, you deserve to live your life with respect and dignity. Yes, you deserve to experience hope, comfort and optimism. Every day in every way, your nerves become stronger, and your mood more stable and pleasant. You become more interested in what you do, and what goes on around you ... and as this happens, your mind becomes calm, serene and peaceful ... your thoughts are clear and well composed. You experience a sense of internal tranquillity in total harmony with your body and as your body responds to your mind, it too becomes more calm and comfortable. Your concentration becomes focused and easy. You accept yourself with grace and with ease as a bona fide member of human society; you learn to see yourself in a positive light, developing greater confidence in your talents and skills, developing greater confidence with faith in a positive future. Now, all these may not happen quickly or rapidly. They may take some time, but only as much time as you really need for them all to take place ... they can happen as rapidly and as quickly as you need for them to happen and as rapidly as your subconscious mind wants them to happen. It is OK if you don't want them to happen too fast, only as fast as you need. Now, you may take a moment to reflect privately what your life is like with all these wonderful changes taking place. Then whenever you are ready, simply count back from three to one. At three you get ready in your own mind, and go ahead and do it now. At two with your eyelids closed, you look up, and at one let your eyelids open and let your eyes come back to focus. Your subconscious mind continues to retain all these suggestions for healing and recovering. Now, you become fully alert, awake and oriented to your surroundings, able to function safely and adaptively as you interact with the environment.

This is followed by a dialogue with the patient on practicing self-hypnosis to induce calmness and relaxation, opening one's mind to accept positive autosuggestions and imagery such as: 'everyday in every way I am getting better and better.' The patient is instructed to practice this on a daily basis and report results even if they are successful.

COGNITIVE REFRAMING AND RESTRUCTURING

Cognitive restructuring is described in detail by the Spiegels in their book, *Trance and Treatment* (1978), and also by cognitive-behavioral therapists such as Meichenbaum (1977) and Kroger and Fezler (1976). In essence, the patient is taught a new way of looking at an old problem and finding new, creative solutions in situations where the patient was cognitively 'chasing his own tail,' and feeling stuck with no way out. The patient with an eating disorder is first guided into a state of self-hypnotic trance, in which the patient is highly receptive to new ideas and suggestions. Under hypnosis, the patient is asked to signify if willing to fully cooperate in this process of therapy, with the aid of ideomotor signalling. Providing the signal is in the affirmative, the therapist may proceed as follows:

As you are sitting in this chair, in this special state of extra-receptivity and self-hypnotic trance, you realize that your subconscious mind has now become your ally, and together you are making the commitment to develop a new relationship between yourself and your body. In this relationship you, in fact, vow to respect and protect your body for the rest of your life. You are learning to develop a new view of your body as a helpless little creature that is totally dependent on you to be taken care of. In fact, your body is like a precious plant through which you can experience life itself, and to the extent that you want to live your life to the fullest, you owe your body this respect and protection. You also become aware that if not for you, for your body, binge eating and purging are, in fact, a poison. (*For bulimic patients. For anorexic patients, modify this statement to say: 'For your body, if not for you, self-starvation is, in fact, a poison'*). You realize that you cannot live without your body. Your body is this precious plant through which you experience life itself, so you need your body to live, and to the extent that you want to live your life to the fullest, you owe your body this respect and protection. Do you agree? [*Waiting for an ideomotor signal of confirmation.*] Now, these are the three principles which reaffirm your commitment to respect and protect your body for the rest of your life. This new commitment is going to be locked in from now on, and forever with the thought to binge, to purge, or to self-starve. Anytime the thought for bingeing, purging, or self-starvation arises it will be locked in with the new commitment to respect and protect your body. Since you and your subconscious have committed to support, strengthen, and empower the commitment to respect and protect your body, the destructive thoughts for bingeing, purging, or self-starvation are going to become weaker, and eventually dissipate away, as if they were never there. Are you willing to reaffirm your commitment and your vow to respect and protect your body for the rest of your life? [*Wait for the affirmative response through ideomotor signalling, or in words. If the answer is yes, proceed in the following way*]: Now, repeat after me the following statements, reaffirming your commitment as a whole person on a conscious and subconscious level: (a) for my body, if not for me, bingeing, purging, or self-starvation are, in fact, a poison [*patient verbally repeats statement*]; (b) I need my body to live [*patient verbally repeats statement*]; (c) To the extent that I want to live my life to the fullest, I owe my body this respect and protection [*patient verbally repeats statement*]. Now that you have reaffirmed your commitment and vow to respect and protect your body for the rest of your life, I suggest you do this exercise once every two hours . . .

In fact, you are going to regain a sense of mastery and control in your life as it

relates to activities on your job, your plans for the future, the learning of new things, and in your relationships with other people. Now, I would like you to take a moment or so to visualize yourself as fully healed and recovered in the future. Notice the sense of joy and accomplishment as you look at your life and your healthy body. You continue your self-hypnotic exercises which you are going to do safely and comfortably on a regular basis . . .

This hypnotic session is followed by a discussion with the patient whereby the patient learns to avoid self-entrapment, using the principle of ‘don’t think about a purple elephant.’ The patient is asked to engage in a thought exercise whereby she is asked not to think about a purple elephant. Most patients smile and report immediately that they picture a nice, big, purple elephant. The patient is then told:

you see, free people don’t like to be told don’t. Your subconscious mind does not incorporate the word ‘don’t’, and only hears, ‘think about a purple elephant,’ and then complies appropriately. The same thing happens when you say to yourself, ‘don’t binge’, or ‘don’t purge.’ You are, in fact, giving yourself the suggestion to binge and to purge, and thus entrapping yourself in doing exactly what you’re wishing to avoid. In this new approach any time you experience the thought to binge, purge, or use self-starvation this is your signal to engage in a state of self-hypnosis, and reaffirm your commitment and your vow to respect and protect your body for the rest of your life. So, now you focus on your vow to respect and protect your body for the rest of your life, and on your future reality of yourself living as a healthy, recovered individual.

In a patient with anorexia nervosa an additional method of cognitive reframing is set up whereby we talk about ‘gaining strength’ instead of ‘gaining weight.’ The patient is instructed that each strength unit is equal to one pound of body weight. Since most patients with anorexia nervosa who are extremely emaciated get into treatment feeling tired and physically weak, these presenting symptoms are capitalized on by asking them, under hypnosis, whether they would be willing to regain their strength. Most patients respond positively to such a suggestion, and this method uses the principle of ‘meet the patient where the patient is at.’ Meeting the patient at her level means devising a treatment plan that will be accepted by the patient with minimal resistance. The patient with anorexia nervosa, who suffers from a low body weight, tiredness and physical weakness, engages more readily and is more cooperative in activities focused on supplying her body with healthy nutrition in wholesome meals so she can regain her strength.

In this method, the patient is guided into a state of self-hypnotic trance relaxation and calmness induced in a nature scene of the patient’s choice. This is followed by the use of symbolic guided imagery intended to introduce a variety of natural images communicating changes of maturation, differentiation, integration, growth, self-mastery, control, and freedom of choice (Baker & Nash, 1987). I like to use natural images of transformation such as the metamorphoses of a caterpillar

through a cocoon into a mature, well-differentiated butterfly. The butterfly is well differentiated sexually and can fly freely from flower to flower and choose its own mate, while the caterpillar is asexual, cannot fly (is immature) and is limited with its choices of food and resources. This has a special value for the immature adolescent patient who struggles with conflicts around gender identity. Another useful image is 'The Red Balloon Technique' (Walch, 1976) which was adapted by Hammond (1987) as an effective adjunct in helping patients to alleviate dysfunctional guilt. I also use images for gaining a sense of control and mastery by asking the patient to visualize herself driving a car, holding the steering wheel in both hands, turning to the right, or left whenever she wishes to do so, changing the speed of her travel in the car, moving forward, or reversing, and using the brakes and other control instruments in the car, based on her need and travel plans. All these are suggested in association with a sense of pleasure and self-mastery.

Another image is one of the patient remodelling and redecorating her room, the room being analogous to the patient's body. First, one imagines living in an old room where the patient feels dissatisfied, then imagery is used in which the patient visualizes the remodelling and redecorating of her room to meet her needs. Emphasis is put on the patient's choice of colours, materials, furniture, drapes, pictures, and so on. Another effective image is that of the patient adopting a puppy or kitten, perhaps a sick one from the animal shelter of the local community. Then, instruct the patient to visualize the kitten or puppy nursed into full health through the patient's commitment and dedication. The sick pet is naturally a metaphor of the patient's unhealthy body, to which they make a commitment to heal and nurse back to full physical health.

'BACK FROM THE FUTURE' TECHNIQUE

In this method, hypnotic age progression techniques are utilized as described by Yapko (1984, 1986), Erickson (1985), Frederick and Phillips (1992), and Torem (1992). Here, a discussion is held with a patient about a desired future image the patient would be interested in as representing her full recovery and reaching an ideal stage regarding personal goals, as well as body image and a state of healthy living. This is particularly important with a developing adolescent patient who is in the process of change and is generally struggling with the question of 'Who shall I become?' The patient is guided into a state of self-hypnotic trance and suggestions are structured as with the following example:

... Everyone who is committed to a process of healing and recovery has an image of the future. If you wish, you may take this very special trip in a time machine, a trip in time, into the future. Ready ... enter into your special time machine and experience yourself moving forward in time ... as you continue to mature, turning into the age of 17 [*assuming the patient is 16 years old*] moving forward into 18, 19, 20, 21, 22, 23, that's right and now age 25 ... By this time, you have graduated from college and you are working in a job of your choice, gainfully employed, living in your own

apartment, enjoying your state of independence. You may wish to experience yourself strolling in a department store, trying on new clothes. Find yourself sitting at the counter consulting a cosmetic sales representative regarding the special colours of lipstick and other make-up items that fit your skin tone and colour. As you try these on, you look in the mirror and you see with joy how much you like your face, and the rest of your body, and yourself, and your blooming femininity presenting the young woman in you. As this goes on, you may continue to experience yourself, on a date with a young man who truly communicates uncritical acceptance of you and loves you with respect and dignity, and, if you wish, you may experience the special joy of having a date and wondering about your natural and healthy attraction to the young man that you love too, wondering about the special compatibility and chemistry that exists between the two of you, trusting the centre core of your subconscious mind that has guided you and led you to this point. On the job, you continue to excel and do what you like best, feeling a sense of self-accomplishment and self-actualization . . . going to work every day with a special feeling of looking forward to the day, being assertive, appropriately so, expressing your feelings and your emotions verbally, clearly, representing your own point of view and at the same time, being flexible, adaptively so, to consider the opinions of other people, as well. Now, with a sense of wisdom, inner joy, intelligence, and special deep knowledge I'd like you to travel in the time machine to the year 1998 . . . age 16 . . . and bring with you back from the future, into the present, all these feelings of confidence and competence, the sense of self-actualization, the joys, the sense of contentment, the sense of maturity that you already have experienced at the age of 25, bringing these experiences with you back to 1998, into age 16, and let your subconscious mind guide you and use the special feelings, the joys, and the wisdom to guide you in the present in moving you forward, on your journey of healing and recovery. That's right, now, you don't have to remember anything that's been discussed and experienced here by you. In fact, even if you don't remember anything at all, your subconscious will continue to do all the work every minute of the hour, every hour of the day, every day of the week, every week of the month, every month of the year every year for the rest of your life. However, if you wish to remember, you may remember whatever you need to remember to continue and guide you in this special journey of healing and recovery, that's right, very good, that's right.

The patient is now encouraged to return to the alert state.

This is followed by a discussion with the patient on what the patient remembered of the exercise of the future-oriented hypnotic imagery. In this modification, which I have called *Back From the Future*, the patient brings back from her trip to the future all the experiences that have already been accomplished in the patient's hypnotic future-oriented imagery. The patient is then given the assignment of writing in her personal journal the details of this experience of her trip to the future, and is requested to bring her completed assignment to the following session. At that time, I ask the patient to read to me her assignment and I will listen carefully to the tense the patient uses in describing her trip into the future. I have found that patients who describe their trip into the future using the past tense throughout their writing assignment usually respond well to this technique, and I use it as a positive, prognostic indicator. Many times, this has proven to be a turning point in the patient's therapy.

METAPHORICAL PRESCRIPTIONS

As part of the whole treatment program my patients are given concrete assignments reinforced with hypnotic suggestions for improved therapeutic outcome. These assignments which they are asked to complete, are designed so that the patient will metaphorically and concretely experience a feeling of success, as well as a sense of gaining mastery, control, and exercising new choices and options. Examples of such metaphorical prescriptions are the following:

1. Chart a journey, on a map from point A to point B. Drive your car in confidence and safety from point A to point B. Choose two different routes; one with the expressway, and the other with a country road.
2. Redecorate your own room, or remodel the house.
3. Change the sheets and pillow cases on your bed.
4. Buy yourself a new dress/blouse and wear it.
5. Get new glasses (frames) or new contact lenses.
6. Adopt a pet: cat or dog.
7. Do a puzzle (and picture of a whole person).
8. Plant a vegetable garden, or one tomato plant. Watch it grow (be responsible for it) and develop. Pick the tomatoes only when ready.
9. Bottlefeed a small human baby, hold it and let it cling to you.

AGE REGRESSION, ABREACTIONS AND CATHARSIS

This specific technique has been found useful with patients in whom the underlying dynamic for the eating disorder has been found to be related to past trauma. This can be done by using hypnosis as a diagnostic tool with the aid of such techniques as the affect bridge (Watkins, 1978; Channon, 1981) and other methods of hypnoanalytic exploration in conjunction with ideomotor signalling (Cheek & Le Cron, 1968; Barnett, 1981; Brown & Fromm, 1986). Once this has been identified, the patient can be guided with the use of age regression to the original trauma to which the eating disorder is being related. Many patients then have a chance to fully abreact emotions attached to the original trauma, and the emotional catharsis in the abreaction itself already produces some relief. At times, a significant improvement (although not a full cure) of the eating disorder symptoms is apparent. This has been described in previous publications on the special subgroup of patients with eating disorders in whom the eating disorder symptoms may be a manifestation of an underlying post-traumatic stress disorder (Torem & Curdue, 1988). To make this specific technique work, additional methods should be attached such as cognitive restructuring, and other methods which use hypnotic suggestion for personal growth, healing, recovery, letting go of the past and being liberated from the traumatic memories (Watkins, 1980).

EGO STATE THERAPY

Ego State Therapy has become a frequent focus in the hypnosis literature (Watkins, 1984; Watkins & Watkins, 1981, 1982; Edelstein, 1982; Beahrs, 1982; Newey, 1986). Ego State Therapy is defined by Watkins and Watkins (1982) as the 'utilization of family and group treatment techniques for the resolution of conflicts between the different ego states which constitute a "family of self" within a single individual.' This method is aimed at conflict resolution and may employ any of the directive, behavioral, psychoanalytic, supportive, existential, and even relaxation and biofeedback techniques of therapy. This method of therapy concerns a notion of how much the individual's behavior is the result of dissociated ego states in a state of conflict. According to Helen and John Watkins, the experience with ego state therapy shows that activating, studying and communicating with various ego states decreases the patient's tendency to dissociate. The patient who used to dissociate and experienced these changes as 'mood swings,' 'confusion states' or 'lost time,' develops an awareness of her condition. Confusion is then replaced by greater clarity, understanding, new hope and a sense of self-mastery. The goal of ego state therapy is not total fusion of all ego states into one fully 'fused' ego, but rather an increased permeability of ego state boundaries, and an improved internal harmony resulting in better cooperation and congruence among the various ego states. Some ego states may be maladaptive; however, the strategy is not to eliminate any ego state, even if it is responsible for maladaptive behavior. Instead the strategy is to change the maladaptive behavior, and to help the ego state become more adaptive in its behaviors. In previous publications (Torem, 1987, 1989a) I have described in great detail the use of this method for the treatment of patients with eating disorders. This specific method is especially effective with patients in whom the underlying dynamic for the eating disorder is related to dissociated ego states, and who are in a state of conflict. This method also has been found useful in patients with eating disorders who had an underlying multiple personality disorder (Torem, 1990, 1993).

ASSESSMENT OF EFFECTIVENESS

Any treatment modality stands to be tested based on the outcome, and outcome of treatment must be compared to the natural history of the illness. There are insufficient data regarding the natural history of eating disorders. This refers to patients with any one of the three eating disorders mentioned at the beginning of this chapter in terms of what takes place regarding the outcome of their illness when no treatment is used. This needs to be compared to a variety of treatment modalities, and when treatment interventions produce better outcome compared to the natural history of the eating disorder, such a treatment modality may be

considered as effective. The following are criteria which I use to measure the effectiveness of a specific treatment intervention:

1. Symptom relief: Patients who come for treatment suffer from a variety of symptoms that can be measured and recorded with the psychiatric interview, the Mental Status Examination, and a variety of scales such as the Eating Disorders Inventory (EDI) (Garner, Olmsted & Polivy, 1983), the Zung Scale for rating Anxiety (Zung, 1971), and the Zung Scale for rating Depression (Zung, 1965). There should be an easing of these symptoms in terms of intensity, frequency, and effect on the patient's ability to function adaptively with the activities of daily living.
2. Behavioral change: I expect to see improvement in the patient's ability to form healthy, interpersonal relationships, their social skills, their ability to hold a job, to be gainfully employed (for adults), and perform academically (for adolescents).
3. Improvement in self-esteem: I expect to see a change in the patient's sense and stability of a positive self-image which can be reflected in the sentence completion test, the psychiatric interview and specific projective testing such as the Thematic Apperception Test (TAT).
4. Body image: The patient's body image should move from a distortion to a realistic assessment and perception of the patient's body image. This can be evaluated by the use of the Mental Status Examination (MSE), as well as the Eating Disorders Inventory (EDI), and the Draw a Person Test (DAP).

Some of these assessments may also be done with the aid of hypnoanalytic exploratory techniques such as ideomotor signalling. All of the assessments can be supplemented by data collected from close family members who know the patient prior to the treatment, during the treatment, and after the treatment intervention has been completed; this will help assess how the patient has changed.

REFERENCES

- Baker, E. L. & Nash, M. R. (1987). Applications of hypnosis in the treatment of anorexia nervosa. *Am. J. Clin. Hypn.*, **29**, 185–193.
- Barnett, E. (1981). *Analytical Hypnotherapy; Principles and Practice*. Kingston, Ontario: Junica.
- Beahrs, J. (1982). *Unity and Multiplicity: Multilevel Consciousness of Self in Hypnosis, Psychiatric Disorders and Mental Health*. New York: Brunner/Mazel.
- Bernstein, E. M. & Putnam, F. W. (1986). Development, reliability and validity of a dissociation scale. *J. Nerv. Ment. Dis.*, **174**, 727–735.
- Bernstein-Carlson, E., Putnam, F. W., Ross, C. A., Torem, M., Coons, P., Dill, D. L., Loewenstein, R. J. & Braun, B. G. (1993). Validity of the Dissociative Experiences Scale in screening for multiple personality disorder: A multicenter study. *Am. J. Psychiat.*, **150**, 1030–1036.

- Brown, D. P. & Fromm, E. (1986). *Hypnotherapy and Hypnoanalysis*. NJ: Lawrence, Erlbaum. Hillsdale.
- Bruch, H. (1973). *Eating Disorders: Obesity, Anorexia Nervosa and the Person Within*. New York: Basic Books.
- Bruch, H. (1974). Eating disturbances in adolescence. In S. Arieti (Ed.), *American Handbook of Psychiatry* (pp. 275–286). New York: Basic Books.
- Bruch, H. (1978). *The Golden Cage: The Anima Of Anorexia Nervosa*. Cambridge, MA: Harvard University Press.
- Chandarana, P. & Malla, A. (1989). Bulimia and dissociative states: a case report. *Can. J. Psychiat.*, **34**, 137–139.
- Channon, L. D. (1981). Modification of the affect-bridge technique in weight control. *Aust. J. Clin. Exp. Hypn.*, **9**(1), 42–43.
- Cheek, D. P. & Le Cron, L. M. (1968). *Clinical Hypnotherapy*. New York: Grune & Stratton.
- Council, J. R. (1986). Exploring the interface of personality and health: Anorexia nervosa, bulimia and hypnotic susceptibility. *Behav. Med. Abstracts*, **7**, 165–168.
- Damlouji, N. F. & Ferguson, J. M. (1985). Three cases of post-traumatic anorexia nervosa. *Am. J. Psychiat.*, **142**, 362–363.
- Doyle, M. M. (1996). Practical management of eating disorders. *Proc. Nutr. Soc.*, **54**, 711–719.
- Edelstein, M. G. (1982). Ego-state therapy in the management of resistance. *Am. J. Clin. Hypn.*, **25**, 15–20.
- Erickson, M. (1985). The case of Barbie: An Ericksonian approach to the treatment of anorexia nervosa. *Transact. Anal. J.*, **15**, 85–92 (originally published in J. K. Zeig (Ed.), 1980. *A Teaching Seminar with Milton H. Erickson*. New York: Brunner/Mazel).
- Evans, J. (1982). *Adolescent and Pre-adolescent Psychiatry*. New York: Academic Press.
- Frederick, C. & Phillips, M. (1992). The use of hypnotic age progressions as interventions with acute psychosomatic conditions. *Am. J. Clin. Hypn.*, **35**, 89–98.
- Garner, D. M., Olmsted, M. P. & Plivy, J. (1983). *Eating Disorder Inventory (EDI)*. Odessa, FL: Psychological Assessment Resources.
- Goodwin, J. (1988). Eating disorders as a response to multimodal child abuse. Paper presented at the Fifth International Conference on Multiple Personality and Dissociative States. Chicago, Illinois.
- Goodwin, J. M. & Attias, R. (1993). Eating disorders in survivors of multimodal childhood abuse. In R. P. Kluft & C. G. Fine (Eds), *Clinical Perspectives on Multiple Personality Disorder* (pp. 327–341). Odessa, FL: American Psychiatric Press.
- Griffith, R. A. (1989). Hypnbehavioral treatment for bulimia nervosa: Preliminary findings. *Aust. J. Clin. Exp. Hypn.*, **17**, 79–87.
- Gross, M. (1984). Hypnosis in the therapy of anorexia nervosa. *Am. J. Clin. Hypn.*, **26**, 175–181.
- Gutwill, S. (1994). Eating problems in patients with multiple personality disorder. In C. Bloom, A. Gilter, S. Gutwill, L. Kogel & L. Zaphiroponlos (Eds), *Eating Problems* (pp. 227–272). New York: Basic Books.
- Haller, E. (1992). Eating disorders: A review and update. *West. J. Med.*, **157**, 658–662.
- Hammond, C. (1987). 'The Red Balloon Technique.' In the *Newsletter* of the American Society of Clinical Hypnosis, **XXVIII**(2):3, From the Editor's Notebook, October.
- Hartland, J. (1965). The value of ego-strengthening procedures prior to direct symptom removal under hypnosis. *Am. J. Clin. Hypn.*, **8**, 89–93.
- Hartland, J. (1971). Further observations on the use of ego-strengthening techniques. *Am. J. Clin. Hypn.*, **14**, 1–8.
- Janet, P. (1919). *Les mediations psychologiques*. Paris: Felix Alcan (English edition: *Psychological Healing*, Vol. 2. New York, Macmillan, 1925).

- Janet, P. (1907). *The Major Symptoms of Hysteria*. London: Macmillan. Second edition, 1920: (facsimile of this edition published New York, Hafner, 1965).
- Kluft, R. P. (1991). Clinical presentations of Multiple Personality Disorder. *Psychiat. Clinics N. America*, **14** (3), 605–630.
- Kroger, W. & Fezler, W. (1976). *Hypnosis and Behavior Modification: Imagery Conditioning*. Philadelphia, PA: J. B. Lippincott.
- McFarlane, A. C., McFarlane, C. M. & Gilchrist, P. N. N. (1988). Post-traumatic bulimia and anorexia nervosa. *Int. Eat. Disord.*, **7**, 705–708.
- Meichenbaum, D. (1977). *Cognitive-Behavior Modification*. New York: Plenum Press.
- Minuchin, S., Rosman, B. & Baker, L. (1978). *Psychosomatic Families: Anorexia Nervosa in Context*. Cambridge, MA: Harvard University Press.
- Newey, A. B. (1986). Ego-state therapy with depression. In B. Zilbergeld, M. G. Edelstein & D. L. Araoz (Eds), *Hypnosis: Questions and Answers* (pp. 197–203). New York: Norton.
- Pettinati, H. M., Horne, R. J. & Staats, J. M. (1982). Hypnotisability of anorexia and bulimia patients (abstract). *Int. J. Clin. Exp. Hypn.*, **30**, 332.
- Pettinati, H. M., Horne, R. J. & Staats, J. M. (1985). Hypnotisability in patients with anorexia nervosa and bulimia. *Arch. Gen. Psychiat.*, **42**, 1014–1016.
- Pettinati, H. M., Kogan, L. G., Margolis, C. et al. (1989). Hypnosis, hypnotisability, and the bulimic patient. In L. M. Hornyak & E. N. Baker (Eds), *Experiential Therapies for Eating Disorders*. New York: Guilford Press.
- Putnam, F. W., Bernstein-Carlson, E., Ross, C. A., Anderson, G., Clark, P., Torem, M. S. et al. (1996). Patterns of dissociation in clinical and nonclinical samples. *J. Nerv. Ment. Dis.*, **184** (11), 673–679.
- Ross, C. A. (1989). *Multiple Personality Disorder*. New York: Wiley.
- Sanders, S. (1986). The perceptual alteration scale: A scale measuring dissociation. *Am. J. Clin. Hypn.*, **29**, 95–102.
- Schwartz, R. C., Barrett, M. J. & Saba, G. (1985). Family therapy in bulimia. In D. M. Garner & P. E. Garfinkel, P. E. (Eds), *Handbook of Psychotherapy for Anorexia Nervosa and Bulimia*. New York: Guilford Press.
- Spiegel, H. & Bridger, A. A. (1970). *Manual for the Hypnotic Induction Profile*. New York: Soni Medica.
- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment: Clinical Uses of Hypnosis*. New York: Basic Books.
- Stanton, H. (1975). Ego-enhancement through positive suggestion. *Aust. J. Clin. Exp. Hypn.*, **3**, 32–35.
- Stanton, H. (1979). Increasing internal control through hypnotic ego-enhancement. *Aust. J. Clin. Exp. Hypn.*, **7**, 219–223.
- Stanton, H. (1989). Ego-enhancement: A five-step approach. *Am. J. Clin. Hypn.*, **31**, 192–198.
- Torem, M. S. (1984). Anorexia nervosa and multiple dissociated ego states. Presented at the 1st International Conference on Multiple Personality and Dissociate States. Chicago Illinois, Sept.
- Torem, M. S. (1986a). Dissociative states presenting as an eating disorder. *Am. J. Clin. Hypn.*, **29**, 137–142.
- Torem, M. S. (1986b). Psycho-dynamic ego-state therapy for eating disorders. *New Dis. Ment. Health Serv.*, Fall (31), 99–107.
- Torem, M. S. (1987). Ego-state therapy for eating disorders. *Am. J. Clin. Hypn.*, **30**, 94–103.
- Torem, M. S. & Curdue, K. (1988). PTSD presenting as an eating disorder. *Stress Med.*, **4**, 139–142.
- Torem, M. S. (1989a). Ego-state hypnotherapy for dissociative eating disorders. *Hypnos*, **16**, 52–63.

- Torem, M. S. (1989b). Eating disorders in MPD patients. Paper presented at the annual meeting of the American Society of Clinical Hypnosis. Nashville, Tennessee, USA.
- Torem, M. S. (1990). Covert multiple personality underlying eating disorders. *Am. J. Psychother.*, **44**, 357–368.
- Torem, M. S. (1991). Eating disorders. In W. C. Wester & D. J. O'Grady (Eds), *Clinical Hypnosis with Children* (pp. 230–257). New York: Brunner/Mazel.
- Torem, M. S. (1992). Therapeutic imagery enhanced by hypnosis. *Psychiat. Med.*, **10**, 1–12.
- Torem, M. S. (1993). Eating disorders in patients with multiple personality disorder. In R. P. Kluft & C. G. Fine (Eds), *Clinical Perspectives on Multiple Personality Disorder* (pp. 343–353). Washington DC: American Psychiatric Press.
- Torem, M. S. (1993). Therapeutic writing as a form of ego-state therapy. *Am. J. Clin. Hypn.*, **35**, 267–276.
- Torem, M. S., Egtvedt, B. D. & Curdue K. J., (1995). The Eye Roll Sign and the PAS Dissociation Scale. *Am. J. Clin. Hypn.*, **38**, 122–125.
- Vanderlinden, J. & Vandereycken, W. (1988). The use of hypnotherapy in the treatment of eating disorders. *Int. Eat. Dis.*, **7**, 673–679.
- Vanderlinden, J. & Vandereycken, W. (1990). The use of hypnosis in the treatment of bulimia nervosa. *Int. J. Clin. Exp. Hypn.*, **38**, 101–111.
- Vanderlinden, J., Norre, J. & Vandereycken, W. (1992). *A Practical Guide to the Treatment of Bulimia Nervosa* (pp. 113–135). New York: Brunner/Mazel.
- Walch, S. L. (1976). The Red Balloon Technique of Hypnotherapy: A clinical note. *Int. J. Clin. Exp. Hypn.*, **24**, 10–12.
- Walsh, B. T. (1997). Eating disorders. In A. Tasman, J. Kay & J. Lieberman (Eds), *Psychiatry* (pp. 1202–1216). Philadelphia, PA: W. B. Saunders.
- Watkins, H. H. (1978). Ego-state therapy. In J. G. Watkins (Ed.) *The Therapeutic Self* (pp. 360–398). New York: Human Sciences Press.
- Watkins, H. H. (1980). The silent abreaction. *Int. J. Clin. Exp. Hypn.*, **28**, 101–113.
- Watkins, H. H. (1984). Ego-state therapy. In R. J. Corsini (Ed.), *Encyclopedia of Psychology*, Vol. 1, (pp. 420–421). New York: Wiley.
- 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.
- Watkins, J. G. & Watkins, H. H. (1981). Ego-state therapy. In L. E. Abt & I. R. Stuart (Eds), *The Newer Therapies: A Sourcebook* (pp. 136–155). New York: Van Nostrand Reinhold.
- Yager, J. (1994). Eating disorders. In Alan Stoudemire (Ed.), *Clinical Psychiatry for Medical Students* (pp. 355–371). Philadelphia, PA: JB Lippincott.
- Yapko, M. D. (1984). *Trancework: An Introduction to Clinical Hypnosis*. New York: Irvington Press.
- Yapko, M. D. (1986). Hypnotic and strategic interventions in the treatment of anorexia nervosa. *Am. J. Clin. Hypn.*, **28**, 224–232.
- Zung, W. W. K. (1965). A self-rating depression scale. *Arch. Gen. Psychiat.*, **12**, 63–70.
- Zung, W. W. K. (1971). A rating instrument for anxiety disorders. *Psychosom.*, **12**, 371–379.

Hypnotherapy in Obesity

JOHAN VANDERLINDEN

University Center St-Josef, Belgium

INTRODUCTION

In this chapter, we review the possibilities and limitations of hypnosis and hypnotherapeutic techniques in the treatment of obesity. Note that hypnosis is not used alone as a separate treatment such as, for instance, behavioral or family therapy: hypnotherapeutic techniques should always be combined with and integrated into an existing therapeutic model. Hypnosis is therefore always part of a multidimensional approach, since it is assumed nowadays that biological and psychological factors can function in combination as pathogenic factors in the development of eating problems. Our own approach (Vanderlinden, Norré & Vandereycken, 1992) can be characterized as a form of directive therapy: the therapy is pragmatically oriented and eclectically inspired. The approach contains, among others, behavioral, cognitive, and interactional components.

PROGNOSTIC FACTORS

Obesity or corpulence, meaning an excessive percentage of body fat, has grown into a gigantic problem in recent years. Epidemiological studies give the fraction of obese people in the United States as 35% of the total population, whereas in Europe figures range from 10 to 25%. There is a considerable number of theories about the etiology of this problem, but they will not be discussed here (for an overview see Beumont, Burrows & Casper, 1988). However, it is generally accepted that the influence of physiological, biological and genetic factors may be much more important than was initially presumed. Overall, five separate factors have been identified in the literature as having a favorable prognosis (Smith & Fremouw, 1987):

1. It is well documented in the literature that rigorous restriction of calorie intake causes a 15–30% reduction in the basal metabolic rate. This puts a strong

check on the possibility of weight loss. A higher metabolism is therefore favorable in prognosis.

2. Regular movement and physical exercise increase metabolism and accelerate weight loss through a series of mechanisms. Therefore physical exercise is an absolute indication.
3. A minimal past history of attempted dieting increases the chances of successful weight reduction. Obese patients with past histories of frequent and severe dieting have a poor prognosis.
4. A fourth factor deals with the onset of the weight problems. If obesity commences during childhood, this results mainly in an increase of the number of fat cells and this appears to be irreversible and very unfavorable for prognosis. On the other hand, subjects who develop obesity after adolescence have a much better prognosis, since this has an influence only on the size of the fat cell, which is reversible.
5. A final factor concerns the content of the diet. Patients going on a low-carbohydrate diet develop an irresistible urge for this sort of food (sugar, starch), which can then result in binges of all kinds of 'forbidden food', a well-known phenomenon in dieting subjects. It is therefore important that carbohydrates should be included in the diet in order to prevent relapse.

Apart from this, it should be mentioned that successful treatment correlates favorably with long-term treatment, an experienced therapist, rigorous following of the diet, physical exercise and sport, as well as cooperation of the family (Bennet, 1986). The hypnotherapist should carefully assess the presence or absence of these five prognostic factors and reckon with these data in planning the treatment. For a considerable group of patients, this can mean that weight reduction is either not a realistic goal, or that the aim of treatment should be adapted; for instance to learn to accept themselves as overweight, instead of pursuing weight reduction.

RESEARCH ON HYPNOSIS

The literature on obesity has been swamped in recent years with very pessimistic and negative treatment results, especially regarding the long-term outcome of treatment (Garner & Wooley, 1991). Unlike the situation with anorexia nervosa and bulimia, hypnotherapists have been intensively engaged in the treatment of obesity (see Vanderlinden & Vandereycken, 1988). Many success stories have been reported in the hypnotherapeutic literature, but these are often reports on a very small number of patients. In addition, they deal with short-term treatment results, and long-term follow-up data are almost completely lacking (Mott & Roberts, 1979; Wadden & Anderton, 1982). Apart from this, most researchers use only one criterion for evaluation, namely weight reduction, while alterations in psychological characteristics such as body image, self-esteem and other criteria are totally

overlooked. Many reports display serious shortcomings in the description of relevant patient characteristics, such as onset of obesity (during childhood, youth or adulthood), presence of individual psychopathology, past history of dieting, and prior treatments. This strongly hampers the interpretation and comparison of treatment results.

The most popular treatment seems to be the combination of a cognitive-behavioral approach and hypnotherapy. In most of these studies, no relation between hypnotizability and weight loss has been detected (Aja, 1977; Cohen & Alpert, 1978; Deyoub, 1978, 1979a,b; Kroger, 1970; Miller, 1974; Spiegel & DeBetz, 1978; Stanton, 1975; Wadden & Flaxman, 1981). In contrast with these findings, other researchers (Anderson, 1985; Barabasz & Spiegel, 1989) have shown a greater weight reduction in more highly hypnotizable patients. When individual versus group therapy using hypnosis were compared, no difference in weight reduction was found (Collins, 1985); nor did the sex of the therapist—male or female—appear to have any influence on weight reduction.

In a critical review, Wadden & Anderton (1982) stated that hypnosis can achieve the same average weekly weight reduction as behavior therapy. They concluded that hypnosis induction adds nothing essential to the treatment of obesity and that 'hypnosis does not appear to be of unique value for weight reduction'. This position has since been refuted by several researchers. In three controlled comparative surveys, a combination of behavioral therapy and hypnotherapy appeared to be superior to a behavioral therapy approach for weight reduction and this lasted in a follow-up after 3 months (Barabasz & Spiegel, 1989), after 6 months (Cochrane & Friesen, 1986) and after 2 years (Bolokofsky, Spinler & Coulthard-Morris, 1985). Moreover, Kirsch, Montgomery & Sapirstein (1995) recently performed a meta-analysis on a series of studies in which cognitive-behavioral therapy was compared with the same therapy supplemented by hypnosis. The results clearly indicated that the addition of hypnosis substantially enhanced treatment outcome. Effects seemed particularly pronounced in obesity, especially at long-term follow-up, indicating that unlike those in nonhypnotic treatment, clients to whom hypnotic inductions had been administered continued to lose weight after treatment was ended. The authors conclude that these results were particularly striking because of the few procedural differences between the hypnotic and nonhypnotic treatments. These results are encouraging and can hopefully stimulate more therapists to incorporate hypnotic techniques in their treatment of obesity.

In most studies, the hypnotherapeutic techniques employed were very simple. Barabasz & Spiegel (1989) taught the patients a self-hypnosis exercise and, for the rest, made use only of the Spiegel & Spiegel procedure (1978), such as recommended in stopping smoking behavior: 'overeating is harmful to your health and poisons your body'. Bolokofsky, Spinler & Coulthard-Morris (1985) also taught self-hypnosis and suggested during the trance that their patients should respect the agreements made on their eating behavior and weight. Cochrane & Friesen (1986) developed a much more comprehensive program in three phases: in the first phase,

basic hypnotic skills were taught and possible unconscious motives for overeating were explored through imagination exercises during hypnosis; in phase two, patients were given instructions for alternative and effective behaviors through fantasy exercises, in order to solve their underlying problems; and in the third phase, hypnosis was employed especially for enhancing motivation, ego-strengthening and to further elaborate new, alternative strategies. Patients were very strongly encouraged to continue the different hypnosis exercises after termination of the 6 months duration of treatment (Cochrane, 1987).

CONCRETE APPLICATIONS OF HYPNOTIC TECHNIQUES

In the following section of this chapter, an overview of different hypnotherapeutic strategies and suggestions will be presented in relation to the different treatment phases (see Vanderlinden, Norré & Vandereycken, 1992).

BEGINNING PHASE

Teaching Relaxation

Many obese patients are often very tense and have learned to reduce this tension through excessive eating. It is therefore useful to teach a self-hypnosis exercise for relaxation and as an alternative coping strategy for overeating. Patients will be strongly encouraged to practice their self-hypnosis daily by means of an audiocassette. To introduce hypnosis, we use a classical induction technique with eye fixation and deepening suggestions. Next, the patient will be asked to imagine herself in a safe, secret place, wherein she can become even more and more relaxed and further reflect upon the things in her (or his) life that are important right now.

Teaching Self-control Techniques

Hypnotic techniques will be introduced to help the patient in gaining self-control over the eating pattern (Wright & Wright, 1987). The patient can be asked to identify situations wherein they lose control over their eating behavior. Usually, the bingeing behavior will take place in specific situations. Hence a suggestion will be made for the patient to identify the triggers (either internal, such as a mood state or external, such as the availability of food) that may provoke their bingeing behavior and be taught new strategies for control.

During hypnosis, suggestions can be made, for instance (see also Coman & Evans, 1995):

1. To reduce food quantity.
2. To eat at fixed times and places.
3. To observe their diet rigorously.

4. To restrict the purchase of food supplies.
5. To evoke aversive responses, such as sickness and disgust, when eating high-calorie food.

Teaching Normal Eating Habits

Most obese people have eating habits that differ strongly from those of normal weight people. They often eat almost automatically, half-consciously and very quickly. Teaching how to return to normal eating habits is therefore an important part of the treatment. This can first be taught during hypnosis. Patients are asked to imagine they are sitting quietly at a table, enjoying their meal slowly, bite after bite, to be chewing the food slowly in their mouth and enjoying the various flavors. At the same time, post-hypnotic suggestions can be made to eat quietly at home as well. This way, eating can become an art: the patient will enjoy food more and more, and eating can again become a pleasurable activity.

Example

After hypnosis induction, the patient can be asked to describe the food that lies on the table and how it smells. Next, the following suggestions can be given:

And when your stomach is signaling you that you are hungry, first decide what you are going to eat and how much . . . OK now you can take your first bite and try to concentrate on what you are tasting. Maybe you'll discover all kind of new flavors during your breakfast. Try to eat as slowly as possible and hence you may learn to enjoy eating much longer than ever before . . . And bite after bite, you may become more and more aware how nice it is to eat slowly, while concentrating more and more on all the sensations in your body . . . All the different flavors and odors . . . And when your stomach signals to you that it is filled with food, you can become aware of an ever increasing feeling of fullness in your stomach, so that you can stop eating and be pleased with yourself, completely satisfied until your next meal and pleased with this very new experience . . .

Awakening Interoceptive Sensations

Obese patients often have to be made conscious again of feelings of hunger and satiation, which can be suggested and taught systematically during the trance. After hypnosis induction, the patient can be asked to concentrate on the feelings in her stomach. Suggestions can be given on how the stomach can communicate to the patient that it is empty, or when it is full and satiated. Other suggestions may be: 'Hunger will help me to signal when it is time to eat my meal, and the feeling of hunger will help me to enjoy my meal. And while enjoying my meal, I will develop a better contact with my stomach, I can concentrate on the feelings in my stomach

and become aware with every bite I take, how my stomach tells me that it is filled with food . . .’

Physical Exercise

Since physical exercise to increase metabolism is of crucial importance for promoting weight loss, the patient will receive a suggestion to start with more and regular movement during a hypnosis exercise. After hypnosis induction the patient is asked to imagine that she is for instance riding a bicycle. While cycling, suggestions are given to become more and more relaxed, reaching a deeper state of trance and/or relaxation. This exercise aims also to motivate the patient to start cycling (with a home-trainer) in the actual situation at home.

An alternative to the classical induction technique is active-alert hypnosis (Banyai, Zseni & Tury, 1993). In this method the hypnotic subject rides a bicycle ergometer (home-trainer) with eyes open throughout the whole hypnotic session. While cycling, verbal suggestions are given to enhance alertness, attentiveness and a feeling of freshness. This exercise combines different goals: increasing actual metabolism, learning to relax while cycling and enhancing motivation for doing physical exercise. For several years active-alert hypnosis on a bicycle has become a basic strategy in our treatment of obesity.

Example

When the patient starts pedalling on the bicycle, the following suggestions can be given:

And now that you have started pedalling, you can listen to my voice and concentrate on all the sensations in your body . . . And while you are pedalling continuously, you can become more and more aware of the rhythmic movement of your muscles, especially your legs. Try to concentrate more and more on the rhythmic movement of your legs, . . . Maybe you will notice how this movement, the pedalling, will become more and more automatic, how cycling becomes easier. After a while you will maybe notice how your legs perform the pedalling more and more easily, you will be able to pedal the bicycle in a more relaxed fashion, easily and automatically. The physical exercise can increase your metabolic rate and help you to burn your calories . . . And the more you cycle, the more you may have the feeling as if your legs become independent of your body. Your legs move automatically . . . And while you are breathing in the fresh air, your head can feel lighter and clearer, you can concentrate more and more easily, and start to feel more and more relaxed . . . and become aware more and more of your inner resources . . .

In only a small number of patients will teaching self-control and relaxation succeed in helping them to change their eating behavior and weight. In most of the obese patients we are working with, the uncovering and exploring of the meaning or

function of obesity in the patient's past and present life situation is of crucial importance. This may reveal issues we have to deal with in the following phase.

MIDDLE PHASE

Altering Cognitions

A whole series of cognitions may contribute to the maintenance of obesity, such as the attitude toward eating, poor self-esteem and the way they perceive and experience their bodies. The Spiegel & Spiegel technique (1978) described earlier, where suggestions are given that 'overeating is harmful and poisons the body', may help the patient to change their attitude toward overeating. Meanwhile, patients can once again become conscious of feelings of hunger and satiation, which can be suggested systematically during the trance (Kroger, 1970).

Obese patients very often have strong feelings of inferiority, they feel weak and powerless against their problem. They may perceive and experience their body as a great threat and even have feelings of disgust toward their body. During hypnosis, ego-strengthening suggestions can be made in order to favorably influence the sense of self-esteem (Brown & Fromm, 1987).

Patients can be given the suggestion to look at their body in a mirror and to evaluate it more positively. Patients with chronic obese problems can be invited during a guided imagery exercise to imagine themselves in a world where being overweight is highly valued.

Example

Karen, a 42-year-old unmarried secretary, entered therapy for a dramatic weight problem. Karen started therapy at 300 pounds and lost only 20 pounds after a year and a half of intensive psychotherapy. Her weight problem had originated in early childhood and in the past she had tried all kinds of diet. Each time when starting eating normally again, she put on weight immediately . . . Because of her severe weight problem, she locked herself up in her apartment and only left her flat to go to work. She had extreme feelings of inferiority. Firstly, self-hypnosis was taught by means of an audiotape. We discovered that Karen had moderate to good hypnotic capacities. Since we had learnt from her weight history that losing weight would be very difficult, we decided to introduce hypnosis to alter her negative feelings and feelings of inferiority about herself. We invited Karen to imagine herself, during hypnosis, in a world where being overweight was highly valued:

And now that you are feeling more and more relaxed and comfortable, I would like to invite you to make a trip to a country where most women are overweight and where being overweight is highly valued . . . In this society all women have to be obese . . . To be attractive, you have to be obese. It may be a funny or confusing experience right now, since everything is so different here . . . But listen to all the positive comments

people are making about you ... Being plump can become a completely new experience. You may start to look at your body in a different way ... More positively ...

Strengthening Motivation

Obese patients are easily discouraged and often think of giving up the treatment. A minimal weight increase is often perceived as a true catastrophe. Direct suggestions can be given to strengthen motivation.

Example

And now that you have learned to respect your body by balanced eating and physical exercise, you will become even more and more aware, day after day, how important regular eating and physical exercise will remain for you for the rest of your life ... How practicing self-hypnosis daily, will help you to stabilize your weight and help you to feel relaxed, comfortable and pleased with yourself. By now, you may have noticed how all these new behaviors and efforts, have become a kind of habit and are happening automatically, and hence don't demand much effort anymore ...

The strategy of positive and negative consequences (Wright & Wright, 1987) as well as future-oriented fantasy exercises can be employed equally to strengthen motivation and to prepare the patient for a possible relapse.

Example

Joanna, a 37-year-old woman, entered the treatment program at 220 pounds and weighed 185 pounds at a 6-months follow-up and 160 pounds at a 2-year follow-up. Her weight problem started after marriage. She had tried several times to lose weight, but always gave up after some weeks. She grew up in a healthy family and seemed to be happy with her husband. Hence we decided to focus on her weight problem and to teach Joanna not to give up. To strengthen her motivation for the treatment, Joanna was invited to write down all the positive consequences of losing weight. Next these positive consequences were suggested during a hypnosis exercise, together with ego-strengthening suggestions.

And now that you imagine yourself beginning to lose weight, you may become more and more aware of all the positive consequences for you of losing weight. Now that you have started to respect your body and protect it through balanced eating, you may begin to feel healthier in your body, you can buy new clothes that fit well and make you feel more attractive. Maybe you notice how cycling has become easier and easier, just as if your cycling has become automatic. You may start to gain more self-confidence, since people give you more and more positive comments ... And this exercise may help you to become even more and more aware of all the positive future consequences of continued balanced eating and physical exercise ... Your willpower to reach your goal can become even stronger.

Exploring Ambivalence Toward Change

The combination of behavioral and hypnotherapeutic techniques may lead to merely a temporarily favorable result in some patients, and to none at all in others. An important number of patients will become anxious and/or depressed when they start to lose weight. The therapist may notice that the patient does not continue to carry out the agreements, and may give the impression of unconsciously undermining any progress. In that situation, different kinds of hypno-analytic techniques can be employed (see Edelstein, 1982), in order to explore possible unconscious obstacles and resistances to further weight loss, such as ideomotor questioning with the seven questions of Le Cron (Cheek & Le Cron, 1968). In women with a strong resistance toward change—usually those who are chronically or massively obese—we often discover that the patient's obesity conceals traumatic events and/or unsolved conflicts of a highly emotional nature. These traumatic events might be incest, rape, physical abuse, extreme emotional neglect and lack of affection, or involvement in chronic marital discord (Vanderlinden, 1993). Besides the technique of ideomotor questioning, we often use ego-state therapy (Watkins & Watkins, 1982) to communicate with that part of the patient that is afraid to lose weight, that induces the overeating, or that is sabotaging the treatment.

Example

Laura, a 38-year-old married woman with a severe obesity problem (250 pounds), responds enthusiastically to the suggested self-control procedures and she practices her self-hypnosis several times a day. As soon as she starts to lose weight, as she regains more control over her eating pattern, Laura becomes more and more depressed and no longer follows the agreements that had been made. She says that 'one part inside doesn't want to cooperate anymore'. We then propose to her to explore the ambivalent attitude by means of ideomotor questioning (with finger signaling and ego-state therapy).

TERAPIST: While you are enjoying your trance state, you can become more in touch with that 'part' in you that makes you feel depressed and forces you to overeat, when you are alone.

Further exploration during hypnosis revealed that one part called 'sadness, helplessness and anger' came in Laura's life (at the age of 4) when she felt emotionally rejected by her parents and when she saw her father beating her mother. During hypnosis she discovers how eating helped her to freeze all these negative feelings and to distance herself from the escalating fights between her parents. She further discovers how overeating became her way of dealing with feelings of loneliness and being rejected, that she experiences every evening when she comes home after work. Thereafter, the working through of these

traumatic memories and feelings became an essential part in Laura's treatment. In the following sessions, Laura was exposed under hypnosis to her traumatic memories and feelings, until extinction of the intensity of the emotions was reached (see Vanderlinden & Vandereycken, 1997). Meanwhile, she was invited to comfort herself as a child and to provide support whenever she felt lonely and rejected. The therapy lasted for about 2 years. At a 1-year follow-up, her weight was decreased by 60 pounds (now 190 pounds), but problems had developed in her marriage.

FINAL PHASE: PREVENTION OF RELAPSE

Most treatments are exclusively aimed at quick weight reduction and ignore the crucial goal, namely weight stabilization and prevention of relapse. Relapse is probably the most frequently quoted problem in the treatment of obesity. A follow-up lasting 1 to 2 years is therefore absolutely indicated to prevent possible relapse. The patient will have to be regularly encouraged and stimulated to follow the agreements and to practice hypnotic exercises on a daily basis. Physical exercise and sport must be practiced every day. Post-hypnotic suggestions can further be offered to strengthen and reinforce daily commitment to the agreements. In the near future, computer programs designed to better master obesity problems, may become very helpful in this regard.

CONCLUSION

Clinical experience together with some research data (Kirsch, Montgomery & Sapirstein, 1995) demonstrate that the involvement of hypnotic techniques in a multidimensional treatment of obesity offers several important advantages. Hypnotic techniques can very easily be combined with a cognitive-behavioral therapeutic approach. Hypnotic techniques can facilitate the process of therapy as well as directing it towards a favorable outcome (Vanderlinden & Vandereycken, 1990). Hypnotic techniques are particularly helpful in obese patients with bingeing behaviors.

Despite optimistic reports on the long-term efficacy of a combined cognitive-behavioral and hypnotherapeutic approach in obesity, more research is urgently needed to investigate those variables that might predict when hypnosis would be helpful. More comparative research is needed on larger samples, where not only weight change is studied, but different psychological characteristics and factors are also examined. This kind of research may give definite answers to the question of how much hypnotic techniques can contribute to a more effective treatment of obesity.

REFERENCES

- Aja, J. H. (1977). Brief group treatment of obesity through ancillary self-hypnosis. *Am. J. Clin. Hypn.*, **19**, 231–234.
- Anderson, M. S. (1985). Hypnotizability as a factor in the hypnotic treatment of obesity. *Int. J. Clin. Exp. Hypn.*, **33**, 150–159.
- Banyai, E. I., Zseni, A. & Tury, F. (1993). Active-alert hypnosis in psychotherapy. In J. W. Rhue, S. J. Lynn & J. Kirsch (Eds), *Handbook of Clinical Hypnosis*. Washington, DC: American Psychological Association.
- Barabasz, M. & Spiegel, D. (1989). Hypnotizability and weight loss in obese subjects. *Int. J. Clin. Eat. Dis.*, **8**, 335–341.
- Bennett, G. A. (1986). Behavior therapy for obesity: A quantitative review of the effects of selected treatment characteristics on outcome. *Behav. Ther.*, **17**, 555–562.
- Beumont, P. J. V., Burrows, G. A. & Casper, R. C. (Eds) (1988). *Handbook of Eating Disorders. Part 2: Obesity*. Amsterdam: Elsevier.
- Bolokofsky, D. N., Spinler, D. & Coulthard-Morris, L. (1985). Effectiveness of hypnosis as an adjunct to behavioral weight management. *J. Clin. Psychol.*, **41**, 35–41.
- Brown, D. P. & Fromm, E. (1987). *Hypnosis and Behavioral Medicine*. London: Laurence Erlbaum.
- Cheek, D. & Le Cron, L. (1968). *Clinical Hypnotherapy*. New York: Grune & Stratton.
- Cochrane, G. J. (1987). Hypnotherapy in weight-loss treatment: Case illustrations. *Am. J. Clin. Hypn.*, **30**, 20–27.
- Cochrane, G. J. & Friesen, J. (1986). Hypnotherapy in weight loss. *J. Consult. Clin. Psychol.*, **54**, 489–492.
- Cohen, N. L. & Alpert, M. (1978). Locus of control as a predictor of outcome in treatment of obesity. *Psychol. Rep.*, **42**, 805–806.
- Collins, J. K. (1985). Hypnosis, body image and weight control. In S. W. Touyz & P. Beumont (Eds), *Eating Disorders: Prevalence and Treatment*. Sydney: Williams & Wilkins.
- Coman, G. J. & Evans, B. J. (1995). Clinical update on eating disorders and obesity: Implications for treatment with hypnosis. *Aust. J. Clin. Exp. Hypn.*, **23**, 1–13.
- Deyoub, P. L. (1978). Relation of suggestibility to obesity. *Psychol. Rep.*, **43**, 175–180.
- Deyoub, P. L. (1979a). Hypnosis in the treatment of obesity and the relation of suggestibility to outcome. *J. Am. Soc. Psychosom. Dent. Med.*, **26**, 137–149.
- Deyoub, P. L. (1979b). Hypnotizability and obesity. *Psychol. Rep.*, **45**, 974.
- Edelstein, M. G. (1982). *Trauma, Trance And Transformation: A Clinical Guide To Hypnotherapy*. New York: Brunner/Mazel.
- Garner, D. M. & Wooley, S. C. (1991). Confronting the failure of behavioral and dietary treatments for obesity. *Clin. Psychol. Rev.*, **11**, 729–780.
- Kirsch, I., Montgomery, G. & Sapirstein, G. (1995). Hypnosis as an adjunct to cognitive behavioral psychotherapy: A meta-analysis. *J. Consult. Clin. Psychol.*, **63**, 2.
- Kroger, W. S. (1970). Comprehensive management of obesity. *Am. J. Clin. Hypn.*, **12**, 165–176.
- Miller, J. E. (1974). Hypnotic susceptibility, achievement, motivation and the treatment of obesity (Doctoral dissertation, University of Southern California). *Diss. Abs. Int.*, **35**, 3026–3027B (University Microfilms No 74-28, 456).
- Mott, T. & Roberts, J. (1979). Obesity and hypnosis: A review of the literature. *Am. J. Clin. Hypn.*, **22**, 3–7.
- Smith, M. E. & Fremouw, W. J. (1987). A realistic approach to treating obesity. *Clin. Psychol. Rev.*, **71**, 449–465.
- Spiegel, H. & Debetz, B. (1978). Restructuring eating behavior with self-hypnosis. *Int. J. Obes.*, **2**, 287–288.

- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment: Clinical Uses of Hypnosis*. New York: Basic Books.
- Stanton, H. E. (1975). Weight loss through hypnosis. *Am. J. Clin. Hypn.*, **18**, 94–97.
- Vanderlinden, J. (1993). *Dissociative Experiences, Trauma and Hypnosis. Research Findings and Clinical Applications in Eating Disorders*. Delft: Eburon.
- Vanderlinden, J. & Vandereycken, W. (1988). The use of hypnotherapy in eating disorders. *Int. J. Clin. Eat. Dis.*, **7**, 673–679.
- Vanderlinden, J. & Vandereycken, W. (1990). The use of hypnosis in the treatment of bulimia nervosa. *Int. J. Clin. Exp. Hypn.*, **38**, 101–111.
- Vanderlinden, J. & Vandereycken, W. (1994). The limited possibilities of hypnotherapy in the treatment of obesity. *Am. J. Clin. Hypn.*, **36**, 4, 248–257.
- Vanderlinden, J. & Vandereycken, W. (1997). *Trauma, Dissociation, and Impulse Dyscontrol in Eating Disorders*. New York: Brunner/Mazel.
- Vanderlinden, J. Norré J. & Vandereycken, W. (1992). *A Practical Guide to the Treatment of Bulimia Nervosa*. New York: Brunner/Mazel.
- Wadden, T. A. & Anderton, C. H. (1982). The clinical use of hypnosis. *Psychol. Bull.*, **91**, 215–243.
- Wadden, T. A. & Flaxman, J. (1981). Hypnosis and weight loss: A preliminary study. *Int. J. Clin. Exp. Hypn.*, **29**, 162–173.
- Watkins, J. G. & Watkins, H. M. (1982). Ego-state therapy. In L. E. Abt & L. R. Stuart (Eds), *The Newer Therapies: A Sourcebook*. New York: Van Nostrand Reinhold.
- Wright, M. E. & Wright, B. A. (1987). *Clinical Practice of Hypnotherapy*. New York: Guilford Press.

Hypnotic Interventions in the Treatment of Sexual Dysfunctions

ROBB O. STANLEY and GRAHAM D. BURROWS
University of Melbourne, Australia

The treatment of male and female sexual dysfunctions is a multistage process with each stage important in determining the final success of therapy. Therapy proper starts with diagnosis and evaluation of the aetiology of the disorder, which is usually complex. The need for an effective evaluation of medical, psychiatric, psychological, social and cultural influences is an essential element of proper therapy. Subsequent stages of therapy may use a variety of strategies. The treatment of sexual dysfunction can take a psychodynamic psychotherapy approach, a brief focused eclectic psychotherapy approach, or a cognitive-behavioral approach, and hypnotic assistance to each of these is advantageous. The intention of this chapter is not to review these approaches extensively but rather to consider how hypnosis may be effectively added to them to improve efficacy.

Clinical difficulties in sexual functioning can arise at any phase of the normal sexual response and can come about from a wide variety of causes. The phases represented in normal sexual response are respectively: sexual interest; sexual arousal; sexual penetration; sexual orgasm, post-sexual resolution and post-sexual feelings. At each phase of the emotional and physical response, male sexual functioning may be hindered. Factors involved in the likely aetiology of the respective disorders are dealt with later.

A thorough evaluation of the nature of the disorder and its aetiology benefits from a multidisciplinary approach. With both male and female sexual dysfunction, medical evaluation is an absolute requirement before psychological treatment is commenced as interference with sexual functioning is an early symptom in a number of medical illnesses. General as well as specific genital, urological and neurological disease processes are investigated. Usage of illicit substances, legal recreational drugs and prescribed medication requires clarification. The role of psychiatric disorders and psychological difficulties in the presentation are deter-

mined, as are socio-psychological influences such as cultural expectations and qualities of relationship.

The Diagnostic and Statistical Manual of Mental Disorders (4th edition) (DSM-IV; APA, 1994) details the most commonly used diagnostic criteria for these disorders. Alternatively the World Health Organization's International Classification of Diseases (10th edition) (ICD-10; WHO 1992) allows for the classification of sexual dysfunction by a set of explicit criteria. To be classified as a sexual dysfunction it is essential that the difficulty causes distress to the individual concerned, or results in interpersonal difficulties. The disorder is not classified as a sexual dysfunction if it is the symptom of some other disorder classified elsewhere in the Axis 1 classifications of DSM-IV (e.g. depression or general anxiety).

All disorders are classified by type, that is the phase of the sexual response involved, and along three other dimensions: (a) whether lifelong or acquired; (b) whether generalized or situation specific; and (c) whether due to psychological; or combined psychological and medical causes; general medical condition-related; or substance use-related (prescribed or non-prescribed).

The lack of good epidemiological studies on normal sexual functioning, in particular contemporary studies, means that at all times the diagnosis of a sexual dysfunction relies upon clinical judgement. The presenting patients' culture, ethnicity, social and educational characteristics, age and gender features need to be taken into account in evaluating the appropriateness of the sexual response or behavior. Expectations and behaviors are greatly influenced by socio-cultural factors and it is essential the treating clinician does not impose his/her own expectations and standards onto the patient.

Where possible the clinician will benefit from a full evaluation of the context in which the sexual difficulties arise. The partner's account of the difficulties frequently adds new perspective on the nature and causes of these disorders.

TREATMENT OF SEXUAL DYSFUNCTION—AN INTEGRATED APPROACH

Masters & Johnson (1966, 1970) proposed an approach to the treatment of sexual difficulties that took these problems out of the realm of long-term psychotherapy. Their investigation of sexual functioning, and focused therapy for sexual difficulties, was an important shift in treatment which created the specialty of 'sex therapy'. Their approach was essentially behavioral in its focus and based around the *in vivo* desensitization, anxiety control and positive rehearsal of appropriate intimacy skills, all incorporated into the 'sensate focus' technique.

Kaplan (1974, 1979) later extended the Masters & Johnson (1966, 1970) approach into a more comprehensive eclectic brief psychotherapy model. She proposed a model of brief therapy for sexual dysfunction starting from a psychotherapy base, but incorporating the cognitive-behavioral strategies available

at that time, as an extension of their seminal works. While Kaplan (1974, 1979) does not discuss the potential role of hypnotically based therapies in her excellent work, she does offer an integrated approach into which hypnosis can be added.

Therapeutic intervention for sexual dysfunction involves at least five sequential components. Each builds on and is predicated by the previous stages, and while early stages are seldom sufficient for a successful treatment outcome, not all will be necessary in a particular therapeutic intervention.

The first stage begins with the diagnostic evaluation of the dysfunction within one of the contemporary diagnostic frameworks such as DSM-IV (APA, 1994). The process then begins with the development of a therapeutic intervention based on the aetiology, expectations and wishes of the patient concerned.

The second stage of treatment comes out of the developing rapport and the process of establishing the aetiology. It involves giving the patient and their partner permission to discuss openly in a non-judgemental way sexuality, sexual beliefs, sexual feelings and the general emotional context within which the sexual involvement occurs.

The third phase of treatment is an educative phase, which confirms the appropriate knowledge of the patient or couple, but most importantly corrects any misinformation the patient accepts about their own sexual functioning or responses or 'normality'. Inappropriate beliefs and understanding, while becoming less common, are still frequently implicated in the aetiology or maintenance of sexual difficulties.

The fourth component of treatment involves therapeutic interventions specifically targeting sexual behavior and learning, those most commonly thought of as 'sex therapy'. A therapeutic agreement or contract is established with the patient, or preferably the patient and partner, after an outline of the approach to be undertaken has been given. Once the therapeutic intervention is embarked upon through the cooperative effort of therapist and patient or couple, ongoing re-evaluation is essential to determine whether further information relevant to the aetiology has emerged in the process of therapy. Assessment of the outcome at each stage of treatment is a useful feedback mechanism to assist the therapist and patient or couple in refining the therapy focus. It is in this area that hypnosis may assist, incorporating its advantages with other therapy approaches.

If resistance to therapy or change is met, or if treatment progress is poor, the therapist may enter into a more long-term intensive psychotherapy approach, the style of which will vary with the approach and expertise of the clinician. A more extensive psychotherapeutic intervention may also be required if the aetiology of the dysfunction is assessed to be the result of more extensive psychological difficulties.

In spite of the usefulness of hypnotic approaches Gilmore (1987) and Hammond (1990) noted that only 5–7% of sex therapists in the United States use hypnosis. This is presumed to be a result of continuing professional ignorance about the therapeutic use of hypnosis and the persistence of myths about hypnosis.

WHY IS HYPNOSIS USEFUL IN THE TREATMENT OF SEXUAL DYSFUNCTION?

Hypnosis, when added to traditional approaches to the treatment of sexual dysfunction in both males and females, facilitates treatment and extends treatment options. Hammond (1990) noted the advantages in using hypnosis as an adjunct to traditional forms of sexual dysfunction, particularly in the way hypnotically-based techniques may assist in working with the single individual if the patient's partner is unwilling, unavailable or non-existent. Hypnosis provides direct and indirect ways of effecting changes in negative thought processes at both the superficial and deeper schematic level. As Araoz (1982) noted, it is often the negative thinking of patients with sexual disorders that perpetuates difficulties. The involvement of thought, image and symbolism in sexual interest, arousal and behavior cannot be overemphasized. Changing the information, associations, symbols and images that contribute to dysfunction is a primary goal of therapy. Hypnosis provides a powerful means of influencing all these cognitive levels in treatment.

HYPNOSIS IN ENHANCING ANXIETY REDUCTION

While relaxation is not a requirement of hypnosis, the use of hypnosis can facilitate relaxation and reduction in the anxiety which may directly or indirectly impair sexual functioning. Hypnotically cued relaxation may be utilized at the time of sexual intimacy, during self-stimulation or during the sensate focus or pleasuring technique, a process of *in vivo* desensitization. This use of cued relaxation may also overcome the anxiety accompanying sexual guilt.

Alternatively hypnotically based relaxation may be added to systematic desensitization in imagination, if *in vivo* work is not practical, for example when the patient does not currently have a partner. In fact Wolpe (1958), in his original account of systematic desensitization in imagination, utilized hypnotically based relaxation techniques, without further discussing the role hypnosis played.

HEALTHY DISSOCIATION AWAY FROM THE SEXUAL FEARS AND NEGATIVE COGNITIONS

As a transitional part of therapy, during self-stimulation, the sensate focus or pleasuring experiences, and during actual sexual intimacy, the patient can be encouraged to use dissociation in a healthy and constructive way, to separate themselves from their sexual fears and negative cognitions about their sexual functioning. Hammond (1990) describes strategies for patients to distance themselves from an excessive focus on their sexual functioning. The approach described is equally applicable to masturbatory and actual intimate relations.

HYPNOTIC ABSORPTION IN FANTASY, INCLUDING SEXUAL FANTASY, CAUSES THE FANTASY TO BE RESPONDED TO AS REALITY

A great advantage of the use of hypnosis is that the sexual suggestions or fantasies created either by direct suggestion or indirectly by metaphor are responded to as though they were reality. As well as distracting the patient from negative self talk, this provides for effective sexual desensitization, sexual rehearsal of successful sexual functioning and attitude change.

Additionally the malleability of fantasy in the hypnotic state can result in shifting sexual arousal, from response to some unacceptable (fetish) fantasy, towards an acceptable fantasy. This reorientation towards a more appropriate sexual context can occur with the patient using fantasy in conjunction with sexual intimacy or in masturbatory changes in sexual focus, as suggested by Marquis (1970).

ABSORPTION IN PLEASURABLE SENSATIONS

Dissociation into sexual involvement rather than away from it can be used to heighten arousal and defeat affective and cognitive distractions. The use of the hypnotic focus and suggestion to encourage amplification of sexual arousal, through intense focusing on sexually pleasurable sensations, heightens sexual involvement, particularly in those disorders that require increased sexual arousal, such as the hypoactive sexual desire disorders, erectile difficulties, dyspareunia (when due to inadequate arousal), female orgasmic disorders and retarded ejaculation.

REINTERPRETATIONS OF PAST EXPERIENCES AND FANTASIES

Through the use of direct suggestion and metaphor past experiences may be reinterpreted and past problematic sexual fantasies changed. Fetish-based focuses may be shifted through such a process of reinterpretation, for example injury-dominated masochistic sexual fantasies may be reinterpreted progressively into a self-nurturing fantasy. Guilt over past sexual events may be lessened as the reinterpretation of the patient's part in former events is modified. Separation of the healthy and acceptable component of past experiences from the unacceptable and unhealthy aspects can be achieved through reinterpretation.

DISTANCING FROM PAST EXPERIENCES

Using the techniques most commonly applied to dealing with traumatic experiences, patients can come to distance themselves from their past, and thereby the contemporary situation is not seen as an extension of that former disturbing experience. Theatre and television techniques and metaphors relating into the

distant past can assist patients in leaving the emotional significance of former events out of current sexual involvement. These techniques may be particularly useful in dealing with earlier traumatic sexual experiences which are colouring contemporary sexual responses.

METAPHORICAL THERAPIES

Metaphors and stories may also be employed to assist attitude change towards one of successful sexual functioning. For example, a recently married patient, experiencing severe vaginismus, responded well to a story of a young couple moving into a new house (she was currently looking for a house in which she and her husband would live), discovering that one room was locked and apparently without a key. Attempts to break the door down were unsuccessful and painful. A search led to the discovery of a number of keys in a drawer in the basement, and the husband attempted to unlock the door. As he was in such a hurry he repeatedly fumbled with the keys, dropped them and was unable to get the key into the lock. His wife's more patient and systematic use of each key resulted in her being calmly able to unlock the door. While finding the key was an essential first step in opening the door, subsequent attempts were initially found to be difficult, as the door had been closed for some long period of time. Once the husband found the oil for the door hinges, the door could be opened as wide as the patient chose. The wife retained control of the keys throughout.

Hammond (1990) reviews the wide variety of dysfunctions that may respond to the 'master control room technique' where the patient is taken in the hypnotic state to the 'control room' of their mind (sited in the hypothalamus?) and from here the patient can make whatever alterations in the area of sexual functioning are required (e.g. suggestions of entering the control room and turning up sexual interest in a step-wise fashion from 0 towards 10, using any one of a number of switch metaphors).

Other metaphors including warmth, sweating, and so on, may also be used to enhance the sexual response. Cartoon or dramatic representations of the most erotic involvement have also been used (Araoz, 1982) to rehearse, give permission for and enhance involvement in sexual activity. Symbolic transformation of the parts of the anatomy which may be perceived negatively has also been used to remove anxiety-based inhibitory responses (Araoz, 1982) (e.g. the labia are perceived as the petals of a lovely flower or the penis may be represented as a beautiful ivory or marble column, and so on).

TIME DISTORTION

Time distortion may be used to deal with both delayed and premature ejaculation as well as anorgasmia or delayed female orgasm. Time may be expanded so that the time to reach orgasm appears long and satisfying or time may be truncated to bring

the orgasmic response earlier in the arousal cycle. Such a distortion of perceived time is then generally carried over into an alteration of actual time in the sexual situation, most likely as a result of anxiety reduction, attitude and cognitive change and sexual rehearsal of effective functioning.

AGE REGRESSION AND AGE PROGRESSION

Age regression may be used in the form of the affect bridge of Watkins (1978) to take the patient back to the first experience of the inhibiting or traumatic affect that is interfering with sexual functioning. Regression may also be used to take the patient back to a time of adequate sexual functioning, if such a time existed prior to the onset of the sexual dysfunction. Such an approach encourages expectation of successful sexual functioning, assists in systematic desensitization and in sexual rehearsal of successful intimacy. Lastly, regression techniques may assist in exploring the emotional basis of the sexual difficulties, with the understanding that information obtained may not represent a factual account of past events. The dangers of the false, confabulated or suggested memory need to be considered in this context.

Age progression of the patient beyond the current difficulties to successful sexual functioning is a similar method of producing satisfactory results.

CATALEPSY

Just as glove anaesthesia may be transferred to a pain site, so catalepsy may be transferred to the penis in males with erectile difficulties and to clitoral erection in women with orgasmic difficulties. Arm catalepsy transferred to the penile response has been reported by Crasilneck & Hall (1975) in a controlled study, and was successful in 80% of patients. Araoz (1982) similarly used the transfer of finger catalepsy concurrently with suggestions of penile catalepsy in treating erectile difficulties.

PHYSIOLOGICAL INFLUENCES

Direct and indirect suggestions designed to elicit appropriate components of sexual arousal, such as the warm healthy natural forces of life radiating throughout the body leading to vaginal muscle relaxation or lubrication at the early stages of arousal, or waves of warmth and muscle tension at the later stages, can also be helpful in assisting sexual responsiveness.

HYPNO-ANALGESIA AND ANAESTHESIA

With sexual overarousal leading to premature ejaculation and in rare instances premature female orgasm, genital sensitivity to arousal may be reduced using

suggestions of genital analgesia. Such suggestions may be given directly, may be transferred to the genital region from glove anaesthesia or via metaphor. Similarly with dyspareunia the oversensitivity may be reduced by these methods.

HYPNO-EXPLORATION AND HYPNO-DYNAMIC THERAPIES

Where there are deeper difficulties, and the sexual dysfunction is symptomatic of more complex intrapsychic conflicts, hypnosis may be used in an exploratory fashion while the therapist must keep in mind the difference between the narrative truth of therapy and the factual truth of the court room.

HYPNOTICALLY ASSISTED TREATMENT OF SEXUAL DYSFUNCTION

Disorders of sexual functioning are classified into disorders of sexual interest or desire; disorders of sexual arousal; disorders associated with sexual penetration; male orgasmic disorders and post-sexual distress. A brief account of approaches is given below: for further reading in the hypnotic treatment of sexual disorders the reader is directed to Araoz (1982, 1998); Brown & Fromm (1987); Hammond (1990).

TREATMENT OF DISORDERS OF SEXUAL INTEREST OR DESIRE

Disorders of sexual interest have become one of the more commonly presenting disorders and their treatment is by no means straightforward. Schover & LoPiccolo (1982) found that up to 50% of patients presenting in the 'sex therapy clinic' complained of 'inhibited sexual desire' and yet, as Hammond (1990) notes, this is one of the most complex and least successfully treated of the sexual disorders. Careful evaluation is required to exclude medical and psychiatric causes. If of a psychological aetiology, such disorders may arise from inadequacies in sexual stimulation; an inability to become absorbed in sexual intimacy; distracting negative self talk, thoughts or images; anxiety, guilt, or anger; or a lack of sexual pleasure resulting in little interest due to there being insufficient pay-off for sexual activity. Traumatic sexual experiences and inadequate parental models are also frequently implicated in the aetiology of disorders of sexual desire (Hammond, 1990). The nature of the intervention will depend upon the specific aetiology of the disorder.

HYPOACTIVE SEXUAL DESIRE DISORDER

The treatment of reduced sexual desire may focus on anxiety reduction with respect to emotional intimacy or sexual involvement or the resolution of relationship difficulties. Hammond (1990) provides a script for using the 'master control room' metaphor to step-wise increase sexual functioning. Negotiation and the use of post-hypnotic suggestions in association with the control room analogy also offer ways of improving sexual responsiveness and overcoming patient resistance.

Hypnosis offers good opportunities to become absorbed in fantasy, and since a hypnotized subject may respond to fantasy as if it were reality, hypnotic techniques provide good opportunities for rehearsal of effective sexual functioning. The use of revivification of previous sexual arousal successes if appropriate, has been reported. Where anger is the inhibitory emotion metaphoric suggestions of extinguishing a powerful force may be used, such as putting out the inner fire of anger with water or sand; the volcano may collapse back in on itself and cease to be an active force; the violent earthquake may pass its peak and settle to a period of quiescence (Araoz, 1982).

SEXUAL AVERSION DISORDER

Sexual aversions are most commonly found to be equivalent to phobic responses, with both anxiety and avoidance being major components of the difficulties. Hypnosis can be used to facilitate systematic desensitization in fantasy and in reality in much the same way as it would be used with other phobic disorders. Facilitation of anxiety control through the use of cued relaxation while thinking of, fantasizing about, or actually involved in sexual activity, is a very useful component of the use of hypnosis. The use of imaginal exposure to the sexual situation using hypnosis also facilitates the desensitization process. Both uses of hypnosis in effect also assist in curtailing avoidance behaviors.

Gilmore (1987) illustrated the use of indirect/metaphorical techniques to assist a woman who was experiencing panic in relation to sexual arousal. The aim of the embedded metaphors was to assist the patient in dissociating the feeling of pain and panic associated with past sexual trauma from contemporary sexual arousal. The first sexual metaphor of a walk in the sun was designed to activate relaxation and encourage letting herself go into a sensuous experience. The second metaphor alluded to overcoming apparent failure and therefore regaining a sense of control. The third metaphor indicated ways to learn to forget pain and guilt.

Hammond (1990) provides many suggestions to overcome sexual aversion. While the approach to what is essentially a sexual phobia can include a formalized desensitization paradigm, permissive approaches are likely to be more successful in representing sexual activity as an emotional and sensuous process. Araoz (1982) presents a technique in which the patient can become the director of their own internal sexually explicit movie which they can change and control at will. Sexual

inhibition due to the learning of inappropriate attitudes to sex may be changed through the process of re-educating the inner child (Araoz, 1982). Similarly parts of the body or explicitly sexual anatomy may be transformed into objects of beauty or at least into an acceptable or attractive form, as described earlier.

TREATMENT OF DISORDERS OF SEXUAL AROUSAL

MALE ERECTILE DISORDER

Crasilneck (1979, 1982) reported an extensive follow-up study of the application of hypnosis to individual patients with erectile dysfunction. Direct suggestions of firm, hard erections can be of assistance, or metaphorical associations of erectile firmness may be suggested in indirect approaches. Suggestions of arm or finger catalepsy may be transferred to erectile functioning (Crasilneck & Hall, 1975; Araoz, 1982; Hammond, 1990). Post-hypnotic suggestions of erectile firmness have proved successful (Crasilneck & Hall, 1975). Hypnotically assisted age regression to a time of successful sexual functioning may be used (Kroger & Fezler, 1976). Hypnotically based desensitization and rehearsal of sexual success may aid in re-establishing confidence and the expectation of successful functioning. Hypnosis may also be used to explore and accentuate past or present sexual fantasies which may then be incorporated into contemporary sexual activity, either in reality with the current partner or in fantasy during intimacy.

Gilmore (1987) describes the use of appropriate and carefully chosen metaphors in the treatment of erectile disorder. Three metaphors designed to retrieve the resources of hope, caring and competence are embedded and intertwined within each other in the resolution of the conflicts that prevent erections during intercourse.

FEMALE SEXUAL AROUSAL DISORDER

The diagnostic criteria of female sexual arousal disorder revolve around inability to attain or maintain adequate sexual arousal, including vaginal vasocongestion, lubrication and vaginal expansion to allow satisfactory sexual activity. This disorder may manifest itself as a dyspareunia but is not classified as such if arousal difficulties are the primary aetiology. The use of fantasy with or without masturbation is an important strategy in the treatment of female sexual dysfunctions which centre around insufficient arousal. By its nature hypnosis allows absorption in fantasy and since in the hypnotic state a hypnotized subject may respond to fantasy as if it were reality, hypnotic techniques provide good opportunities for rehearsal of effective sexual functioning. Hammond (1990) provides some ideas about the appropriate suggestions to use to enhance sexual arousal and encourage vaginal lubrication. These strategies may be similarly applied in hypo-active desire disorders, dyspareunia and anorgasmia. Detailed mental rehearsal of successful

sexual arousal; increased absorption and amplification of initially small sexual responses; metaphors of arousal and lubrication such as an analogy with sweating and a healthy journey of discovery through the sexual organs and finding the sites of sexual pleasure; these may all be used in heightening arousal.

TREATMENT OF DISORDERS OF SEXUAL PENETRATION

DYSPAREUNIA IN THE MALE PATIENT

Male dyspareunia most often has an organic cause. This aetiology ought to be treated medically where possible, but if dyspareunia continues it may be managed as with other pain states. Such approaches as hypno-analgesia and glove anaesthesia being transferred to the erect penis may be successful. It is also necessary to consider when male dyspareunia may represent a conversion symptom requiring hypno-exploration rather than symptom management.

DYSPAREUNIA IN THE FEMALE PATIENT

Dyspareunia—pain during or after sexual intercourse—is a commonly presenting clinical problem requiring a careful medical history, physical examination and a detailed psycho-sexual evaluation. Dyspareunia is diagnosed only if the pain syndrome is not the result of inadequate arousal and lubrication, or vaginismus. The treatment of female arousal disorders has already been detailed. A true dyspareunia due to causes other than arousal difficulties most often has an organic cause that requires medical intervention. If the resulting state is a residual dyspareunia that is not amenable to medical treatment, it may be appropriately treated as a pain disorder and the hypnotic techniques applicable to pain may be used. Such approaches as hypno-analgesia and glove anaesthesia being transferred to the genital area may be used successfully. As with male dyspareunia, it is necessary to consider when female dyspareunia may represent a conversion symptom requiring hypno-exploration rather than symptom management.

VAGINISMUS

Vaginismus, involving a recurrent or persistent involuntary contraction of the perineal muscles surrounding the outer third of the vagina when vaginal penetration with penis, finger, tampon or speculum is attempted, most commonly is of psychological aetiology, although it may also arise as a disorder secondary to dyspareunia. Hammond (1990) provides ideas about the appropriate suggestions to use to enhance sexual arousal and encourage vaginal lubrication. Metaphorical treatment approaches may also be successful as indicated in the example given earlier in this

chapter. The control over the opening of the vagina is best left clearly in the hands of the female patient, rather than being on demand of her partner.

TREATMENT OF DISORDERS OF ORGASMIC RESPONSE

TREATMENT OF PREMATURE EJACULATION

Premature ejaculation is one of the most treatable of male sexual dysfunctions; a variety of direct and indirect suggestions have been used in its treatment. Many approaches have focused on anxiety reduction as the primary goal, as performance anxiety is the most common cause of a rapid ejaculatory response. Hypnotically assisted desensitization and rehearsal of appropriate sexual responding are applicable to this anxiety-driven disorder. Creative uses of healthy dissociation and distraction can also assist the male in being able to psychologically distance themselves from overarousal.

Acquired oversensitivity to sexual stimulation has been implicated in those who observe their sexual responsiveness too closely. On that basis, partial genital anaesthesia to reduce erotic stimulation has been used (Doane, 1971) with a later return of sensation during intercourse. Time distortion techniques have been applied to extend the perceived length of time of sexual activity, reducing anxiety and resulting in a reduction of overarousal.

TREATMENT OF RETARDED ORGASMIC RESPONSES IN THE MALE

Careful evaluation is required to determine that the cause of retarded orgasmic responses is not psychiatric, organic or illicit drug- or medication-related.

The adequacy (intensity, involvement and duration) and expectations of sexual stimulation need to be considered. It is possible for a delay in the orgasmic response to reflect inadequate sexual stimulation, which may in turn reflect inadequacies in sexual behavior, partner involvement or some other distracting process.

All the approaches designed to heighten sexual arousal in the female arousal disorders can be applied to the male patient: detailed mental rehearsal of successful sexual arousal; increased absorption and amplification of initially small sexual responses; metaphors of arousal and lubrication such as an analogy with sweating and a healthy journey of discovery through the sexual organs and finding the sites of sexual pleasure.

Dramatic (e.g. television or theatre techniques) and cartoon rehearsal of arousing sexual behavior that the patient is reluctant to relate to themselves may be used as a model and assist in the patient giving themselves approval for sexual involvement and pleasure.

TREATMENT OF FEMALE ORGASMIC DISORDER

Female orgasmic disorders involving delayed or absence of orgasm are frequently presenting clinical problems. Thorough evaluation of the onset, development and course of the disorder, psycho-sexual history, medical, psychiatric and psychological features of the patient are required to reveal the often multifactorial aetiology. Medication, other drug and alcohol use history also requires evaluation. Sexual behavior and the quality of the relationship are important considerations in evaluating these disorders.

Other parameters of evaluation and treatment are similar to those in retarded orgasmic responses in the male.

POST- SEXUAL DISTRESS

A small number of patients present with post-sexual guilt, fears or depression. These phenomena are seldom considered specifically a sexual disorder, but rather a disorder of functioning that has a sexual focus. Self-condemnation over sexual feelings or activities often represents an overly obsessive, anxiety-prone personality with a specific sexual focus. An overly restrictive family background with negative attitudes to sexuality or strict moral or religious restrictions on sexuality are often involved. The nature of this disorder needs to be considered in terms of the socio-cultural and religious background of the patient involved. Early up-bringing and familial attitudes to sexuality are the most likely causes of this disorder

CONCLUSION

Hypnosis assists in the treatment of a wide range of sexual dysfunctions and brings specific techniques not available to the non-hypnotically trained sex therapist. It is regrettable that the use of the hypnotic approaches is not more widely accepted within the therapies of sexual dysfunction.

REFERENCES

- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edn) (DSM-IV) Washington DC: APA.
- Araoz, D. L. (1982). *Hypnosis and Sex Therapy*. New York: Brunner/Mazel.
- Araoz, D. L. (1998). *The New Hypnosis in Sex Therapy: Cognitive-Behavioral Methods for Clinicians*. New Jersey: Aronson.
- Brown, D. P. & Fromm, E. (1987). *Hypnosis and Behavioural Medicine*. Hillsdale, NJ: Lawrence Erlbaum.

- Crasilneck, H. B. (1979). The use of hypnosis in the treatment of psychogenic impotency. *Aust. J. Clin. Exp. Hypn.*, **2**, 147–153.
- Crasilneck, H. B. (1982). A follow-up study in the use of hypnotherapy in the treatment of psychogenic impotency. *Am. J. Clin. Hypn.*, **25**, 52–61.
- Crasilneck, H. B. & Hall, J. A. (1975). *Clinical Hypnosis: Principles and Applications*. New York: Grune & Stratton.
- Dennerstein, L., Stanley, R. O. & Burrows, G. D. (1980). Anxiety and psychosexual dysfunction. In G. D. Burrows & B. Davies (Eds), *Handbook of Studies in Anxiety*, (pp 265–278). Amsterdam: Elsevier/North Holland.
- Doane, W. L. (1971). Report of a case of anesthesia of the penis cured by hypnotherapy. *J. Am. Inst. Hypn.*, **12**, 165.
- Gilmore, L. G. (1987). Hypnotic metaphor and sexual dysfunction. *J. Sex Mar. Ther.*, **13**, 45–57.
- Hammond, D. C. (Ed.) (1990). *Handbook of Hypnotic Suggestions and Metaphors*. New York: W. W. Norton.
- Kaplan, H. S. (1974). *The New Sex Therapy—Active Treatment of Sexual Dysfunctions*. New York: Brunner/Mazel.
- Kaplan, H. S. (1979). *The New Sex Therapy*, Vol. II—*Disorders of Sexual Desire and other New Concepts and Techniques in Sex Therapy*. New York: Brunner/Mazel.
- Kroger, W. S. & Fezler, W. D. (1976). *Hypnosis and Behaviour Modification: Imagery Conditioning*. Philadelphia, PA: J.B. Lippincott.
- Marquis, J. N. (1970). Orgasmic reconditioning: Changing sexual object choice through controlling masturbation fantasies. *J. Behav. Ther. Exp. Psychiat.*, **1**, 263–265.
- Masters, W. H. & Johnson, V. E. (1966). *Human Sexual Response*. Boston: Little Brown.
- Masters, W. H. & Johnson, V. E. (1970). *Human Sexual Inadequacy*. Boston: Little Brown.
- Schover, L. & LoPiccolo, J. (1982). Treatment effectiveness for dysfunctions of sexual desire. *J. Sex Mar. Ther.*, **8**, 179–197.
- Stanley, R. O. & Burrows, G. D. (1997). Hypnosis in the treatment of sexual dysfunction. In R. O. Stanley & B. J. Evans (Eds), *Hypnosis in the Treatment of Sexual Dysfunction*., Artemis.
- Watkins, J. (1978). *The Therapeutic Self*. New York: Human Services Press.
- WHO (1992). *The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Description and Diagnostic Guidelines* (10th edn). Geneva: World Health Organization.
- Wolpe, J. (1958). *Psychotherapy by Reciprocal Inhibition*. Stanford, CA: Stanford University Press.

Hypnosis in Chronic Pain Management

FREDERICK J. EVANS

Pathfinders, Consultants in Human Behavior, Lawrenceville, NJ, USA

HYPNOSIS AND CHRONIC PAIN: A BRIEF REVIEW

The Scottish physician, Esdaile (1850/1957) may have been the first to document the use of hypnosis to control pain. Just prior to the development of chemical anesthesia, Esdaile successfully used hypnosis widely in India as the only form of anesthesia for amputations, tumor removals and complex surgical procedures. Overlooked in Esdaile's reports was the fact that most of his patients survived surgery—a rare event in those days because of hemorrhage, shock, and post-surgical infection. In addition to controlling surgical and post-operative pain, hypnosis may have had autonomic and/or immunological effects that minimized the usual complications of surgical procedures.

Clinical reports document that hypnosis has been used to reduce chronic pain (Sacerdote, 1970), to reduce the pain and severity of debridement procedures in burn patients (Ewin, 1976; see also chapter 19 in this volume), and to assist in the management of pain in the terminally ill (cancer) patient (Domangue & Margolis, 1983). There are relatively few well-controlled empirical studies of the clinical efficacy of hypnosis in the management of acute or chronic pain (Turner & Chapman, 1982). The evidence suggests that about 50% of terminal cancer patients (Hilgard & Hilgard, 1975) and 95% of dental patients (J. Barber, 1977) can be helped with some pain control by the adjunctive use of hypnotic techniques. Recently, a powerful policy statement was issued by the National Institutes of Health Technology Conference (1995) on 'The Integration of Behavioral and Relaxation Approaches into the Treatment of Chronic Pain and Insomnia', finding that 'hypnosis is effective in alleviating chronic pain associated with various cancers . . . [and] irritable bowel syndrome, inflammatory conditions of the mouth, temporomandibular disorders, and tension headaches'. Most of the studies which led to this conclusion have been reviewed by Large (1994) and Holroyd (1996).

Studying mixed groups of chronic pain patients, Melzack & Perry (1975) found that a combination of hypnosis and biofeedback was more effective in alleviating

pain than either technique alone ($N = 24$). Elton, Burrows & Stanley (1980) found that hypnosis was more effective than behavioral therapy and pill placebo with 30 chronic pain patients. James, Large & Beale (1989) effectively individualized self-hypnotic strategies in five chronic pain patients, using a multiple baseline study.

Crasilneck (1979) found 69% of 29 consecutive low back pain referrals reported 80% subjective pain relief during outpatient treatment with individualized hypnosis lasting up to 9 months. McCauley, Thelen, Frank, Willard & Callen (1983) found positive results for both hypnosis and relaxation with back pain patients.

Two studies have shown the effectiveness of hypnosis with painful irritable bowel syndrome. Whorwell, Prior & Faragher (1984) found hypnosis reduced subjective pain and abdominal distension in 30 patients compared to supportive psychotherapy. This group (Prior, Colgan & Whorwell, 1990) later found that hypnosis reduced rectal sensitivity in 15 diarrhea-prone patients.

Compared to physical therapy, hypnosis was more effective in improving pain and sleep, but not tender points, in 40 patients with fibromyalgia (Haanen, Hoenderdos, vanRomunde et al., 1991). Medication reduction was observed in 80% of the patients treated with hypnosis. Several anecdotal reports (Margolis, personal communication; Finer, personal communication; Gainer, 1992; Evans, 2001) suggest that hypnosis might be effective in the early phases of reflex sympathetic dystrophy, but formal studies have not yet been completed.

In one of the few studies that measured hypnotic ability, Stam, McGrath & Brooke (1984) found that the more highly hypnotizable of 61 patients with temporomandibular joint pain gained relief with both hypnosis and relaxation compared to a control group. There was little pain reduction with any of the treatments for low hypnotizable patients.

Syrjala, Cummings & Donaldson (1992) found that hypnosis was more effective than cognitive-behavioral therapy in reducing pain, but not nausea, emesis, or opioid use, in 67 bone marrow transplant patients. This result is a little surprising in view of the widely held anecdotal reports that hypnosis is an excellent tool for treating nausea and vomiting in several clinical populations, including hyperemesis in early pregnancy, bulimia and treatment-induced emesis in cancer patients (Evans, 1991).

Several studies have shown the value of hypnosis in treating chronic headache. Olness, MacDonald & Uden (1987) found hypnosis was superior to propranolol or placebo in treating 28 children with migraine headaches. Cedercreutz (1976) treated 100 patients with severe migraine headaches using hypnosis. Of the 55% of patients whose migraines decreased over 3 months, most were highly hypnotizable. It is not clear what measure of hypnotic ability was used, nor were there any control groups. Basker, Anderson & Dalton (1976) compared 47 patients with migraine headaches randomly assigned to hypnosis or drug (prochlorperazine). Complete remission over three months occurred in significantly more of the hypnotized patients (43%) compared to the drug group (12%). At least three studies ($N = 55, 56, 79$) from Holland (van Dyck, Zitman, Linssen & Spinhoven, 1991;

Spinhoven, Linssen, van Dyck & Zitman, 1992; Zitman, van Dyck, Spinhoven & Linssen, 1992) have found that hypnosis or self-hypnosis, especially among the more hypnotizable, reduces tension headache pain, at least as well as autogenic training, and better than control groups.

This is not a comprehensive or a critical review of existing studies. No attempt has been made to review studies using hypnosis in the treatment of cancer pain, such as the work of Spiegel (1993). It is intended to show that hypnosis may be one valuable technique to help reduce chronic pain of various origins. These studies use a wide variety of hypnotic techniques, and they do not indicate which hypnotic strategies might be more helpful for specific painful conditions. Most of the studies lack appropriate control groups and have inadequate follow-up data. Several of the studies find no difference in efficacy between hypnosis and other active psychosocial treatment modalities, but some show that hypnosis can be as effective as direct medical interventions (e.g. pain medication). Unfortunately, hypnotic ability is rarely related to outcome, neither in the hypnosis nor the comparison groups. Therefore it is not known if the pain reduction is due to hypnosis or to non-specific effects associated with the use of hypnotic interventions. Nor do these studies come to terms with the difficult issue of how best to measure pain reduction. Most have been forced to rely on subjective pain ratings of unknown reliability. The clinical criterion of successful treatment outcome for chronic pain patients is far more complex than mere pain reduction. Multiple outcome measures need to consider decreased depression and medication and opioid use; improved sleep, social and family relations and quality of life; increase in range of motion and activity level; and return to work (Evans, 1989; 2001).

HYPNOTIC STRATEGIES FOR PAIN MANAGEMENT

One's theoretical stance about the nature of hypnosis may influence research design as well as strategies used in hypnotic treatment programs. There is no consensus definition of hypnosis, but most investigators emphasize one or more of four aspects: expectations (and the hypnotist–subject interaction); suggestibility; a cognitive dimension related to relaxation and/or imagery; and dissociation (Evans, 1991; 2001).

Some authors emphasize the social-psychological interaction between hypnotist and subject as the main component of hypnotic behavior (T. Barber, 1969; Chaves & Brown, 1978; Sarbin & Coe, 1972; Spanos, 1986; Wagstaff, 1981). Pain reduction involves interpersonal processes or self-generated cognitive and motivational strategies, such as the reallocation of attention away from the pain, distraction, imagery, verbal relabeling, role-playing, attribution, anxiety reduction, forgetting and denial. These strategies are presumably facilitated by the hypnotic relationship; the hypnotic induction procedure and individual differences in hypnotic ability are considered incidental or irrelevant.

Another view of hypnosis is that it reflects a stable capacity of the individual. The hypnotic experience may involve an ability to readily change states of awareness or levels of consciousness. These changes may be either interpersonally- or self-induced (Bowers, 1976; Evans, 2000; Hilgard, 1965, 1977). Hypnosis is considered in terms of neodissociation or multiple cognitive pathways. The patient simultaneously knows, but is unaware of, pain severity, at different levels of awareness. Pain awareness and analgesia are co-conscious. Hypnosis may involve a more general ability of cognitive flexibility, or switching mechanism, that allows one to change psychological, cognitive or physiological processes, or readily access different levels of consciousness (Evans, 2000, 1991). Hypnotizability correlates with several related measures including the ability to utilize imagery effectively; napping and the ease of falling asleep; the ability to become absorbed in engaging experiences such as being 'lost' in a movie or novel; occasional lateness for appointments; and the ease with which patients will give up psychiatric (and possibly medical) symptoms, even with non-hypnotic treatment (Evans, 1991, 2001).

The correlation between measured hypnotizability and pain control has been reported by Hilgard (1977) to be around 0.5 in a variety of experimental situations, confirming neither general theory. This correlation is significantly less than the joint reliabilities of the pain reports and the hypnotizability measures. Thus, the existing data highlight the paradox of hypnotic pain control: clinicians report that most of their patients can benefit from hypnotic intervention techniques, while empirical data suggest that only relatively few people have the complex (dissociative) capacity to experience the sensory and cognitive skills required to significantly reduce severe pain.

Hilgard's (1977) later elaboration of pain control within the context of neodissociation theory, particularly using the method of the 'hidden observer', helped document that pain perception takes place at different levels of awareness. Multiple cognitive pathways may be accessible to the hypnotized subject, enabling him/her to experience minimal pain at a conscious level, even though at another cognitive level (or to an observing ego) reasonably accurate reports of the actual intensity of the painful stimulation are made. For example, we experience that the dentist's drill does not hurt, even though we maintain awareness of the level of painful stimulation that we would be experiencing without the chemical intervention.

DISSOCIATIVE AND PLACEBO COMPONENTS OF HYPNOTIC PAIN MANAGEMENT

The significant contributions to understanding the nature of acute pain that have been made in the hypnosis literature will not be reviewed. The meticulous psychophysical studies of experimental pain conducted by Hilgard (1969, 1977) and others have shown that there is a lawful relationship between the intensity of

the noxious stimulation and the subjective experience of transient, acute pain, which also holds for the reduction of pain following hypnotic analgesia. Most experimental studies of acute pain and hypnotic analgesia have been conducted in situations where the significance of the stimulation is not psychologically meaningful beyond the transient noxious stimulation. Anxiety about the meaning of the painful stimulation is minimized or eliminated. Such studies are probably not helpful to the clinician confronted with patients in pain.

Effects of hypnotic intervention on experimental pain have been documented only over the last three decades. Most earlier studies (see reviews by Shor, 1962; Hilgard, 1977; Elton, Burrows & Stanley, 1980; Spanos, 1986; Holroyd, 1996) used transient painful stimulation such as electric shock and radiant heat—procedures which share neither the enduring qualities of chronic pain, nor the debilitating anxiety of acute pain. Indeed, early studies deliberately minimized anxiety and stress, and thus failed to show pain reduction following administration of standard analgesic drugs such as morphine. These studies were also limited by measuring pain threshold, or the point at which pain first becomes noticeable. Clinically, patients do not report that they have a problem with their pain threshold! Meaningful studies are restricted to those pain induction procedures using protracted measurements such as ischemic pain or cold pressor pain tolerance and endurance levels.

In one of the first such studies McGlashan, Evans & Orne, (1969; see also Evans, 1984, 1990b, 2001; Evans & McGlashan, 1987; Hilgard & Hilgard, 1975; Orne, 1974; Wagstaff, 1987), compared hypnotic and placebo analgesia (ischemic pain tolerance) using 12 extreme high and 12 low hypnotizable subjects during three sessions: (a) highly motivated baseline conditions; (b) following the induction of hypnotic analgesia, including a clinically derived procedure to motivate low hypnotizable subjects to expect hypnotic analgesia; and (c) after ingesting a placebo capsule which the experimenter thought was part of a double blind drug study. The logic of this study was to maximize variables influencing the placebo effect, as is done in the clinic, rather than to control or eliminate them, as had been done in traditional experimental studies. Three aspects of the results were especially important.

1. There was a dramatic increase in pain tolerance for deeply hypnotizable subjects during hypnotically induced analgesia. This is likely to be a result of the dissociative aspects of the hypnotic condition when it occurs in subjects or patients who are very responsive to hypnosis.
2. The much smaller but significant placebo-induced change in ischemic pain tolerance was equal in magnitude for both high hypnotizable and low hypnotizable subjects.
3. The hypnotic analgesia suggestions significantly improved tolerance of ischemic pain even for low hypnotizable subjects. For these hypnotically unresponsive subjects, the pain relief produced by the placebo component of

the hypnotic context and the placebo component of ingesting a pill are about equal, and highly correlated (0.76, $N = 12$).¹ This is the 'placebo' component of the hypnotic induction procedure. The expectation that hypnosis can be helpful in reducing pain produced similar significant reductions in pain to the expectation derived from taking a pain-killing pill, particularly in those individuals who otherwise have no special hypnotic skills. Significant pain relief was achieved under both the placebo analgesia and placebo hypnosis conditions, even though this relief was not nearly as great as that obtained with hypnotic analgesia in hypnotizable subjects.

The study by McGlashan, Evans & Orne (1969; Evans, 1984, 1987, 1990b, 2001) documented that the mechanisms by which a placebo pill and hypnosis produced analgesia were different in subjects with high hypnotic capacity. Several studies using different methodologies have produced similar results. For example, Knox, Gekoski, Shum & McLaughlin (1981) compared acupuncture with hypnosis.² The pain reduction with acupuncture was equal in high and low hypnotizable subjects, but the pain response of highly hypnotizable subjects was significantly greater with hypnosis than with acupuncture. A similar result was found by Miller & Bowers (1986) in a study in which Meichenbaum's (1977) stress inoculation procedure was compared to hypnotic analgesia.

In summary, these and other studies show that hypnosis can facilitate cognitive strategies that are helpful in alleviating pain. Specific interventions such as acupuncture, attention/distraction, medication, placebo, relaxation, stress inoculation, all have a significant effect on pain, but these effects are independent of individual differences in hypnotic capacity (Evans, 1989, 2001). The use of the label 'hypnosis' produces a strong connotation that change is expected by the therapist as well as in the patient. The communication of confidence and the message to the patient that help is on its way is a powerful therapeutic intervention. The magical connotations and ritual of the hypnotic induction process produce meaningful non-specific pain-reducing effects, even in many patients with limited hypnotic capacity. Hypnosis may 'work' for everybody (except the treatment-resistant patient), even though some of the clinical improvement is produced by the context of hypnosis rather than the hypnotic condition itself. On the other hand, these studies show that at least for some highly selected individuals, hypnosis produces a means of controlling and mastering pain that is different from all other interventions studied so far. In clinical management these interpersonal and individual trait aspects of hypnosis cannot be separated easily. It is not surprising that many patients with moderate to low hypnotizability will be responsive to hypnotic manipulations, particularly if they are ready to respond at that time. The fact that there are two interacting mechanisms involved helps to explain why clinicians often see compelling pain relief in patients who otherwise seem unhypnotizable (Evans, 1987, 1989, 1991, 2000, 2001). The capacity to experience hypnosis may be at best a bonus. If hypnosis is useful with chronic pain cases

where depression and secondary gain are the key therapeutic issues, it is more likely to involve these non-specific aspects of the hypnotic context rather than hypnotic capacity.

TRANSITION FROM ACUTE TO CHRONIC PAIN: ANXIETY TO DEPRESSION

The laboratory findings of a one-to-one correlation between the intensity of short-lasting, noxious stimulation and reported pain do not hold true for chronic pain. With most chronic pain patients, the intensity of the pain is not correlated with the intensity of the wound or lesion. The psychological or emotional significance of the pain may be the primary determinant of its perceived intensity.

Even acute pain is not a simple matter of stimulus intensity in the clinical situation. Beecher (1946, 1959) observed, on the Anzio beachhead during World War II, that wounded soldiers did not typically report pain as they waited to be removed from the battlefield, in spite of gunshot and shrapnel wounds that eventually may have needed major surgery, amputation, and long-term convalescence. He contrasted the wounded soldier's mild euphoria with similarly injured civilians in a hospital emergency setting, who typically expressed considerable pain and suffering. The soldier knew he was going home, and that he no longer had to fear being killed: for the civilian the pain has socio-economic implications, fear of job loss, and so on. Subsequent studies have confirmed that acute pain is primarily mediated by anxiety (Sternbach, 1968). Beecher's (1959) emphasis on the manner in which the psychological significance of the pain modulates wound severity has led to the delineation of learning factors and early experience in the development of chronic pain behavior (Sternbach, 1968). A child, after falling, surveys the environs to establish whether a parent is nearby to provide tender loving care before deciding whether to cry or continue playing with his/her friends. Early learning patterns in the management of transient and acute pain may lead to enduring developmental patterns in which pain and suffering can become instrumental in manipulating the environment, for example, avoiding school, getting attention from Mommy, and so forth. Such factors are prevalent in the psychological history of chronic pain patients.

The management of acute pain (including some aspects of terminal cancer pain and chronic transient headaches; Evans, 1989) involves the direct management of anxiety. The growing anxiety about the short- and long-term consequences of an injury or illness which accompanies the increasing intensity of the noxious stimulation is usually relieved by adequate treatment such as pain medication, hypnosis, or any other intervention that reduces anxiety, facilitates relaxation and refocuses attention (Evans, 1990b, 2001).

When the pain is not relieved satisfactorily, a different set of dynamics develop. Although pain intensity may have increased initially, it tends to abate gradually. However, the fear of continued suffering remains. The anticipatory feelings of

future fear give way to the frightening awareness that a painful injury or condition may have a permanent effect. Despair and despondency develop as the suffering remains partially unrelieved, and activities become restricted. The seductiveness of seeking, demanding, and receiving help from significant others, including doctors and family, the mildly pleasant and/or euphoric effects of medication, or the sedation and induced sleep which avoids pain, can produce a reinforcement contingency for which the pain is a sufficient, and eventually a necessary precursor. Feelings of helplessness lead to depression, guilt, and internalized anger concerning perceived loss of bodily parts or functions, and diminished self-control. Gradually, a time-protracted pattern is established involving helplessness and depression which reinforces pain behavior (Fordyce, 1976; Sternbach, 1968). Pain is sometimes positively reinforced by its pleasant consequences, and sometimes negative consequences are avoided by continued pain. Good things happen only when the patient has pain: ('My low back pain allows me to watch the Sunday football game instead of mowing the lawn'). Alternatively, pain is that which prevents bad things from happening: ('When I have my migraines, I can avoid my spouse's advances'; 'My unmanageable children go outside and play when I hurt'). Hypnotic strategies need to be developed which will not initially threaten the secondary gain issues that typically exist with the chronic pain patient. Hypnotic intervention based on anxiety reduction will only frustrate the patient and the therapist, and will usually be unsuccessful. While using hypnosis for pain control it is necessary to address simultaneously the depression and secondary gain as psychotherapeutic issues.

HYPNOSIS AND CHRONIC PAIN MANAGEMENT: USEFUL CLINICAL STRATEGIES

The typical chronic pain patient will be taking several medications, and will have been treated unsuccessfully by several specialists before considering hypnosis. These may have included neurologists and (neuro)surgeons ('when in doubt, cut it out'), manipulative procedures by orthopedic and chiropractic specialists ('when in doubt, pound it out'), physical therapists ('when in doubt, walk it out'), mental health professionals ('when in doubt, talk it out'), and extensive pharmacological intervention ('when in doubt, medicate'). For these patients, the demand, 'hypnotize me and get rid of my pain', is often an invitation to failure. When the burden of cure is abrogated to the implicit magic of the technique, any initial attempt to use hypnosis at best would be unsuccessful, and at worst, would precipitate an early termination of the therapeutic encounter. Most pain patients have been unable to accept their current reduced functionality, and angrily demand to be helped 'return to the way I used to be'. The typical chronic pain patient is angry, depressed, past-oriented, feels abused by the medico-legal system and insists that he/she has lost control of life. These are all relevant therapeutic issues. It is critical that the therapist accepts the pain as 'real', and not merely in the patient's head.

The importance of the initial therapeutic contact must be emphasized when hypnosis is to be used with the chronic pain patient. A direct approach is required to evaluate secondary gain and masked depression: it will be these issues that will determine the focus of the treatment plan. Four direct questions are usually helpful (Evans, 1989, 2001). The first two help evaluate secondary gain, while the second two are primarily therapeutic contractual questions.

1. 'What difference would it make to your life if suddenly you had no pain'? The patient will often hedge an answer with anger, which will reveal hints about the psychic utility of the pain as a reinforcing event. For example, one patient replied: 'My poor, poor, husband. Why, he looks after me so well. He could stop cooking and cleaning for me. He hates cleaning. He would rather be out with his friends.' Her response gives clear insight into the psychic economy of the pain which will need to be addressed before any hypnotic or other intervention will be useful in reducing her pain.
2. 'Do you want to get better'? Many chronic pain patients react with anger to this question. 'What do you mean? Of course I want to get better'! Even after repeating the question three times, failure to obtain an unequivocal 'yes' is common, and indicates the patient may not be ready to relinquish the pain.
3. 'Would you be satisfied if your pain could be reduced by about half'? Acquiescence is necessary to help evaluate whether the patient has realistic expectations, although it is stressed that the goal of treatment is to maximize pain relief.
4. 'Are you willing to work hard to get better'? This question is useful to ascertain that the patient does not have unrealistic expectations about a magical cure with hypnosis, and helps establish a contract that the patient must be responsible for his/her own progress.

Although it is uncommon, positive answers to each of these questions usually indicate that secondary gain is not an issue in the patient's pain behavior. Direct use of hypnotic techniques may be successful quite rapidly.

Some additional useful questions set the stage for later hypnotic interventions. When the chronic pain patient is asked to describe: 'What do you like about yourself?', there is usually a long silence, with little response. In contrast is the verbal torrent usually accompanying the question: 'What do you dislike about yourself'? Both answers will provide a framework for later hypnotic ego-strengthening techniques, as well as indicate the major areas of dysfunction associated with the pain.

The manner in which the patient is asked to describe the pain may be useful for the selection of appropriate imagery and cognitive strategies when it is time to use hypnotic interventions. Because of the depression and years of feeling misunderstood, many patients find it difficult to describe pain verbally, but can write about it. Techniques such as asking about the 'color' and 'shape' of the pain, drawing the pain, and exploring conditions under which it is more or less intense (heat, cold, sitting,

etc.), may be relevant to later hypnotic strategies. By asking the patient to give his/her pain a name ('Mr Sonofabitch' seems to be a popular choice), a letter can be written to 'Dear Mr Sonofabitch'. By encouraging a stream of consciousness approach (ignore punctuation, spelling, etc.) the patient is easily introduced to experiencing dissociation, and the letter may give clues about relevant psychodynamics.

While it is assumed that the chronic pain patient is depressed until proven otherwise, the masked depression cannot be dealt with initially.³ For example, the patient involved in compensation or litigation cannot give up the pain easily until the legal proceedings are resolved. Initially, hypnosis may not be very successful. However, when gradually introduced with supportive psychotherapy, hypnosis may be the adjunctive treatment of choice. Similarly, the chronic pain patient who is masking depression will not easily relinquish his/her pain with hypnotic (or any other) intervention. Where there is the possibility of unmasking depression due to too rapid removal of the pain symptom, complications, including suicide risk, must be carefully considered. Fortunately, those patients usually have their symptoms too well integrated to allow such a possibility. The symptom is usually too important to relinquish with direct hypnotic interventions.

Several techniques (Evans, 1989, 2001) are useful to help the patient 'discover' that he/she is capable of controlling bodily sensations, especially pain. Suggested glove analgesia can be induced in all except a few resistant patients. Done with care, the patient gradually begins to believe that he/she can control a physiological experience in a part of his/her body. With repeated experience glove analgesia can be transferred to the pain-afflicted area, but this should be done cautiously. Imagery, relaxation and self-hypnotic methods are usually introduced. Use of the Chevreul pendulum will help circumvent resistance (almost all patients respond unless deliberately resisting). The use of ideomotor suggestion (Evans, 1967, 2001) is an elegant way to introduce the mind-body connection, which usually plays such an important role in later hypnotic interventions. Several techniques borrowed from sports medicine applications (Unesthal, 1979) are helpful. For example, visual mental rehearsal of getting out of bed for 30–60 seconds before arising will stimulate action potentials that will help the patient quickly overcome the stiffness often experienced when inactive for a period of time (see Evans, 2001, for sample transcripts).

In the subsequent hypnosis sessions a delicate balance is required between the initial, authoritarian, direct approach by the hypnotist to teach the patient mind-body control, and the later non-directive cognitive discovery of success and mastery of physical and bodily control in unrelated areas which will gradually be insightfully discovered by the patient as relevant to subsequent pain control. At the same time, this progress must be sufficiently slow so that the patient can be drawn into the therapeutic alliance to handle the psychological issues that are more relevant than the pain experience (e.g., 'What if I don't win the compensation case?' 'How do I handle my spouse's sexual advances and the children's behavior?').

It is the melody rather than the lyrics that are important in hypnotic techniques. The hypnotic procedures used need to be a comfortable mix of the patient's abilities

and the therapist's style. Many good examples of hypnotic pain reduction suggestions have been outlined by Hammond (1990, pp. 45–49) and Evans (2001). The emphasis of these hypnotic interventions is on the learning of mastery experiences and self-control. However, it is especially important that the patient has permission not to use these mastery techniques in all situations. For example, in a litigation case a contract can be established (usually while under hypnosis) that the pain can be controlled using hypnosis, but the patient should feel comfortable about deciding when to use these mastery techniques. The tactic of allowing the patient complete choice as to when to control pain is an important way to handle the problems associated with the exposure to psychological threat, and the removal of the pain as a defensive reaction. The thrust of the hypnotic intervention is simply to teach the patient that he/she is capable of controlling pain and the related psychological issues, but not to become involved in the ethical and moral issues as to when the patient should use these techniques. Such contracts allow the patient to manipulate pain when it is psychologically appropriate, progress at his/her own pace, provide time to develop a therapeutic alliance, and to treat the depression either with antidepressant medication or psychotherapeutic techniques.

SUMMARY

The specific applications of hypnosis in pain management will be different depending on the nature and history of the patient's pain. Acute pain is best managed by anxiety-reducing strategies. Chronic pain has gradually become a weapon in the control of contingencies in the sufferer's interaction with the external world. It requires strategies that deal with handling one's psychological environment effectively. In such cases the pain may have no clear organic basis, even though from the patient's viewpoint 'it hurts'. Several powerful hypnotic strategies—relaxation, imagery, ideomotor action, dissociation, self-hypnosis—are available to teach self-control and cognitive mastery (Evans, 1989, 2001).

Further research and controlled clinical trials will be necessary to evaluate which of these approaches will be most helpful to individual patients with different kinds of persistent pain. However, as each patient suffers in his/her own private way, clinical sensitivity must always take priority over general guidelines for these difficult and misunderstood patients.

NOTES

1. The magnitude of this non-specific response can be considerable. For patients who respond to a placebo injection, about 95% will also respond to a standard dose of morphine to reduce pain. However, in those patients who do not respond to the placebo trial, only about 50% respond to morphine (Lasagna, Mosteller, Vol Felsing &

- Beecher, 1954). Evans (1984, 1985) showed that the relative effectiveness of placebo compared to a standard dose of morphine is about 56% in double blind studies. The placebo is also from 50 to 60% as effective as aspirin, Codeine and Darvon, as well as for non-pain treatments, including the pharmacological and behavioral treatment of insomnia and the double blind use of lithium in psychiatric patients. This implies that the non-specific factors arising from the treatment milieu are important clinical variables, presumably operating because the therapist communicates his enthusiasm and expectations of success to the suffering patient.
2. Acupuncture and hypnosis involve different mechanisms. Studies have shown that the opiate antagonist, Naloxone, reverses the pain alleviation of acupuncture and other pain-reducing strategies, but does not affect the pain reduction produced by hypnosis (Goldstein & Hilgard, 1975; Spiegel & Albert, 1983; Evans & McGlashan, 1987).
 3. Drug withdrawal, if necessary, will be handled slowly in the early sessions.

REFERENCES

- Barber, J. (1977). Rapid induction analgesia: A clinical report. *Am. J. Clin. Hypn.*, **19**, 138–147.
- Barber, T. X. (1969). *Hypnosis: A Scientific Approach*. New York: Van Nostrand.
- Basker, M. A., Anderson, J. A. D. & Dalton, J. (1976). Migraine and hypnotherapy. In F. H. Frankel & H. S. Zamansky (Eds), *Hypnosis at its Bicentennial*. New York: Plenum Press.
- Beecher, H. K. (1946). Pain in men wounded in battle. *Ann. Surgery.*, **123**, 98–105.
- Beecher, H. K. (1959). *Measurement of Subjective Responses: Quantitative Effects of Drugs*. New York: Oxford University Press.
- Bowers, K. S. (1976). *Hypnosis for the Seriously Curious*. New York: W. W. Norton.
- Cedercreutz, C. (1976). Hypnotic treatment of 100 cases of migraine. In F. H. Frankel & H. S. Zamansky (Eds), *Hypnosis at its Bicentennial*. New York: Plenum Press.
- Chaves, J. F. & Brown, J. M. (1978). Self-generated strategies for the control of pain and stress. Paper presented at the Annual Meeting of the American Psychological Association, Toronto, Canada.
- Crasilneck, H. B. (1979). Hypnosis in the control of chronic low back pain. *Am. J. Clin. Hypn.*, **22**, 71–81
- Domangue, B. B. & Margolis, C. G. (1983). Hypnosis and a multidisciplinary cancer pain management team: Role and effects. *Int. J. Clin. Exp. Hypn.*, **31**, 206–212.
- Elton, D., Burrows, G. D. & Stanley, G. V. (1980). Chronic pain and hypnosis. In G. D. Burrows & L. Dennerstein, (Eds), *Handbook of Hypnosis and Psychosomatic Medicine*. Amsterdam: Elsevier/North Holland Biomedical Press.
- Esdaille, J. (1957). *Hypnosis in Medicine and Surgery*. New York: Julian Press. (Originally titled *Mesmerism in India*, 1850).
- Evans, F. J. (1967). Suggestibility in the normal working state. *Psychol. Bull.*, **67**, 114–129.
- Evans, F. J. (1984). Expectation and the placebo response. *Advances: J. Inst. Advance. Health*, **5**, 11–20.
- Evans, F. J. (1985). Expectancy, therapeutic instructions, and the placebo response. In L. White, B. Tursky & G. Schwartz, (Eds), *Placebo: Clinical Phenomena and New Insights*. New York: Guilford Press.
- Evans, F. J. (1987a). Hypnosis and chronic pain. In G. D. Burrows, D. Elton & R. Stanley, (Eds), *Handbook of Chronic Pain Management*. Amsterdam: Elsevier.
- Evans, F. J. (1987b). The hypnotizable patient. Invited Address presented at the IVth European Congress of Hypnosis and Psychosomatic Medicine, Oxford, England.

- Evans, F. J. (1989). Hypnosis. In C. D. Tollison & M. L. Kriegel (Eds), *Interdisciplinary Rehabilitation of Low Back Pain*. Baltimore, MD: Williams & Wilkins.
- Evans, F. J. (1990a). Chronic pain and depression. *Houston Med.*, **6**, 99–103.
- Evans, F. J. (1990b). Hypnosis and pain control. *Aust. J. Clin. Exp. Hypn.*, **18**, 21–33.
- Evans, F. J. (1991). Hypnotizability: Individual differences in dissociation and the flexible control of psychological processes. In S. J. Lynn & J. W. Rhue (Eds), *Theories of Hypnosis*. pp. 144–168. New York: Guilford.
- Evans, F. J. (2000). The domain of hypnosis: A multifactorial model. *Am J. Clin. Hypn.*, **43**, 1–16.
- Evans, F. J. (2001). Hypnosis and the management of chronic pain. In L. E. Fredericks (Ed.), *The Use of Hypnosis in Surgery and Anesthesiology: Psychological Preparation of the Surgical Patient*, (pp. 31–56). Springfield, Ill: Charles C. Thomas.
- Evans, F. J. & McGlashan, T. H. (1987). Specific and nonspecific factors in hypnotic analgesia: A reply to Wagstaff. *Br. J. Exp. Clin. Hypn.*, **4**, 141–147.
- Ewin, D. M. (1976). Clinical use of Hypnosis for attenuation of burn depth. In F. H. Frankel & H. S. Zamansky, (Eds), *Hypnosis at its Bicentennial*. New York: Plenum Press.
- Fordyce, W. E. (1976). *Behavioral Methods for Chronic Pain and Illness*. St. Louis: C. V. Mosby.
- Gainer, M. J. (1992). Hypnotherapy for reflex sympathetic dystrophy. *Am. J. Clin. Hypn.*, **34**, 227–232.
- Goldstein, E. & Hilgard, E. R. (1975). Failure of opiate antagonist naloxone to modify hypnotic analgesia. *Proc. Nat. Acad. Sci., USA*, **72**, 2041–2043.
- Haanen, H. C. M., Hoenderdos, H. T. W., van Romunde, L. K. J., Hop, W. C. J., Mallee, C. Terwiel, J. P. & Hekster, G. B. (1991). Controlled trial of hypnotherapy in the treatment of refractory fibromyalgia. *J. Rheumatol.*, **18**, 72–75.
- Hammond, D. C. (Ed.) (1990). *Handbook of Hypnotic Suggestions and Metaphors*. New York: W. W. Norton.
- Hilgard, E. R. (1965). *Hypnotic Susceptibility*. New York: Harcourt, Brace & World.
- Hilgard, E. R. (1969). Pain as a puzzle for psychology and physiology. *Am. Psychol.*, **24**, 103–113.
- Hilgard, E. R. (1977). *Divided Consciousness: Multiple Controls in Human Thought and Action*. New York: Wiley.
- Hilgard, E. R. & Hilgard, J. R. (1975). *Hypnosis in the Relief of Pain*. Los Altos, CA: William Kaufman.
- Holroyd, J. (1996). Hypnosis treatment of clinical pain. Understanding why hypnosis is useful. *Int. J. Clin. Exp. Hypn.*, **44**, 33–51.
- James, F. R., Large, R. G. & Beale, I. L. (1989). Self-hypnosis in chronic pain: a multiple baseline study of five highly hypnotizable subjects. *Clin. J. Pain*, **5**, 161–168.
- Knox, V. J., Gekoski, W. L., Shum, K. & McLaughlin, D. M. (1981). Analgesia for experimentally induced pain: Multiple sessions of acupuncture compared to hypnosis in high- and low-susceptible subjects. *J. Abnorm. Psychol.*, **90**, 28–34.
- Large, R. G. (1994). Hypnosis for chronic pain: A critical review. Paper presented at the 13th International Congress of Hypnosis, Melbourne, Australia, August, 1994.
- Lasagna, L., Mosteller, F., von Felsinger, J. M. & Beecher, H. (1954). A study of the placebo response. *Am. J. Med.*, **16**, 770–779.
- McCauley, J. D., Thelen, M. H., Frank, R. G., Willard, R. R. & Callen, K. E. (1983). Hypnosis compared to relaxation in the outpatient management of low back pain. *Arch. Phys. Med. Rehabil.*, **64**, 548–552.
- McGlashan, T. H., Evans, F. J. & Orne, M. T. (1969). The nature of hypnotic analgesia and the placebo response to experimental pain. *Psychosom. Med.*, **31**, 227–246.

- Meichenbaum, D. H. (1977). *Cognitive-Behavior Modification: An Integrative Approach*. New York: Plenum Press.
- Melzack, R. & Perry, C. (1975). Self-regulation of pain: The use of alpha-feedback and hypnotic training for the control of chronic pain. *Exp. Neurol.*, **46**, 452–469.
- Miller, M. E. & Bowers, K. S. (1986). Hypnotic analgesia and stress inoculation in the reduction of pain. *J. Abnorm. Psychol.*, **95**, 6–14.
- National Institutes of Mental Health Technology Assessment Conference (1995). Integration of behavioral and relaxation approaches into the treatment of chronic pain and insomnia. Bethesda, MD, press release, 5 October, 1995.
- Olness, K., MacDonald, J. T. & Uden, D. L. (1987). Comparison of self-hypnosis and propranolol in the treatment of juvenile classic migraine. *Pediatr.*, **79**, 593–597.
- Orne, M. T. (1974). Pain suppression by hypnosis and related phenomena. In J. J. Bonica (Ed.), *Pain*. New York: Raven Press.
- Prior, A., Colgan, S. M. & Whorwell, P. J. (1990). Changes in rectal sensitivity after hypnotherapy in patients with irritable bowel syndrome. *Gut*, **31**, 896–898.
- Sacerdote, P. (1970). Theory and practice of pain control in malignancy and other protracted or recurring painful illnesses. *Int. J. Clin. Exp. Hypn.*, **18**, 160–180.
- Sarbin, T. R. & Coe, W. (1972). *Hypnosis: A Social Psychological Analysis of Influence Communication*. New York: Holt, Rinehart & Winston.
- Shor, R. E. (1962). Physiological effects of painful stimulation during hypnotic analgesia under conditions designed to minimize anxiety. *Int. J. Clin. Exp. Hypn.*, **10**, 183–202.
- Spanos, N. P. (1986). A social psychological approach to hypnotic behavior. *Behav. Brain Sci.*, **9**, 449–467.
- Spiegel, D. & Albert, L. H. (1983). Naloxone fails to reverse hypnotic alleviation of chronic pain. *Psychopharmacol.*, **81**, 140–143.
- Spiegel, D. (1993). *Living Beyond Limits*. New York: Times Books.
- Spinhoven, P., Linssen, A. C., Van Dyck, R. & Zitman, F. G. (1992). Autogenic training and self-hypnosis in the control of tension headache. *Gen. Hosp. Psychiat.*, **14**, 408–415.
- Stam, H. J., McGrath, P. A. & Brooke, R. I. (1984). The effects of a cognitive-behavioral treatment program on temporomandibular pain and dysfunction syndrome. *Psychosom. Med.*, **46**, 534–545.
- Sternbach, R. A. (1968). *Pain: A Psychophysiological Analysis*. New York: Academic Press.
- Syrjala, K. L., Cummings, C. & Donaldson, G. W. (1992) Hypnosis or cognitive behavioral training for the reduction of pain and nausea during cancer treatment: A controlled clinical trial. *Pain*, **48**, 137–146.
- Turner, J. A. & Chapman, C. R. (1982). Psychological interventions for chronic pain: A critical review. II. Operant conditioning, hypnosis, and cognitive-behavioral therapy. *Pain*, **12**, 23–46.
- Unestahl, L.-E. (1979). Hypnotic preparation of athletes. In G. D. Burrows, D. R. Collison & L. Dennerstein (Eds), *Hypnosis 1979*. New York: Elsevier.
- van Dyck, R., Zitman, F. G., Linssen, A. C. & Spinhoven, P. (1991). Autogenic training and future oriented imagery in the treatment of tension headache: outcome and process. *Int. J. Clin. Exp. Hypn.*, **39**, 6–23.
- Wagstaff, G. F. (1981). *Hypnosis, Compliance and Belief*. New York: St. Martin's Press.
- Wagstaff, G. F. (1987). Is hypnotherapy a placebo? *Br. J. Exp. Clin. Hypn.*, **4**, 135–140.
- Whorwell, P. J., Prior, A. & Faragher, E. B. (1984). Controlled trial of hypnotherapy in the treatment of severe refractory irritable-bowel syndrome. *Lancet*, **2**, 1232–1234.
- Zitman, F. G., van Dyck, R., Spinhoven, P. & Linssen, A. C. (1992). Hypnosis and autogenic training in the treatment of tension headaches: A two phase constructive design study with follow-up. *J. Psychosom. Res.*, **36**, 219–228

Hypnosis and Pain

LEONARD ROSE

Melbourne Pain Management Clinic, Australia

Many factors influence a patient's response to pain, and these are as important as the extent of the physical damage causing it. They include personality, cultural background, previous experience, the significance of the organ involved, and financial implications. Thorough assessment by history and physical examination must be considered with an evaluation of the social issues. Treating the physical component of pain without considering the psychological and emotional consequences of pain will result in less than optimal pain relief.

A problem when dealing with pain is its measurement, both for diagnosis and for assessing the success of treatment. The simplest measure is the Visual Analogue Scale or VAS, a horizontal or vertical line with the ends fixed by the statement 'no pain' or 'the worst pain experienced'. The McGill Pain Questionnaire (MPQ) (Melzack, 1975) has been well studied and validated. The MPQ consists of groups of pain descriptors forming three main categories which can be compared to the three higher centres described originally by Melzack. These include the following categories: sensory (throbbing, burning, cramping, etc.); affective (sickening, terrifying and blinding, etc.); evaluative (annoying, miserable and unbearable, etc.). Multiple studies have confirmed that the words chosen by the pain patient to describe their pain are important as a measure of severity, affective words being among the more important.

Thus cues to the appropriate utilization of hypnotic approaches to treat pain are often given in the very terminology patients use to describe their pain. Even the adjectives used to describe pain may have an important role in forming the diagnosis. Pain from nerve damage is often described as shooting, jabbing, or like lightning; such conditions as causalgia, reflex sympathetic dystrophy (RSD), and post-herpetic neuralgia are described as 'cold fire', or 'burning ice' (Merskey & Bogduk, 1994). Conditions where the pain is described as having a burning quality may respond well to the use of hypnotic suggestions of a cooling nature. In glove anaesthesia suggestions are made with imagery of cooling the affected area with snow or a cool breeze. Painful areas associated with sensations of cold or in situations where vaso-constriction has actually occurred may respond to suggestion of warmth such as 'imagine you are now holding (the affected area) to the warmth

of the flames in the open fireplace and that the area affected absorbs the heat so that a pleasant warmth now replaces the sensations of cold'.

Whether a patient complains of constant or intermittent pain is as important in diagnosis as whether pain is precipitated by position, activity, and so on. Where patients complain of seemingly endless periods of severe pain and far too short periods of relative relief, suggestions of time distortion may be of assistance. Such patients may be told during hypnosis that 'periods of severe pain can fly by as if only present for a brief time, and periods of relative relief can seem to stretch out for ever in that special hypnosis time'.

Constant headaches, typically described as a tight band around the head, will usually be due to muscular contraction secondary to stress and may be relieved by utilizing simple relaxation suggestions, or suggestions that the affected muscles are 'letting go . . . becoming more and more relaxed as you let go any undue tightness stress or strain'.

The complaint of pain may finally be a common expression for physical, emotional, and financial stress. This is often compounded by an economic reinforcement system for pain and disability—pensions for disability, third party payment for injuries due to motor vehicle accidents or work-related injury.

MANAGEMENT OF CHRONIC PAIN

The proper management of the patient presenting with chronic pain includes a proper diagnosis followed by the most effective therapeutic strategy. This requires knowledge of the aetiology, mechanism, pathophysiology and symptomatology of the various pain syndromes, and the availability of the various modes of therapy. In most cases, success will depend on multidisciplinary collaboration (Working Party on Management of Severe Pain, 1988). Sternbach (1968) pointed out the importance of determining whether there are treatable psychological or physical abnormalities, particularly in chronic intractable pain in which both forms of disorder usually are present.

Adequate management of patients with chronic pain requires much time and effort, without which optimal results will be difficult to achieve, and iatrogenic problems may well be produced. In Australia, excellent teaching programmes for doctors, dentists and psychologists in hypnosis, are run by the Australian Society of Hypnosis in the various States (see also Fields, 1975; Working Party on Management of Severe Pain, 1988). The proper use of these approaches, combined with appropriate psychotropic medication, psychological counselling, and with prompt referral of chronic pain patients when indicated to multidisciplinary pain centres (Rose & Fitzgerald, 1987; Rose, 1990) will ensure an improved approach to this difficult area both for the patient and for the busy practitioner.

PAIN, STRESS AND THE IMMUNE SYSTEM

According to Melzack (1993), pain is a major stressor in human life and produces the classic physiological responses of all stressors. However, different pain stimuli or situations produce different perceived levels of stress, depending on the extent to which they are interpreted as life-threatening, so that physiological responses show great variability. There is convincing evidence on the damaging effects of pain-stress on the immune response, as described and evaluated by Liebeskind and others at the 1993 Padua Conference. A large body of evidence shows that stress suppresses immune function generally, suggesting that severe, prolonged pain can have serious, health-threatening consequences. Because it occurs more often in older people who are more likely to have severe postoperative and other kinds of pain, pain can no longer be brushed aside as ‘well, it’s just pain; it can’t kill you’.

Most data describe the physiological effects of acute pain. We know much less about the physiological effects of chronic pain. On the other hand, the effects of chronic pain on psychological health are well known. Chronic pain produces depression, anxiety and fear. These adverse psychological consequences affect the person, the family, and, because of the great costs of medical and social care, all of society.

To treat chronic pain, which has such devastating psychological and social effects, we must use all the techniques at our disposal, but we often fail to do so, producing the tragedy of needless pain. (Melzack, 1990)

CAN PHYSICAL EFFECTS OF HYPNOTIC ANALGESIA BE DEMONSTRATED?

As reviewed in the first part of this chapter, a number of investigations have overwhelmingly supported the effectiveness of hypnosis in providing pain relief. This has been demonstrated for many types of pain experience, and even in patients with low hypnotizability ratings.

Spiegel, Bierre & Rooteberg. (1989) found a well-defined physiological effect of hypnosis on pain control. They determined that the amplitude of neurophysiological responses of hypnotized subjects given pain-blocking imagery was significantly reduced in comparison to that of non-hypnotized subjects. Based on this phenomenon they propose that there is, in fact, a definable neurophysiological basis for pain blockage via hypnosis.

There appears to be no real evidence of a relationship between hypnosis and the endorphins—natural brain opiates or morphine-like substances. A study in 1975 by Goldstein & Hilgard showed that hypnotic analgesia was not reversed by naloxone, a drug which reverses the analgesic effects of morphine in a dose which is effective in reducing the placebo response. On the other hand placebo response in pain

control has been shown to work by making the brain produce its own endogenous opioids (Portenoy, 1994).

In 1995 Kiernan, Dane, Philips & Price published the results of a study of hypnotic pain control. Gracely (1995), commenting in an editorial in the same issue of the journal *Pain*, suggests 'by temporarily removing the second burden of relying on a subjective response, Kiernan et al. have also relieved the first burden of at least the validity, if not the uniqueness, of hypnotic analgesia'.

Kiernan and his team claim to have shown that the hypnotic procedure significantly attenuates a physiological measure, the nociceptive reflex elicited by electrical stimulation of the sural nerve. They used both the nociceptive reflex and separate verbal measures of the intensity and unpleasantness components of pain sensation to infer a triple, hierarchical pain-control system that is activated at all levels by their hypnotic procedure. They found that hypnosis activated all three systems. The percentage reduction in sensory intensity of about 30% was greater than the 20% reduction in the nociceptive reflex, suggesting that the additional 10% was provided by supraspinal inhibition. Similarly, the 40% reduction in unpleasantness ratings suggested that the 10% increase over the reduction in sensory ratings was provided by a reduction in the amount of unpleasantness associated with a specific sensory magnitude. Kiernan concludes his paper by stating the results of this study demonstrate the multiple mechanisms of pain reduction by hypnotic suggestions, and suggests, such mechanisms may also participate in other psychologically mediated forms of pain reduction.

FLEXIBILITY IN THE HYPNOTIC MANAGEMENT OF PAIN

Hypnosis frequently contributes to anxiety reduction but this effect can be distinguished from pain reduction. Anxiety is strongly associated with pain but separate from it; a person in acute pain will often be anxious whereas chronic pain is usually associated with depression. Benzodiazepine drugs have been shown to reduce pain by relieving anxiety but they do not affect the pain threshold or the physical sensation of pain. Pain tolerance is something beyond sensory pain and suffering so that, in some cases, hypnosis substitutes for a tranquillizer rather than acting as an analgesic.

Hypnotherapy is often ineffective with pain of a psychological nature, particularly when pain is seen to be a depressive equivalent. Masked depression is one of the conditions where hypnosis should be avoided unless the hypnotist is able to deal properly with depression, using medication and psychotherapy. This situation should be suspected if the patient gives a history of sleep disorder, fatigue, lack of interest in sexuality or in general, or inability to work—or a tendency to stay in bed. This is particularly so if the patient functioned effectively previously; such patients can respond dramatically to antidepressant therapy. Hypnosis may be used after the depression is controlled.

Methods of treatment need to be adapted to the individual's hypnotic ability. They depend on that patient's interests, capabilities and levels of motivation. Even non-hypnotizable subjects may benefit from the therapy aspects of the treatment rather than the hypnosis itself.

Hypnotic pain reduction procedures are equally applicable to many painful conditions where the pain occurs in short episodes, as in most dental procedures, as well as in childbirth and surgery, where the pain is longer but with a known end-point. It is even useful when pain is protracted for days or weeks, as in burns patients and in cancer cases.

SELF-HYPNOSIS AS THE GOAL

In keeping with modern approaches to patient care and autonomy patients are encouraged to become more involved in their own management, both by selecting their own fantasies and maintaining a two-way communication with a hypnotic practitioner. There is a trend towards natural methods, and the authoritative hypnotist is giving way to a more permissive guide, who takes the hypnotic subject through the new territory of their altered state of awareness until they are prepared to take their own initiative. The modern approach to hypnotic pain control is more individualized, the clinician attending to the special needs of the patient and preparing them for what is to come and enhancing the patient's own capacity to cope. The recent introduction of so-called indirect approaches to hypnosis has introduced more naturalistic elements to hypnotic practice and has led to claims that resistance in hypnosis can be overcome.

Studies have shown that subjects highly susceptible to hypnosis are likely to have a vivid imagination. On the other hand, having a good imagination reveals little about susceptibility to hypnosis. Bowers (1976) reached the conclusion that: 'To the extent that imagery, and fantasy, are different cognitive functions, hypnosis may be more related to imagery than fantasy.'

The display of imagery and fantasy implies the requirement of special skills and abilities of the hypnotized person. Active imagination is permitted by the hypnotist who attempts to create the most favourable situation possible for the display of the subject's abilities and talents. Reality and fantasy then coexist potentially to influence the subject in how they choose to behave. Success depends on motivation.

Organically caused pain is often amenable to hypnotically based techniques. This is so even when the subject has deeply entrenched economic and social reinforcers for wanting to perpetuate the pain situation. These may be to maximize a payout in a law suit or the person may have entered an alternative way of life as a professional pain patient, one who has adopted the permanent role of being chronically 'sick'. Psychologically based pain, usually brought on by one or other type of stress, is

often the only way a particular individual is able to express his or her stress. It is much less likely therefore that hypnosis can be successfully used to treat it.

When motivated by pain, even patients not considered good hypnotic subjects may develop effective pain control. Thus, hypnotic suggestions may be most effective both with good hypnotic subjects and in those well motivated to succeed.

ASSESSING THE POTENTIAL FOR HYPNOTIC RESPONSE IN THE PATIENT WITH PAIN

Factors considered helpful to the therapist in predicting the outcome of hypnotic pain control include:

- The nature and origin of the pain and whether it is organically or mainly psychologically caused
- Whether the patient/client believes in hypnosis or not—and whether they expect it will bring pain relief
- The presence of ‘secondary gain’—social or financial rewards for the maintenance of the pain problem
- The patient’s motivation to improve
- The development of a positive and trusting relationship between therapist and patient/client—rapport
- The patient’s willingness to practise self-hypnosis

The ability to produce a deep state of hypnotic trance is not always important and good results occasionally occur in the presence of light hypnotic or light sleep-like states. Training in self-hypnosis gives patients a sense of mastery and control over their pain and they become independent of the therapist. As an alternative, audiotapes are often provided as an extension of the therapy.

TECHNIQUES FOR PAIN CONTROL BY HYPNOSIS

Techniques for hypnotic pain reduction present a number of interesting similarities to familiar psychological defence mechanisms normally used as coping mechanisms. These are amnesia (repression), substitution, denial, displacement and retreat into fantasy. Thus, symptoms may be substituted: pain can become a tingling sensation or ‘painless pain’. One problem seen at times in the pain clinic is that of severe intractable pain following motorcycle crashes. Typically the brachial plexus is torn away from the spinal cord as the victim’s shoulder strikes the ground and is violently forced downward. Intractable uncontrolled pain is often associated with a ‘flail arm’ resulting from the paralysis resulting from nerve pathway interruption. The pain caused by this type of injury is similar to that experienced in patients with phantom limb pain, and is due to an absence of the normal endogenous controls on

pain which are themselves dependent on intact neuronal pathways. In this situation a patient may be asked to ‘Imagine your arm is being cooled by having water sprayed on to the skin and then cooling air is being blown over it—just like a gentle breeze does after you climb out of water after a summer swim.’

CASE HISTORY 1

A middle-aged man presented to the pain clinic with a 10-year history of intractable burning and itching pain affecting the area of the face supplied by the infra-orbital nerve, following an episode of Herpes Zoster some 10 years previously. His pain was of such severity he was passively suicidal and he had been unable to touch his left cheek for many years. After he was placed on antidepressants his distress was reduced and three sessions of hypnosis using glove anaesthesia enabled him for the first time to control his pain. The imagery technique involved taking him back to his European childhood and asking him to imagine that he was holding a snowball against the affected area of his face.

This approach followed the use of the Wilson & Barber (1977) Creative Imagination Scale to assess his hypnotic susceptibility. One of the items of this scale involves asking the subject to imagine a local anaesthetic injection being given into the side of their hand and that the affected fingers are becoming numb and dull. In clinical use this item is translated into the phenomenon of Glove Anaesthesia. Other items in this 10-item scale may be used to predict patients’ likely responsiveness to suggestions of time distortion, age regression, the utilization of music for induction or trance work and relaxation imagery.

CASE HISTORY 2

A remarkable improvement in pain control occurred some years ago with the presentation of a 50-year-old hotel cook who for years had been trying to convince doctors that there was a physical cause for her severe lower back pain and left-sided sciatica. No specific lesion had been demonstrated after intensive investigations, including lumbar puncture and myelography—yet she continued to complain of searing pain and paraesthesiae in one of her lower limbs on a constant basis.

Under hypnosis she was asked to:

Imagine that you are lying on warm sand on a beach and that a layer of sand is gently being blown over your leg. This sand has special properties and, as your leg absorbs the sand’s warmth, the pain in your leg is draining into the sand—draining into it!

The sand is replacing your previous pain with a sense of warmth and comfort. When you return to your alert state you will bring back all of that comfort with you and this comfort will remain with you long after you are fully alert.

This patient was able to use the technique, even whilst standing in crowded buses to get to work and home again. She was eventually able to cease taking the high

dosages of antidepressants (up to 300 mg per day of amitriptyline), other psychotropic agents and analgesics prescribed by previous practitioners.

This successful case, however, raises a cautionary note—6 months after discharge she collapsed in the street with total paraplegia and was eventually found, after further investigation, to be suffering from a high dorsal spinal meningeal tumour. When this was successfully removed she became permanently asymptomatic.

IMAGERY TECHNIQUES AND CHRONIC PAIN—A PRACTICAL PRIMER

SPECIFIC PAIN CONTROL TECHNIQUES

1. Suggestions of deep relaxation in themselves may reduce the anxiety that often accompanies pain. These suggestions can be enhanced by providing imagery under pleasant environmental conditions, with as much visual and sensory imagery as possible. For example, asking patients to imagine that they are in a mountain cabin in the snow can be therapeutic in itself or it can lead to the production of 'glove anaesthesia'. This may occur when patients are asked to imagine going for a walk in the snow, picking up a handful of snow, holding it to the pain area and then transferring the cold and numbness to replace the pain.
2. Direct suggestions of pain relief. Simply telling patients under hypnosis that the pain will disappear and will not return when the patient is in the normal waking state may lead to an apparent reduction in pain.
3. The hypnotic transfer of pain from one part of the body to another, where it is less disabling, may benefit patients who have a psychological need for the pain to continue whether for sympathy or to get a greater financial settlement. For example, such patients may be able to transfer their pain from their abdomen to a finger.
4. Hypnosis can be used to change pain sensations into more easily tolerated sensations. It can be suggested that the pain will be experienced as a pleasant 'buzzing' or 'warmth' sensation rather than an acute or deep sensation.
5. Pain may be controlled by suggesting an area of numbness produced by asking patients to imagine that a local anaesthetic has been administered. Another method previously mentioned is 'glove anaesthesia' which can be transferred to the pain area. For example, in dentistry, an anaesthetic gel can be used on a child's finger. The child is then told that he or she has a 'magic' finger which can remove all the discomfort experienced during the procedure. The anaesthetic thus reinforces the therapist's suggestions.

Dissociation can be used to separate patients from their pain. If patients are well trained and motivated, it is possible for them to dissociate all or part of

themselves from the pain, using vivid and pleasant imagery. Patients can even leave their body during painful procedures.

6. Dissociation can be achieved by imagining a pleasant scene. Perhaps a sunlit beach with warm, inviting sand or a cool green shady jungle scene where patients are asked to imagine shrinking themselves to become small enough to fly away on the back of a butterfly! As they shrink, so does the pain.

These techniques have proved extremely helpful to many patients, particularly those with cancer.

7. In the hypnotic state, patients use their imagination to think of their pain as an interesting experience—neutral and distinct from the suffering it may produce.
8. It may be suggested that the pain is changed to a ‘pleasant sensation’, incompatible with pain or suffering. Patients can be asked to hallucinate these sensations, or to dream them or to project them on to a movie screen in their imagination. For example, patients can be told: ‘Imagine that you’re sitting comfortably in front of a screen. Now, imagine that on the screen you can see yourself—not as you’ve been, but as you would like to see yourself—without pain—and able to function at your maximum capacity.’
9. Patients can be asked under the hypnotic state to imagine going backward in time ‘to a time long ago, before any pain or discomfort, when you were full of energy and had a sense of complete well-being—and, when you return to the normal waking state, you will feel again that same sense of well-being.’
10. Hypnotic distortion of time can be used either to lengthen periods of discomfort or to apparently shorten periods of intense pain: ‘As a result of your new capacity to relax, time will now seem to fly whenever you experience periods of intense pain. On the other hand, time will move very slowly indeed with every second stretching out so that you can enjoy those periods when discomfort is at a minimum and so use them as positively as possible.’
11. Other techniques involve asking you to transform your pain into a visual image that can be manipulated in the imagination. ‘Now see your pain. What shape is it? A triangle? A circle? Perhaps a pyramid or a cube? See its colour? Is it red? Yellow? Purple? Perhaps another colour? Now change the shape and colour. The new shape and colour are definitely not compatible with your pain.’

To the above specific pain-relief methods, other hypnotic techniques found to be useful include taking the patient on a ride through a rainbow using the colours of the rainbow to impart an emotional lift at times of crisis. In this imagery, red is associated with a feeling of warmth and healing energy, peach with complete and perfect peace, yellow with happiness and well-being, green with joy and rapture, aqua blue with water and freedom, and violet with complete and perfect tranquility.

THE SECRET ROOM OR INNER PLACE (Elton & Burrows, 1978)

The subject is asked to: 'Imagine that you're walking along a corridor in your mind. You keep walking until you come to a door. It's a door you have never seen before. Behind it lies your secret room. Your sanctuary, a place incompatible with pain. You open the door and close it behind you leaving your pain and discomfort behind you. In this place of peace and perfect tranquillity you see yourself not as you have been—but as you would like to be.'

MIGRAINE AND DOLPHINS

In his book *Applied Hypnosis and Hyperempiria*, Gibbons (1979) presents a catalogue of useful imagery techniques. Gibbons believes that the use of imagery can in fact enhance sensory experiences. Thus, patients are better able to utilize suggestions aimed at helping them to achieve pain relief—or even a significant change in behaviour. Amongst these is a dolphin image where patients are asked to imagine themselves as a dolphin swimming in the sea. Gibbons suggested that the slowing of the heartbeat and decreasing blood pressure this imagery produces, leads to an alleviation of the circulatory congestion in the head with a consequent cessation of headache symptoms in some patients who suffer from migraine and other stress-induced headaches.

CONCLUSION

Obviously, this is just a brief review of the area of pain management and hypnosis. It is hoped that those practitioners who deal with this most difficult group of patients will be able to gain some ideas on which to build their own practical experiences.

REFERENCES

- Bonica, J. J. (1993). Pain: The Neglected Pathogen, Lecture notes, Conference on Pain, Stress and the Immune System, Padua and Venice, 28–30 August 1993.
- Bowers, K. S. (1976). *Hypnosis for the Seriously Curious*, New York: W. W. Norton.
- Elton, D. & Burrows, G. D. (1978). Specific use of imagery in treatment by hypnosis: 'the secret room'. *Aust. J. Clin. Exp. Hypn.*, **6**, 17–26.
- Fields, H. L. (Ed.) (1995). *Taskforce on Professional Education*. Washington, DC: Core Curriculum For Professional Education in Pain, IASP Press.
- Gibbons, D. (1979). *Applied Hypnosis and Hyperempiria*. New York: Plenum Press.
- Goldstein, A. & Hilgard, E. R. (1975). Lack of influence of the morphine antagonist naloxone on hypnotic analgesia. *Proc. Nat. Acad. Sci.*, **71**, 2041–2043.
- Gracely, R. H. (1995). Hypnosis and hierarchical pain control systems: Editorial comment. *Pain*, **60**, 1–2.

- Kiernan, B. D., Dane J. R. , Philips L. H. & Price D. D. (1995). Hypnotic analgesia reduces the R III reflex nociceptive reflex: Further evidence concerning the multi-factorial nature of hypnotic analgesia. *Pain*, **6**, 39–47.
- Liebeskind, J. C. (1993). Studying Pain and Stress in the Laboratory Animal. Lecture notes, Conference on Pain, Stress and the Immune System, Padua and Venice, 28–30 August 1993.
- Melzack, R. (1975). The McGill Pain Questionnaire: Major properties and scoring methods. *Pain*, **1**, 277.
- Melzack, R. (1990). The tragedy of needless pain. *Sci. Amer.*, **282**(2), 19–25.
- Melzack R. (1993). Pain as a Stressor in Humans Lecture notes, Conference on Pain, Stress and the Immune System, Padua and Venice, 28–30 August 1993.
- Merskey, H. (1979). Pain and personality. In *The Psychology of Pain* (p. 111). New York: Raven Press.
- Merskey, H. & Bogduk, N. (1994). *Classification of Chronic Pain: Descriptions of Chronic Pain Syndromes and Definitions of Pain Terms*, 2nd edition. Washington, DC: IASP Press.
- Portenoy, R. K. (1994). Opioid therapy for chronic non-malignant pain: Current status. In H. L. Fields & John C. Liebeskind (Eds), *Progress in Pain Research and Management*, Vol. 1 (p. 247–287) Seattle: ISAP Press.
- Rose, L. (1990). *Overcoming Pain*. Melbourne: McCulloch Publishing.
- Rose, L. & Fitzgerald, P. (1987). *Manage Your Pain*. Sydney: Angus & Robertson Publishers.
- Spiegel, D., Bierre, P. & Rootenberg, J. (1989). Hypnotic alteration of somatosensory perception. *Am. J. Psychiat.*, **146**, 749–754.
- Sternbach, R. (1968). *Pain: A Psychophysiological Analysis*. New York: Academic Press.
- Wilson, C. & Barber, T. X. (1977). *The Creative Imagination Scale as a Measure of Hypnotic Responsiveness: Applications to Clinical and Experimental Hypnosis*, revd. edn. Hadfield MA: Hadfield Foundation.
- Working Party on Management of Severe Pain (1988). Report of the working party on Management of Severe Pain, Australian Government Publishing Service, Canberra.

The Use of Hypnosis in the Treatment of Burn Patients

DABNEY M. EWIN

Tulane University, LA, USA

The seriously burned patient needs psychiatric help from the time of injury to full recovery, and this need is increasing as modern burn centers are dramatically improving survival rates. Hypnosis is the psychiatric treatment of choice, possibly because these patients come to the emergency room in a focused state that is the equivalent of a good trance, and all that is required is to insinuate oneself into the trance and then guide away from terror into confidence. I predict that it will not be long before a Burn Centre is considered inadequately staffed without someone competent in the use of hypnosis.

In the United States, it is estimated that each year 731 000 people visit Emergency Rooms for burns (Frank, Berry, Wachtel & Johnson, 1987). Some 60 900 of them are hospitalized at enormous cost, and many still die in spite of vast improvements in the technology and sophistication of care.

Seriously burned patients run the gamut of negative emotions. (Ewin, 1978). Both the burn and its treatments are excruciatingly painful, and fear of the next treatment sets in early. The accident is usually caused by carelessness (of the patient or someone else), so either guilt or anger intervenes. A sense of helplessness and hopelessness resulting in depression is common. Metabolic rate increases as much as 100%, and nausea and anorexia hinder the increased food intake necessary to meet metabolic demands. It is easy for these patients to become sullen, obstinate, and uncooperative. Curtis Artz, first President of the American Burn Association and one of the early advocates of separate burn centers, is quoted (Dahinterova, 1967) as follows:

The well-motivated individual did extremely well after even the most severe burn injury, whereas individuals without these resources had considerable difficulty adjusting to the result of a massive injury.

Hypnosis can provide this sense of security and motivation, and a number of clinical reports describe burned patients on critical, downhill courses who reversed

direction and healed promptly following hypnosis (Cheek, 1962; Crasilneck, Stirman et al., 1955; LaBaw, 1973; Pellicane, 1960).

Early hypnosis (within the first 2 hours after burning) is particularly valuable in limiting the amount of inflammatory reaction to the thermal injury. Brauer and Spira (1966) showed that up to 4 hours postburn a standard 'full thickness' experimental burn could be excised and used as a skin graft, demonstrating that deeper dermal layers are not killed by the heat, but by the inflammatory progression of the wound (Hinshaw, 1963). Chapman, Goodell & Wolff (1959a) showed that the signs of inflammation (heat, pain, redness, swelling) are affected by the patient's *attitude* to the thermal injury. The thermal stimulus goes to the central nervous system, and it initiates the inflammatory response. A hypnotically imagined burn 'stimulus' can evoke an actual burn, that is, a painful blister (Bellis, 1966; Chapman, Goodell & Wolff, 1959b; Johnson & Barber, 1976; Ullman, 1947; Spanos, McNeil & Stam, 1982). Likewise, after a true burn stimulus (but before the natural response has occurred), hypnotic suggestions of cooling and anaesthesia limit or prevent the inflammatory response, just as actual icing of a burn limits the progression of a burn. De Camara, Raine and Robson (1981) used electron microscopy in a controlled study of standard scald burns (second degree) on guinea pigs treated by ice-water immersion for 30 minutes at 10 minutes postburn. At 2, 8, 24, and 96 hours compared to controls the cooled burns showed less edema, less swelling of dermal axons, and lack of infiltration by polymorphonuclear leucocytes. At 96 hours in the untreated burns 'the damaged epidermis sloughed . . . large numbers of polymorphonuclear leucocytes had invaded the dermis forming areas resembling microabscesses . . . nerves compared with normal nerves showed degranulation of the axons and extensive fragmentation of the myelin sheaths.' In the treated group at 96 hours postburn, 'the cooled burn wound appeared almost normal by light microscopy' except that fragmentation of myelin sheaths was pronounced and no different than that observed in the untreated group.

A burned patient who has accepted the suggestion that his wounded area is 'cool and comfortable' is easy to treat, optimistic, and heals rapidly (Ewin, 1978, 1979). This is particularly evident in burns of less than 20% of the body surface. In larger burns, inflammatory response is not fully blocked by hypnosis, but the edema is limited, as shown by the fact that with early hypnosis, these patients may require as little as 50% of the fluid calculated by formula for resuscitation (Margolis, Domangue, Ehleben & Shrier, 1983). During the first 48 hours following a sizable burn, large amounts of fluid shift from the bloodstream into the injured tissues, causing local edema. When a patient requires a large volume of fluid to maintain blood pressure and urine output during these first 2 days, he must later mobilize much of this back into the circulation. In older patients with weak hearts, this can result in fluid overload, pulmonary edema, and heart failure. To safely cut in half the amount of fluid given during shock resuscitation is potentially life-saving.

Van der Does and Van Dyke (1989) have correctly noted that my clinical observations on limiting inflammatory progression of burns are only case reports,

and the data have not yet been confirmed by a convincing controlled study. While awaiting such a study, I implore the reader to try it—you'll like it (Ewin, 1996).

PAIN AND FEAR

When a newly burned patient arrives in the Emergency Room, his mind is concentrated and hypnosis is easy to induce if he is not already in a spontaneous trance. He is often a stranger to the physician, and the first communication is an introduction and suggestion:

Verbalization

DOCTOR: I'm Dr —— and I'll be taking care of you [*pause*]. Do you know how to treat this kind of burn?

PATIENT: No.

DOCTOR: That's all right, because we know how to take care of this, and you've already done the most important thing, which was to get to the hospital quickly. You are safe now, and if you will do what I say, you can have a comfortable rest in the hospital while your body is healing. Will you do what I say?

PATIENT: Yes [or 'I'll try'].

Comment

This question is to bring to his immediate attention that he does not know and that he must put his faith in the medical team. Precise wording is important because if you ask 'Do you know *anything* about treating burns?' he may think he knows something and tell you about butter, Solarcaine, or kiss-it-and-make-it-well, which is complete avoidance of recognizing the dependence.

The standard reply. In the rare instance of a physician or nurse who actually does know about burns, you simply use that knowledge to say: 'Then you already know that you need to turn your care over to us and that we will take care of you'. This exchange lets the patient know that he is on the team and has already done his biggest job, so he can safely lay aside his fight or flight response (he's already fled to the hospital), which mobilizes hormones that interfere with normal immunity and metabolism. It includes a prehypnotic suggestion (Alexander, 1971) that he is safe and can be comfortable if he makes a commitment. With his affirmative answer he has made a hypnotic contract that is as good as any trance. Frightened patients tend to constantly analyze each sensation and

new symptom to report to the doctor. By turning his care over to us (the whole team), he is freed of his responsibility and worry. Next, his attention is diverted to something he had not thought of before.

DOCTOR: The first thing I want you to do is turn the care of this burn completely over to us, so you won't have to worry about it at all. The second thing is for you to realize that what you think will make a great deal of difference in your healing. Have you ever seen a person blush red, or blanch white with fear?

PATIENT: Yes.

DOCTOR: Well, you know that nothing has happened except a thought, an idea, and all of the little blood vessels in the face have opened up and turned red, or clamped down and blanched. What you think is going to affect the blood supply to your skin, and that affects healing, and you can start right now. You need to have happy, relaxing, enjoyable thoughts to free up all of your healing energy. Brer Rabbit said 'everybody's got a laughing place,' and when I tell you to go to your laughing place, I mean for you to imagine that you are in a safe, peaceful place, enjoying yourself, totally free of responsibility, just goofing off. What would you choose for a laughing place?

PATIENT: Go to the beach . . . or . . .

DOCTOR: Let's get you relaxed and go to your laughing place right now, while we take care of the burn. Get comfortable and roll your eyeballs up

Even dark-skinned patients are aware of this phenomenon in light-skinned people.

The patient needs something he perceives as useful to occupy his mind. The laughing place may be the beach, television, fishing, golfing, needlepoint, playing dolls, anything. It becomes the key word for subsequent rapid induction for dressing changes, and so on—to simply 'go to your laughing place.'

as though you are looking at the top of your forehead and take a deep, deep, deep breath and as you take it in, gradually close your eyelids, and as you let the breath out, let your eyes relax and let every nerve and fibre in your body go [*slow and cadenced*] loose and limp and lazy, your limbs like lumps of lead. Then just let your mind go off to your laughing place and . . . [*visual imagery of laughing place*].

It helps the doctor to know what the laughing place is and to record it, because he may enhance it later with some visual imagery. This simple rapid induction usually produces a profound trance almost immediately.

This short amount of conversation does not ordinarily delay the usual emergency hospital care. Most often, when the patient arrives in the Emergency Room an analgesic is given, blood is drawn, IV drips are started, and cold water applications are put in place by the time the doctor arrives. If not, these can proceed while the conversation takes place. A towel dipped in icewater produces immediate relief of the burning pain that occurs right after a fresh burn. Since frostbite is as bad an injury as a burn, the patient should not be packed in ice, but icewater towels are very helpful. In fact, Chapman (Chapman, Goodell & Wolff, 1959a) showed that applying icewater to a burn holds the inflammatory response in check for several hours, so there is ample time to call for the assistance of a qualified hypnotist if the primary physician is not skilled in the technique of hypnosis.

Verbalization

DOCTOR: Now while you are off at your laughing place, I want you to also notice that *all of the injured areas* are cool and comfortable. Notice how cool and comfortable they actually are, and when you can really feel this, you'll let me know because this finger [*touch an index finger*] will slowly rise to signal that all of the injured areas are cool and comfortable.

Comment

By this time, the patient has iced towels on and the analgesic is taking effect so that he actually is cool and comfortable. It is much easier hypnotically to continue a sensation that is already present than it is to imagine its opposite. The suggestion 'cool and comfortable' is anti-inflammatory, and if he accepts it, he cannot be hot and painful. From now on, the word *injured* is substituted whenever possible for the word *burn*, because patients use the word burning to describe their pain. (Do not specify a particular area such as hand, neck, etc., because while these areas may do well, some area you forgot may do poorly.)

DOCTOR: [*after obtaining ideomotor signal*] I then leave the patient in trance, go ahead with his initial care, and get him in on that sensation of being cool and moved to the Burn Unit. Often, he will comfortable and you can keep it that drop off to sleep. way during your entire stay in the hospital. You can enjoy going to your laughing place as often as you like, and you'll be able to ignore all of the bothersome things we may have to do and *anything negative* that is said.

DOCTOR: Go to your laughing place. On subsequent days, this is all the signal the patient usually needs to drop into a hypnoidal state and tolerate bedside procedures, physical therapy, and so on.

With burns covering less than 20% of the body surface, the single initial trance generally suffices, while in more extensive burns, repeated suggestion helps control pain, anorexia, and uncooperativeness (Crasilneck et al., 1955; Ewin, 1973; Schafer, 1975; Wakeman & Kaplan 1978; Knudson-Cooper, 1981; Patterson, Everett, Burns & Marvin, 1992). In more extensive burns requiring multiple surgeries, the patient's outcome may be influenced by subconscious hearing of pessimistic conversation while under general anesthesia (Ewin, 1986a,b).

GUILT AND ANGER

Since a thought can produce a 'burn' (see above), continued feelings of guilt or anger can prevent healing, and should be dealt with during emotional countershock (Mattson, 1975) a day or two after admission. If the patient caused it and is feeling guilty, I stress the fact that the injury was unintentional, he has been punished enough and has learned a lesson he will never forget or repeat. If someone else is at fault and he is angry, I point out that our first priority is healing. Getting well does not interfere with his legal rights, and they come later. If it was an accident, I ask my patient to forgive the person of evil intent, even though planning to pursue legal redress. There is no place for anger at his laughing place, and he is instructed to postpone that feeling until healing has occurred.

PAIN—RESTING AND PROCEDURAL

During hospitalization, burned patients endure two quite different pain experiences. Resting, or background, pain is ever present and of low to moderate intensity.

Opioids are the treatment of choice, even though they seldom provide complete relief. There is little danger of addiction or serious side effects from liberal use of opioids over the course of burn healing (Melzack, 1990). Hypnosis can be a helpful adjunct, and should not be withheld even in patients who test low in hypnotizability (Patterson, Questad & deLateur, 1989; Schafer, 1996).

Procedural pain is short-lived and excruciating, often unmanageable with multiple forms of analgesia, including high doses of opioids (Perry, Heidrich & Ramas, 1981). Daily tubbings, wound care, and dressing changes are too frequent to use general anesthesia without harming the patient. Patterson, Goldberg and Ehde (1996) report a patient who refused to continue his dressing changes, stating: 'I would rather die than go through the pain again.' He was hypnotized twice, and at his next dressing change he fell asleep for 2 hours. The authors note that few patients have responded as dramatically since that time. Nonetheless, this case illustrates the clinical value of their controlled studies (Patterson, Questad & de Lateur, 1989; Patterson et al., 1992; Patterson & Ptacek, 1997; Everett, Patterson & Chen, 1990) showing that burned patients with high pain scores obtained more subjective relief from hypnosis than those with low pain scores or the controls who were not hypnotized.

A videotape of a patient with severe and intolerable pain at dressing changes of both legs is available from the library of the American Society of Clinical Hypnosis (Dane, 1988). In the tape, he undergoes hypnosis, rests quietly through the tubing and dressing, then walks back to his room 'standing on his own two feet'.

INFECTION

Three-fourths of all deaths occurring in burn patients are due to sepsis (Simmons & Howard, 1982). Hypnosis exerts a profound effect on infection, but the mechanism remains unclear. In 1847 Esdaile's (reprinted 1957) surgical death rate from infection dropped from 45 to 5% when he started using hypnoanesthesia in India. Schafer (1975) noted that the patients he hypnotized on the Burn Unit healed without infection. He graciously credited this to good surgical care, but surgeons know better. Chong (1975) describes the Monkey God rituals in which participants in a trance-like state put skewers through their cheeks and flesh without sterilization, and he comments that 'no case of sepsis or tetanus has ever been reported.' It has been my experience with the viral infections of warts (Ewin, 1974) and herpes (Ewin & Hill, 1981) that hypnotic intervention is effective. Feller, Flora and Bawol (1976) showed in a cooperative study of 21 000 burned patients that survival was not statistically influenced by the type of topical antibiotic used, or even if none was used.

How might hypnosis influence infection? Virulence of the organism and resistance of the patient are the protagonists, and presumably all we can influence with words is the patient's resistance. A reasonable theory derives from comparative

physiology: many life-forms have a special inactive state in which survival is enhanced. The tetanus organism in its spore state can survive drying, boiling for 5 minutes, and exposure to antibiotics: in its vegetative state, it is susceptible to many antibiotics and even oxygen. The amoebic cyst has been revived after drying for 40 years and is not harmed by ordinary chlorination of drinking water or application of any known medications: in its active trophozoite form, it is destroyed by numerous amoebicidal drugs. Plants and trees become dormant in wintertime and can be pruned, grafted, or transplanted safely; they are unlikely to survive the same treatment during the active growing period of springtime. The African lung fish (*Protopterus*) can survive for several years out of water in a state of suspended animation called estivation or summer torpidity. The ground squirrel hibernates to survive winter freezing and food shortages, decreasing heart rate from 300 to 10 per minute and reducing metabolism 30 to 100 times. A deep somnambulistic trance apparently gives humans similar protection against potentially lethal external onslaughts. More recent studies in immunology and microchemistry indicate that 'information substances' (neuropeptides) are released by nervous tissue, some of which act as cytokines which influence inflammation and immunity (Pert, Ruff, Weber & Herkenham, 1985; Pennisi, 1997). These include substance P (Payan, 1989), interleukin-1 and interleukin-6, as well as counterregulatory hormones such as catecholamines, cortisol, and glucagon (Fong, Moldawer, Shires & Lowry, 1990; Silver, Gamelli, O'Reilly & Hebert, 1990). In a review article, Solomon (1987) puts forward over 30 'postulates' for specific implications of CNS-immune interaction. Most telling is Ader's (1981) demonstration of Pavlovian conditioning of the immune system in rats.

My own experience has matched Esdaile's, and I no longer use prophylactic systemic antibiotics on burned patients who have been hypnotized early and can be treated as outpatients. Larger burns requiring hospitalization should be referred to a Burn Center. In the rare patient who develops infection, a culture and the appropriate antibiotic should be used.

REGRESSION AND DEPRESSION

Seriously burned patients easily develop a sense of helplessness and fear of the many painful dressing changes and whirlpool tubbings they are required to undergo. Children in particular regress to infancy and will urinate and defecate in bed and on their wounds, adding to morbidity (LaBaw, 1973). Simply lying in bed is regressive. Burns seldom occur on the bottom of the feet, and as soon as shock is controlled enough to allow the vertical position without hypotension (3 or 4 days), the patient should be encouraged to 'stand on his own two feet' to void and at least to walk around the bed with help. This counteracts regression, opposes depression, and is the beginning of physical and emotional rehabilitation.

NUTRITION

The metabolic rate rises significantly with burns, and attains a maximum of twice normal when the extent of the burn reaches 60% of body surface. Meeting caloric requirements is imperative for good wound healing, and recent studies indicate that enteral feeding may protect against endotoxemia and is preferable to intravenous feeding. Burned patients are often aware of the odor of their secretions and feel queazy or lacking in appetite. Hypnosis is widely used to control the nausea associated with chemotherapy, and Crasilneck (Crasilneck et al., 1955) has reported a depleted burn patient who increased his oral intake to 8000 Kcal per day with hypnotic suggestions to eat everything on his plate.

BODY IMAGE AND PHYSICAL REHABILITATION

Disfigurement is never pleasant, and in this age of body-building, facelifts, breast implants, and bikinis, the slightest imperfection or scarring can make a patient feel like the Phantom of the Opera. If the patient has a religious background, this can be a powerful resource, and I emphasize that the *real* self is still there, and they can learn to forgive anyone who doesn't know that fact and looks askance. Patients without spiritual resources need to be approached with a more Ericksonian technique, utilizing whatever ego strengths are available.

Physical rehabilitation requires determination to stretch out contractures, ignoring or modifying perceptions of itching and irritation in scars, and overcoming heat intolerance (Wakeman, 1988). Above all, one must persevere in physical therapy until maximal improvement is attained. Physicians tend to leave this to the physiotherapist so completely that it is almost like abandoning the patient. Hypnotic suggestions directed at these problems near the end of treatment are a final expression of interest and encouragement, and give the physician a matchless opportunity to congratulate the patient on his participation in the outcome, as he resumes control of his own life.

SUMMARY

Hypnosis is of inestimable value in the care of burns from onset to discharge. In the first 2 to 4 hours postburn it diminishes the inflammatory response that causes progression of a burn from first to second degree, or from second to third degree. Later, it is helpful for resting pain, and especially effective for control of pain in those patients with the most excruciating procedural pain. Infection is minimized, suppressed appetite can be restored, and body image and active participation in rehabilitation are enhanced.

In conclusion, it is encouraging to note that in looking 10 years ahead, predicting

changes to come in burn care, the outgoing president of the American Burn Association said in his presidential address that 'Hypnosis and relaxation therapy will be in common use' (Heimbach, 1988).

REFERENCES

- Ader, R. (Ed.) (1981). *Psychoneuroimmunology*. New York: Academic Press.
- Alexander, L. (1971). The prehypnotic suggestion. *Comprehens. Psychol.*, **12**, 414–418.
- Bellis, J. M. (1966). Hypnotic pseudo-sunburn. *Am. J. Clin. Hypn.*, **8**, 310–312.
- Brauer, R. O. & Spira, M. (1966). Full thickness burns as source for donor graft in the pig. *Plast. Recons. Surg.*, **37**, 21–30.
- Chapman, L. F., Goodell, H. & Wolff, H. G. (1959a). Augmentation of the inflammatory reaction by activity of the central nervous system. *Am. Med. Assoc. Arch. Neurol.*, **1**, 557–572.
- Chapman, L. F., Goodell, H. & Wolff, H. G. (1959b). Changes in tissue vulnerability induced during hypnotic suggestion. *J. Psychosom. Res.*, **4**, 99–105.
- Cheek, D. B. (1962). Ideomotor questioning for investigation of subconscious 'pain' and target organ susceptibility. *Am. J. Clin. Hypn.*, **5**, 30–41.
- Chong, T. M. (1975). Trance states in Singapore. *Br. J. Clin. Hypn.*, **5**, 102–107.
- Crasilneck, H. B., Stirman, J. A., Wilson, B. J., McCranie, E. J. & Fogelman, M. J. (1955). Use of hypnosis in the management of burns. *J. Am. Med. Assoc.*, **158**, 103–106.
- Dahinterova, J. (1967). Some experiences with the use of hypnosis in the treatment of burns. *Int. J. Clin. Exp. Hypn.*, **15**, 49–53.
- Dane, J. R. (1988). Hypnosis for pain, anxiety, and healing with a burn patient. Video Library, American Society of Clinical Hypnosis, 2200 East Devon Ave. Suite 291, Des Plaines IL 60018.
- de Camara, D. L., Raine, T. & Robson, M. C. (1981). Ultrastructural aspects of cooled thermal injury. *J. Trauma*, **21**, 911–919.
- Deitch, E. A. (1990). The management of burns. *New Eng. J. Med.*, **323**, 1249–1253.
- Esdaile, J. (1957). *Hypnosis in Medicine and Surgery* (originally titled *Mesmerism in India*, 1847). New York: Julian Press.
- Everett, J. J., Patterson, D. R. & Chen, A. C. N. (1990). Cognitive and behavioural treatments for burn pain. *Pain Clin.*, **3**, 133–145.
- Ewin, D. M. (1973). Hypnosis in industrial practice. *J. Occup. Med.*, **15**, 586–589.
- Ewin, D. M. (1974). Condyloma acuminatum. Successful treatment of four cases by hypnosis. *Am. J. Clin. Hypn.*, **17**, 73–78.
- Ewin, D. M. (1978). Clinical use of hypnosis for attenuation of burn depth. In F. H. Frankel & H.S. Zamansky (Eds), *Hypnosis at its Bicentennial*. Selected papers from the Seventh International Congress of Hypnosis and Psychosomatic Medicine. New York: Plenum Press.
- Ewin, D. M. (1979). Hypnosis in burn therapy. In G. D. Burrows, D. R. Collison & L. Dennerstein (Eds), *Hypnosis 1979*. New York: Elsevier/North-Holland.
- Ewin, D. M. (1984). Hypnosis in surgery and anesthesia. In W.C. Wester, II & A.H. Smith, Jr (Eds), *Clinical Hypnosis: A Multidisciplinary Approach*. Philadelphia: J.B. Lippincott.
- Ewin, D. M. (1986a). Emergency room hypnosis for the burned patient. *Am. J. Clin. Hypn.*, **26**, 5–8.
- Ewin, D. M. (1986b). The effect of hypnosis and mental set on major surgery and burns. *Psychiatric Ann.*, **16**, 115–118.
- Ewin, D. M. (1996). Editorial comment. *Am. J. Clin. Hypn.*, **38**, 213.

- Ewin, D. M. & Hill, F. E. (1981). Analytical hypnotherapy of recurrent herpes genitalis: Report of four cases. Presented at the 24th annual meeting of the American Society of Clinical Hypnosis, Boston, 14 November 1981.
- Feller, I., Flora, J. D. Jr & Bawol, R. (1976). Baseline results of therapy for burned patients. *J. Am. Med. Assoc.*, **236**, 1943–1947.
- Fong, Y., Moldawer, L. L., Shires, G. T. & Lowry, S. F. (1990). The biologic characteristics of cytokines and their implication in surgical injury. *Surg. Gyn. Obs.*, **170**, 363–378.
- Frank, B. A., Berry, C., Wachtel, T. L. & Johnson, R. W. (1987). The impact of thermal injury. *J. Burn Care Rehab.*, **8**, 260–262.
- Heimbach, D. M. (1988). 'We can see so far because . . .' *J. Burn Care Rehab.*, **9**, 340–346.
- Herndon, D. N., Curreri, P. W., Abston, S., Rutan, T. C. & Barrow, R. E. (1987). Treatment of burns. *Curr. Probl. Surg.*, **24**, 341–397.
- Hinshaw, J. R. (1963). Progressive changes in the depth of burns. *Arch. Surg.*, **87**, 993–997.
- Johnson, R. F. Q. & Barber, T. X. (1976). Hypnotic suggestions for blister formation: Subjective and physiological effects. *Am. J. Clin. Hypn.*, **18**, 172–181.
- Knudson-Cooper, M. S. (1981). Relaxation and biofeedback training in the treatment of severely burned children. *J. Burn Care Rehab.*, **2**, 102–104.
- LaBaw, W. L. (1973). Adjunctive trance therapy with severely burned children. *Int. J. Child Psychother.*, **2**, 80–92.
- Levitin, A. A. (1991). The use of hypnosis with cancer patients. *Psychiatric Med.*, **10**(1), 119–131.
- Margolis, C. B., Domangue, B.B., Ehleben, C. & Shrier, L. (1983). Hypnosis in the early treatment of burns: A pilot study. *Am. J. Clin. Hypn.*, **26**, 9–15.
- Mattson, E. I. (1975). Psychological aspects of severe physical injury and its treatment. *J. Trauma*, **15**, 217–234.
- Melzack, R. (1990). The tragedy of needless pain. *Sci. Amer.*, **282**(2), 19–25.
- Patterson, D. R., Everett, J. J., Burns, G. L. & Marvin, J. A. (1992). Hypnosis for the treatment of burn pain. *J. Cons. Clin. Psychol.*, **60**, 713–717.
- Patterson, D. R., Goldberg, M. L. & Ehde, D. M. (1996). Hypnosis in the treatment of patients with severe burns. *Am. J. Clin. Hypn.*, **38**, 200–212.
- Patterson, D. R. & Ptacek, J. T. (1997). Baseline pain as a moderator of hypnotic analgesia for burn injury treatment. *J. Cons. Clin. Psychol.*, **65**, 60–67.
- Patterson, D. R., Questad, K. A. & de Lateur, B.J. (1989). Hypnotherapy as an adjunct to narcotic analgesia for the treatment of pain for burn debridement. *Am. J. Clin. Hypn.*, **31**, 156–163.
- Payan, D. G. (1989). Substance P: A modulator of neuroendocrine-immune function. *Hosp. Pract.*, 15 February, 67–80.
- Pellicane, A. J. (1960). Hypnosis as adjunct to treatment of burns. *Am. J. Clin. Hypn.*, **2**, 153–156.
- Pennisi, E. (1997). Tracing molecules that make the brain–body connection. *Science*, **275**, 930–931.
- Perry, S., Heidrich, G. & Ramos, E. (1981). Assessment of pain in burn patients. *J. Burn Care Rehab.*, **2**, 322–326.
- Pert, C., Ruff, M., Weber, R. & Herkenham, M. (1985). Neuropeptides and their receptors: A psychosomatic network. *J. Immun.*, **135**, 820s–826s.
- Schafer, D. W. (1975). Hypnosis use on a burn unit. *Int. J. Clin. Exp. Hypn.*, **23**, 1–14.
- Schafer, D. W. (1996). *Relieving Pain: A Basic Hypnotherapeutic Approach*, Appendix B. Northvale, NJ and London: Jason Aronson.
- Silver, G. M., Gamelli, R. L., O'Reilly, M. & Hebert, J. C. (1990). The effect of interleukin 1 alpha on survival in a murine model of burn wound sepsis. *Arch. Surg.*, **125**, 922–925.

- Simmons, R. L. & Howard, R. J. (Eds) (1982). *Surgical Infectious Diseases*. New York: Appleton-Century-Crofts.
- Solomon, G. F. (1987). Psychoneuroimmunology: Interactions between central nervous system and immune system. *J. Neurosci. Res.*, **18**, 1–9.
- Spanos, N. P., McNeil, C. & Stam, H. J. (1982). Hypnotically 'reliving' a prior burn: Effects on blister formation and localized skin temperature. *J. Abnorm. Psychol.*, **91**, 303–305.
- Ullman, M. (1947). Herpes simplex and second degree burn induced under hypnosis. *Am. J. Psychiat.*, **103**, 828–830.
- Van der Does, A. J. & Van Dyke, R. (1989). Does hypnosis contribute to the care of burn patients? *Gen. Hosp. Psychiat.*, **11**, 119–124.
- Wakeman, R. J. (1988). Heat desensitization of job-related heat intolerance in recovered burn victims. *Am. J. Clin. Hypn.*, **31**, 28–32.
- Wakeman, R. J. & Kaplan, J. Z. (1978). An experimental study of hypnosis in painful burns. *Am. J. Clin. Hypn.*, **21**, 3–12.

Hypnosis in Dentistry

DOV GLAZER

New Orleans, LA, USA

INTRODUCTION

This chapter deals with that part of the human anatomy that is the greatest culprit in reduction in life expectancy—the mouth. After all, smoking, drinking and improper nutrition all pass through the oral cavity. While nutritional abuses have been dealt with elsewhere in this volume (see chapter 15), the focus here is to provide dental and mental health practitioners insight and solutions for the hypnotic management of oral problems. An approach is offered and scripts are provided to make the application of clinical hypnosis strategies effective, time-saving and practical in the busy private practice setting. Strategies for enhancing patient comfort, expediting the healing process, reducing pain perception, dealing with destructive oral habits (such as finger and thumb sucking, exaggerated gag reflex, bruxism and smoking) are presented for the reader's consideration. Implementing these hypnotic strategies can improve the quality of care, and increase the practitioner's satisfaction in providing it.

CENTRALITY OF ORAL CAVITY

There are compelling reasons to view the oral cavity as central to human existence. According to Freudian psychosexual theory, psychological development is divided into three stages: the oral stage (first year), the anal stage (second and third years), and the genital stage (around third or fourth year). Occasionally, some libidinal energy exists during one or both of the earlier stages, influencing the rest of the individual's life. By Freud's own account, the mouth serves as the first interface between the infant and the surrounding environment. Not only does it serve as a means of obtaining proper nutrition but also as an erogenous zone which provides sexual pleasure. If the infant feels anxious about oral activity, an oral fixation may result. Fixation produces an individual possessing a personality described by Freud as an 'oral character.' Another cause of oral fixation revolves around satisfactory nourishment. The individual develops a sense of trust or distrust towards its

environment during the oral stage. This trust is based on the mother's ability to meet the infant's biological needs; that is, to nourish the baby as it desires.

The contemporary dentist appreciates that expertise in this health care field extends beyond the surgical and medical management of the hard and soft tissues of the oral cavity. The psychological wellness of the patient is an integral part of effective comprehensive care. Beyond the physical well-being of the patient's oral cavity, a relevant factor in successful treatment, the psychological wellness of the patient with relation to the oral cavity is a precondition to the wellness of the patient as a whole (Eli, 1992).

VISITING THE DENTIST IS ENTRANCING

Hypnosis plays a vital role in every dental practitioner's interaction with patients. The frightened patient walking into the dental treatment room is most certainly in a trance state. The dentist with training in clinical hypnosis can transform that intense sense of powerlessness and fright to a state of inner calm and comfort. Probably the greatest benefit of clinical hypnosis to the dentist is the ability to recognize the patient's state of consciousness and apply verbal and non-verbal hypnotic strategies to enhance patient comfort.

The dental practitioner has an assortment of tools available to help the patient distract and dissociate from the frightening feeling of being a vulnerable subject in the dental chair. Projecting an educational or entertaining video program on a personalized 3-D monitor is extremely effective for the patient who is visual but reluctant to engage in auto-visual imaging. A headset with an audiotape player is effective for the patient who is auditory and ready to close the eyes. The patient who wants to create a chemical mystical experience can be offered nitrous oxide/oxygen conscious sedation. But the effectiveness of each of these adjunctive techniques is dependent on the hypnotic suggestions offered by the dentist operator and members of the dental team. What is said affects what is felt.

Regardless of which other tools are utilized, the crucial constant is the doctor's verbiage and attitude. Offering the patient hypnotically positive ideas and suggestions makes the difference between the fight-flight-bite response and the cool, calm and relaxed experience. Positive hypnotic ideas and suggestions help the patient create hemostasis immediately following dental extractions, promote the rate of healing and reduce postoperative discomfort. Clinical hypnotic strategies are also very useful in modifying harmful oral habits such as bruxism, finger sucking and nail biting. In addition, hypnosis is extremely useful in the management of the 'difficult' patient who suffers from a hyperactive gag reflex or simply fails to make necessary dental appointments.

There are three levels in the utilization of clinical hypnosis. First, as a means for achieving a higher level of self-awareness, which may lead to a higher degree of proficiency and satisfaction from the practice of dentistry. Learning, experiencing

and practicing self-hypnosis is an incredibly rewarding personal growth tool. Beyond that, associating with practitioners from other medical disciplines can be extremely educational and enlightening. In our community, the component section of the American Society of Clinical Hypnosis meets bimonthly to discuss advances in and case studies of clinical hypnosis. Besides the formal meetings, this author meets with three other colleagues (a general surgeon, an oral surgeon and a psychiatrist) on a monthly basis to conduct small group practice of hypnotic techniques. We take turns at being the 'operator' and 'subject', videotape the session and review our individual experience. This group has been conducting these sessions since 1993 and the fact that we still meet regularly is testimony to the value of exploring via hypnosis. The second level is achieved by creating a hypnotically calm dental environment in which direct and indirect, verbal and non-verbal, messages are presented to enhance patient comfort and cooperation. At this level audio and videotapes produced by outside sources and/or the doctor can be offered to the patient. The ambiance of the office, from the background music to the aromas in the air, to staff friendliness and genuine interest in the patient, will affect the dental experience. Nitrous oxide/oxygen with an adequate dose of positive hypnotic suggestions is effective at this level. The dentist with advanced training in clinical hypnosis can offer the third level of hypnotic intervention. At this level overt hypnotic interactions are utilized. The patient is interviewed, the term hypnosis is actually used, a history is taken, consent forms are signed, the session is recorded on videotape, the Hypnotic Induction Profile is administered, and if appropriate, the patient is asked if they would like to be taught how hypnosis can be useful. While dentists feel much more comfortable in molding patients' teeth rather than behavior, and opt to make appropriate referrals to mental health professionals, there are situations in which brief hypnotic intervention by the dentist is appropriate. At some level, every dental practice that has frightened patients and a dentist who wants to offer suggestions for relief should benefit from the contents of this chapter.

COVERT HYPNOTIC INTERACTION

The first doctor–patient, eyeball-to-eyeball interaction is the most crucial. Commonly, the patient is at some level of the fight-flight-bite response and the dentist has the opportunity to manipulate this hypnotic state to enhance patient comfort in the dental situation. The hypnotic interaction has begun before the first word is uttered. There is no overt effort to enter into a verbal or written contract that hypnosis is part of the interaction, and the patient enters into a spontaneous trance state. The first step for the dentist is to raise the patient's chair to eye level with that of the doctor's. The doctor also rolls back the dentist's stool about 5–6 feet from the patient in order to communicate to the patient a sense of equality in controlling the situation and a sense that personal space is not being violated. As the medical-

dental health history is being reviewed, and as questions are discussed concerning the teeth, the doctor moves closer and closer to the patient. At some point the patient is asked by what name friends call her and permission to use that name is requested. Before the physical oral exam is conducted, or before any operative procedures are performed, the following verbiage is used to heighten the patient's sense of control.

Jane, I would like to place my hand on your shoulder to show you something very interesting. May I put some pressure on your shoulder? [*Permission is usually indicated by a nod, and the part of the body farthest from the face is squeezed gently yet firmly.*] You can feel that, can't you? Feeling is okay. In much the same way, you can feel everything we do for you. Feeling is okay. If for any reason you ever want us to pause, or if you have any questions about anything, just let the left hand rise [*for the right-handed dentist the left hand is gently raised about 6 inches from the lap by gently lifting the wrist.*] We will always tell you everything you would like to know. We have a hand mirror for you to watch if you are curious [*offer 4-inch mirror to be held in right hand.*] Most people prefer to just let the eyes close. What would you like?

It should be noted that in this patient-empowering interaction, the words pain, hurt and discomfort are never introduced. When patients say 'Doc, I don't want to feel anything', the implication is the desire to avoid pain sensations. Since the terms 'feel' and 'hurt' are interchangeable, a changed attitude is presented which is acceptable to the entranced patient. The patient is ready for more positive advice, and as the dental chair is reclined, the following suggestions are offered:

As the back of the chair slowly reclines, notice how comfortable it is. The chair gives you perfect support. This is the perfect opportunity to just let yourself go into a wonderful, relaxing dream-like state. There are no phone calls, no demands on you, just the perfect opportunity to let yourself relax; perhaps take a nap, while your mouth (or teeth or gums) is being taken care of. Would it be all right for you to let yourself relax while we take care of you? [*Place index finger on forehead and move it slowly to the bridge of the nose.*] Let the eyes close. Take a deep breath, and let the jaw go loose, limp and relaxed. Just let the force of gravity open the mouth naturally. Be pleasantly surprised how comfortable it feels and enjoyable it is to be in your special laughing place. That wonderful place where you feel warm, safe and secure. That place that you've been to before or look forward to visiting. Perhaps high on the mountaintop or at the seashore. Experience it with all the senses. Touch, smell, hear, see, and feel as though you are there at this very moment. Enjoy this special time.

Instead of telling the patient to try to open the mouth wide, the gentle suggestion is offered to let gravity do the task while letting all the muscles of facial expression be flaccid while the dental procedure is underway.

At the conclusion of the procedure the patient is thanked for the cooperation given and complimented for the ability to be so calm and relaxed. The suggestion is offered that at the next visit, feeling the hand on the shoulder can serve as the

cue to let the eyes close, to take a deep breath and to enjoy the experience of deep relaxation while care is being given to the mouth.

POSTOPERATIVE HEMOSTASIS AND HEALING SUGGESTIONS

Additional suggestions are offered to the patient who has undergone an oral surgical procedure. At the conclusion of procedures involving bleeding (tooth extraction, excision of soft tissue lesion, periodontal surgery), the patient is informed of the results of the operation and offered the following suggestions:

The procedure went very well [*As it usually does. If there were problems, the patient needs to be fully informed.*] It is now time for you to start the healing process. Please let the extraction site bleed lightly so that the fluid washes away any unnecessary debris or toxins within the socket. Then stop the bleeding so that the socket is filled and the clot can form. Your body knows how to do this. [*Place two pieces of 2 × 2 moist gauze over the extraction site.*] Just like any situation where you have a cut, first apply pressure, and you do that by biting down on the gauze, and then let the scab form. The soft scab will first form a layer of protective skin and then more and more layers of skin will grow in the coming days. In the coming months bone will fill in the area that used to have the tooth. In the mean time, your task is to treat the area gently and let healing occur naturally. If you had a small cut on your arm, you would do everything possible to protect the scab. So avoid things that are harmful and eat foods that are healthy and good for you. For the next 24 hours, avoid smoking, spices and mouthwash. Eat cool and sweet foods. The coolness reduces unnecessary swelling and the sugar promotes healing. Ice cream or milk shakes will make you feel better and help the healing process progress rapidly. Fortunately, the mouth is the fastest healing part of the body because of the presence of immunoglobulins in the saliva, and the fluids washing the area. So treat that area gently and be pleasantly surprised how quickly and effectively it heals. As always, if you have any questions, please call me at the office or at home. [*Give patient postoperative instruction sheet and hand write home phone number. If a prescription for narcotic analgesic is indicated, the directions state to take medication for comfort, (rather than for pain).*]

DO YOU REALLY WANT TO START SMOKING?

Another area in which hypnotic strategies are utilized, but the concepts of hypnosis are not mentioned, is in the 3-minute smoking cessation interaction. At the conclusion of the oral examination and cancer screening, if there is an indication by the patient that there is a desire to 'quit', the following sample script is useful.

DOCTOR: When did you have your last cigarette?

PATIENT: On the way to the office, about half an hour ago.

DOCTOR: So you had your last cigarette at three o'clock, on 6, May 1997. Do you really want to start smoking again?

PATIENT: (Pause). I get it. Each time I burn the tobacco and inhale the smoke, I start smoking. It was not pleasant when I started at 18. Knowing what I know now, I have no desire to start today.

DOCTOR: The choice to start is totally your own. Should you have a craving, consider taking a deep breath, hold it and gently release the tension. Drinking eight cups of water a day is a good habit to acquire. To keep your mouth feeling healthy and clean, gently brush the teeth and clean the tongue several times throughout the day.

Rarely do people feel comfortable in labeling themselves as quitters. The focus is changed from quitting to starting. This strategy eliminates the fear of failure at 'quitting', and does not strain the doctor-patient relationship. If more intense interaction is indicated, an appropriate referral is made to a mental health practitioner or smoking cessation program.

According to the National Cancer Institute, the realization that a dentist cares enough about a patient's health to encourage smoking cessation or continued abstinence from smoking can be a major factor in a patient continuing as a non-smoker. About 95% of non-practicing smokers decided not to start again without the help of formal cessation programs. In addition to having high motivation and good self-management skills, successful former smokers usually receive help and encouragement from family, friends, physicians and dentists. In fact, clinical studies show that patients whose doctors deliver a brief stop-smoking message are 2-10 times more likely to create a positive change than are patients who receive no such advice.

CAN'T HEAR OVER THE SOUND OF THE DRILL

When patients visit a physician or mental health professional, they expect verbal interactions. That is not the case with dentistry. Patients coming to the dentist expect their mouth to be treated, not talked about or analyzed. With the advent of stereophonic headphones the dentist can offer positive hypnotic suggestions while taking care of the mouth. With the use of the waterproof cassette player (which can be sanitized between patients), the dental patient can be distracted and dissociated by the soothing suggestions of the doctor's voice and also enjoy an audio shield from the piercing noise of the dental drill. The dental practitioner can prepare 'generic' audiotapes that are consistent with the practice's philosophy or offer pre-recorded music, humor or educational/instructional audiotapes. For the doctor who is willing to invest a little time in preparing patient tapes, it is recommended that the form of speech be primarily in the passive voice and the text be devoid of

personal pronouns. It may feel strange to record a tape without using the 'I want you to...' mode, but for the listener, hearing just the ideas and suggestions is empowering. Because the brain does not easily compute 'no' in the hypnotic state, it is more effective to offer positive suggestions. For example, rather than saying 'don't forget to floss daily', 'be sure to floss daily to keep your gums healthy', is more likely to produce the desired response.

RELAXATION IS JUST A BREATH AWAY

When a patient is obviously anxious about being in the dental treatment room and wants a quick procedure for experiencing a relaxing hypnotic state, the 5-minute relaxation exercise, developed by the author in 1982, is offered. The patient does this hypnotic exercise before the dental procedure is initiated. There is no need for the doctor to be present while the patient is experiencing the calming affects. Copies of this tape can be given to patients to practice at home, or the tape can be listened to as the first part of the dental visit.

I. INTRODUCTION

For the next five minutes, experience a uniquely effective technique to enjoy a hypnotic trance. Simply listen to the suggestion, follow the instruction and be pleasantly surprised by the effect.

II. INDUCTION

A. Tension:

Focus attention on the hands. Put the heels of the hands together and let the fingers touch each other. Raise the hands to the height of the jaw, elbows away from the body. Press the hands together. Press tight enough to feel the tension in the fingers; hands; arms; shoulders; neck; clench the teeth; feel the tension around the jaw, face, head. Squint the eyes, wrinkle the forehead. Press tighter.

Feel that tension!

B. Relief:

Now, relax: hands down, eyes closed. Take a deep breath through the nose and hold it, now gently release the air. Nice and comfortable, pleasantly relaxed. Lips together, jaw loose, limp and relaxed. With eyes closed, arms and legs in a comfortable position, let the body sink gently into the chair. As the tension drains from the top of the head to the tips of the fingers, become aware of relaxed muscles around the head; temples; forehead; eyebrows; eyes; nose; cheeks; lips; chin; jaw; ears; neck; shoulders; arms; hands; fingers.

III. SUGGESTIONS

Sense the relaxation throughout. Feel warm, safe and secure. Float with the feeling, and once again, take a deep, deep, deep, breath through the nose and hold it, now gently release the tension. Nice and comfortable, pleasantly relaxed, more deeply relaxed. Feel good and confident that relaxation is always just a breath away. Want it to happen, expect it to happen, it does happen. Enjoy the calmness, the tranquillity and the serenity.

IV. Alert

Now, as though waking up from a pleasant relaxed rest, feel naturally bright, alert and refreshed. Sound in mind, sound in body, sound in health. Eyes open, bright, alert and refreshed. Ready to proceed.

This technique is so effective because it focuses on the head, face and mouth; the part of the body with the highest concentration of neuronal innervation. The body–mind and the mind–body effects are most pronounced in the head, face and mouth. The mere act of smiling, contracting the muscles of facial expression to stretch the obliquularis oris, consistently produces a sense of well-being. Tensing the masseters and temporalis muscles will produce a sense of tension not only around the mouth and face, but also throughout the whole body. Thus the tape is used to teach patients not only to relax but to manage muscle tension headaches and to abort bruxism.

IS THE PAIN IN THE MAIN PLAINLY IN THE BRAIN?

While many clinicians view headaches as primarily a psychological manifestation, it is imperative that a complete medical/dental workup be performed. One of the prime causes of muscle tension headaches in the temporal area may be attributed to bruxism and dental malocclusion.

To understand the relation between muscle tension headaches and the mouth, place the tips of the fingers of the right hand on the right temple and the left fingers on the left temple, as though ready to massage the sides of the head. Clench the teeth together, and feel the muscles bulge. When the mouth is closed, do all the teeth fit together comfortably? When the mouth is opened, does the jaw shift to the right or to the left? Do the muscles on the right and left temple contract equally on both sides? If the teeth don't close comfortably and are sensitive to cold or to pressure, if the mouth can't be opened wide without the jaw deviating, if there are popping or grating sounds around the ears when the jaw is opened or closed, or if the muscles of mastication are hyperactive and tender to percussion, then the differential diagnosis of temporomandibular disorder (TMD) must be considered.

The term TMD is replacing the more popular TMJ, which is an abbreviated acronym for Temporo Mandibular Joint Pain Dysfunction Syndrome. This disorder

may be thought of as an orthopedic condition, which is manifested by the skeletal malalignment of the mandible to the cranium and the neuromuscular imbalance of the muscles of mastication and associated musculature of the head and neck. When the lower jaw is jolted out of its habitual closure pattern, the teeth do not meet properly and abnormal stress is placed on just a few teeth. The neuromuscular apparatus protects these teeth by preventing complete closure, which results in fatigue of the muscles of mastication. The consequence of this unphysiologic positioning is jaw dysfunction, muscle spasm and pain. The cycle is perpetuated till the opposing teeth are adjusted to meet comfortably and the habitual cycle of pain is extinguished.

Effectively managing TMD requires a two-pronged approach of physically eliminating the noxious dental stimulus and mentally relaxing the muscles of mastication and muscles of facial expression. The use of medication and massage of sore muscles may expedite the healing process. Treatment of the physical etiology may be as simple as polishing fillings that have expanded with the course of time. Other treatment options may range from wearing a specially designed 'bite guard' appliance during sleep (or when stress is experienced during the day), to comprehensive orthodontic treatment and full mouth reconstruction with dental implants, crowns and bridges. But it may be impossible to determine the proper bite relation as long as the supporting muscles are in the clenched or braced posture. Resolution of the disorder requires a coordinated effort. The patient needs to learn how to relax the muscle of mastication and the dentist needs to adjust the bite for optimal comfort. Learning how to relax the muscles and cease diurnal and nocturnal clenching and tooth grinding is no easy task. Approaches range from wearing orthodontic dental appliances or using thin splints, to taking tricyclic antidepressants, to undergoing biofeedback training, to psychiatric counseling, to relaxation/hypnosis training.

The 5-minute relaxation exercise (described earlier) has proven to be a potent means of helping the patient relax so that the teeth can be equilibrated. After the teeth have been adjusted, the exercise is beneficial in helping the jaw relax into the new position. If the muscles are still tense, it's all right to touch the area and massage the tension out. The relaxation exercise, followed by the head, face and jaw massage, should be done several times throughout the day during the acute phase and as needed when there is the sense that a headache is about to erupt.

The cause of bruxism is obscure and disputed. One suggested cause is anatomic interferences of opposing teeth during function or at rest. Children who have nervous disorders exhibit signs of bruxing more frequently (Peterson & Schneider, 1991).

Though bruxism during childhood has few long-term sequelae, the teeth may be permanently damaged. An extended period of forceful bruxism can result in tooth surface abrasion, fracture, or pulpal exposure or necrosis. Destructive affects to the periodontium and tooth structure may be sufficient to cause pain and soreness during mastication. If habit suppression is deemed appropriate and/or necessary,

one of the most useful modalities in the management of oral habits that no longer serve a useful purpose is clinical hypnosis.

HABIT MANAGEMENT

General techniques for decreasing undesirable oral habits are extinction, ignoring a previously reinforced behavior, temporarily denying privileges, punishment, direct negative action, reasoning, provision of alternatives, and positive reinforcement in the absence of the behavior (Peterson & Schneider, 1991). The general dental practitioner does not have the facility or training to apply these relatively time-consuming methods. He or she can utilize some hypnotic strategies that may yield dramatic result with an investment of just a few minutes of chairtime.

PACIFIER, FINGER AND THUMB SUCKING

According to the authors of 'Oral Habits: A Behavioral Approach' (Peterson & Schneider, 1991): 'Some 13% to 45% of children are reported to suck their digits. Practically all children who eventually take up the habit do so during their first few months. By 3.5 to 4 years of age, most children have discontinued the habit spontaneously. The severity and even presence of deleterious effects of finger sucking depends on the habit's frequency, duration, intensity, and position of the finger in the mouth. Dentoalveolar changes associated with thumb-sucking include anterior open bite accompanied by decreased alveolar bone growth. If the habit continues beyond puberty, these problems do not usually self-correct.'

Cessation of finger sucking may be approached in a number of ways. Finger sucking is frequently accompanied by possession and manipulation of a favored object, such as a doll or blanket. Removal of the object has been shown to eliminate the finger sucking as well. Explaining to the child the association between the habit and the object and subsequent confiscation of the object may aid in elimination of the finger sucking.

The application of a bitter solution to the thumb has empirically absolved finger suckers of the habit. A 'hayrake' attached to a palatal bar fixed to the molars that does not interfere with occlusion reminds the child of the habit, and has shown to be quite effective even for an intense habit. Lingual spurs attached to the maxillary incisor bands also act as a reminder appliance.

The effectiveness of psychotherapeutic counseling has also been shown to be high. Intellectual/emotional/hypnotic approaches are of particular interest here. The use of age regression/progression has been shown by Crasilneck & Hall (1985, 1990) to be very effective. The authors suggest that the child's feelings for personal

appearance be elicited, and an appeal is made to the child's desire to be more mature and attractive.

If there is an underlying traumatic or symbolic basis for the thumb sucking, it can usually be clarified by an interview under hypnosis, utilizing either the fantasized theater technique or using age regression to the time when thumb sucking would ordinarily have been given up as an outworn habit. If such dynamics are uncovered, their working through must become a primary goal of treatment.

Under hypnosis, the child is told that the thumb will begin to taste bitter and that this will act as a reminder that the wish to suck the thumb is gone. The child is told that should the thumb come to the mouth, the bitter taste will be the motive to move the thumb away. Any improvement is given immediate and ample praise, both to the child and the parents, as the symptom has usually become a focus of hostile interaction between parents and child. Self-hypnosis is quite often taught in the control of this problem.

Another favorite approach is based on Milton H. Erickson's 'Be Fair to Fingers'. The statement is made that the right thumb is entitled to the same attention as the left thumb. The result is that as both thumbs are sucked, sucking the left thumb is cut by about 50%. The habit is naturally reduced. 'The right thumb hasn't had a turn; the first finger hasn't had a turn; not a single other finger has had a turn. So now, be fair and give each of the fingers a proper turn' (Erickson, 1990).

After the child has been given these suggestions, the parent is called in and instructed to help remind the child to suck all the fingers. Parents and children are usually pleased with this approach because it shifts all the energy from what not to do, to a positive attention-getter that gets old quickly. Results are very favorable.

EXAGGERATED GAGGING

The normal physiological gag reflex holds an important place in dentistry because it prevents potential life-threatening obstructions of the gastro-intestinal tract by foreign objects and alerts the dentist that undesired material has slipped into the pharynx area. However, a phenomenon termed the excessive or exaggerated gag reflex, a hypersensitive response to most foreign oral stimulation, may be found in some patients. Exaggerated gagging can successfully prevent the dentist from examining or operating on the patient. The tendency to lurch forward while retching poses a danger to the patient and liability to the dentist if sharp dental instruments are positioned within the oral cavity. Other than being a dental nuisance, however, the exaggerated gag reflex rarely poses any other threat to the patient. Most patients who claim to be unable to place foreign appliances into their mouth, or even to perform routine dental procedures, such as tooth brushing, find no difficulty in managing solid foods.

One of the following three factors probably contributes to an exaggerated gag reflex in a patient. First is the belief on the part of the patient that for efficient

breathing, the oral cavity must be entirely unobstructed. Since dental instruments obstruct the cavity, a sense of suffocation overcomes the patient, and a gag reflex manifests itself. Secondly, situational factors inducing previous gagging may lead the patient to believe that s/he is 'prone to gagging.' Finally, clinicians who label the patient as a 'chronic gagger' reinforce the patient's self-image as a gagger.

There are several effective approaches used for the patient with the hyperactive gag response. First show the patient that it is possible to breathe through the mouth while the mouth is open. Ask the patient to close the mouth and gently and calmly inhale and exhale through the nose. After a few moments of nasal breathing, ask the patient to continue to breathe through the nose, and open the mouth. Finally, ask for permission to demonstrate nose breathing with an open and full mouth, and once granted, gently spray water into the mouth with the air/water syringe. Let the patient experience their ability to comfortably breathe through the nose as the water pools in the mouth.

An elegant approach to help the patient who has a hyperactive gag reflex which prevents them from wearing a dental prosthesis, having intraoral radiographs taken or having an impression made, is based on Dr Harold Golan's classic script (Golan, 1990a). The script has been modified here, and a similar one may be pre-recorded by the practitioner. The patient may listen to the tape in the office or clinic or be offered a copy to listen to at home.

The body is the person's most prized possession . . . and deserves the respect of good health. With the new teeth (dentures) the face looks well. See how people respond warmly to the new smile. The new teeth make it possible to eat well, to be able to swallow naturally, to aid in digestion. Remember that properly chewed and digested food is necessary for life itself.

Notice how good it feels right now, how the breathing rate has slowed. Every muscle from the tip of the toes to the top of the head is relaxing, comfortably and easily. [*Name the muscle systems.*] It's pleasant and reassuring to practice calm breathing at least six times a day until it becomes second nature . . . Do this after a while with eyes closed or open, because it's necessary to eat with eyes open.

Carry out this magnificent skill . . . whenever the need arises. It's pleasing to be in control of the body. Smile, realizing an immense feeling of confidence and pride . . . Smile at the tissues of the mouth and throat, using this new control . . . This relaxation is the most complete a body can experience. Now make a tight fist. Make the arm rigid, strong, tight. Stronger, tighter. Feel the tension. Now relax [*relaxes the arm and hand.*] This is what happens during gagging . . . tightening of the throat muscles and forgetting to relax the muscles. Now tighten and then relax the other fist, the other arm. Knowing how to tense and relax is a wonderful skill. Every portion of the mouth and throat can be tightened and relaxed. Let the mouth relax. Relax the palate, throat, floor of the mouth, the cheeks. Continue to sense the relaxation, let the eyes open, let the mouth open and with a clean finger touch the various parts of the mouth and become aware of the comfort. Experience a sense of great confidence to be able to touch any area of the mouth.

Now, feeling rested and refreshed, as though waking up from a very pleasant nap, let the eyes open in a few moments . . . Let that inner smile grow . . .

NITROUS OXIDE CONSCIOUS SEDATION

Nitrous oxide plays a vital role in creating a euphoric hypnotic state and positive hypnotic suggestions enhance the experience. Nitrous oxide conscious sedation is an important adjunct in the contemporary dental practice.

Various studies of the relationship between dental phobia and sensitivity to pain experienced by dental patients, indicate that the higher the anxiety, the greater the pain experienced. Dental discomfort can, however, be eliminated without the use of drugs. Holden (1983) writes, 'It is a misconceived idea that sedation, in its strictest sense, for the purpose of pain and anxiety control in dentistry, must consist of pharmacological involvement'. He further suggests that the use of drugs to control discomfort may often be reduced or eliminated by 'the application of methods based on an understanding of psychosomatic principles and applied psychology which may, or may not, involve the use of suggestion or hypnosis.'

The benefits of nitrous oxide/oxygen are widely recognized. Giovannitti (1985) cites an early study which demonstrated that 20% nitrous oxide was equivalent to 15 mg of subcutaneously administered morphine. More recent studies have shown that nitrous oxide can diminish both the sensory and affective components of pain. Empirically, nitrous oxide/oxygen has increased success by enormous proportions. A clinical study conducted by Quarnstrom & Milgrom (1989). found that transcutaneous electrical nerve stimulation (TENS) alone used as an anesthetic resulted in 53% of patients experiencing an acceptable level of pain (slight or none), whereas TENS used in conjunction with nitrous oxide/oxygen resulted in 82% of patients experiencing pain reduction to an acceptable level. Also, morbidity and mortality due to nitrous oxide can be linked exclusively to arterial hypoxia, a condition which develops when the nitrous oxide concentration rises above 80%.

Nitrous oxide has been shown to emulate and enhance the hypnotic state. Goepferd et al. (1985) wrote that when hypnotic suggestion is combined with nitrous oxide, in general the patient is able to attain a therapeutic state of relaxation, euphoria and/or sedation with decreased levels of nitrous oxide. In addition the use of nitrous oxide enhances the patient's response to suggestion even in an otherwise resistant patient. As well as its apparent trance-inducing effects, the gas also preserves both deep tendon and protective reflexes, and the airway is maintained in a clear state.

CONCLUSION

The contemporary dentist has to use time efficiently to provide high-quality, comprehensive care. This chapter offered ideas, suggestions and scripts used by the author for incorporating hypnotic principles in the care and management of dental patients. The ideas of including audiotapes, video headsets, and nitrous oxide with hypnotic suggestion are time-tested and effective. The complaint, usually lodged

by resistant practitioners, that hypnosis is too time-consuming is no longer valid. This is not to imply that extensive training and study of clinical hypnosis is obsolete, but rather that there are options available to enhance the level of professional satisfaction and quality of care.

REFERENCES

- Crasilneck, H. B. & Hall, J. A. (1985). *Clinical Hypnosis: Principles and Applications*. Orlando, FL: Grune & Stratton.
- Crasilneck, H. B. & Hall, J. A. (1990). Hypnosis with nailbiting. In D. C. Hammond (Ed.) *Handbook of Hypnotic Suggestions and Metaphors*. (p. 429). New York: W. W. Norton.
- Eli, Ilana (1992). *Oral Psychophysiology: Stress, Pain, and Behavior in Dental Care*. Boca Raton, FL: CRC Press.
- Erickson, M. D. (1990). Milton H. Erickson's suggestions for thumbsucking. In D. C. Hammond (Ed.) *Handbook of Hypnotic Suggestions and Metaphors*. (p. 498). New York: W. W. Norton.
- Erickson, M. H., Hershman, S. & Senter, I. I. (1990). *The Practical Application of Medical and Dental Hypnosis*. New York: Brunner/Mazel.
- Giovannitti, J. A., Jr (1985). Pain control in dentistry: Oral premedication and nitrous oxide. *Compendium*, (October), 653.
- Goepferd, S. et al. (1985). In R. B. Simpson (Ed.) *Hypnosis in Dentistry* (pp. 45–46). Illinois: Charles C. Thomas. pp. 45–46.
- Golan, Harold P. (1990a). Gagging. In D. C. Hammond (Ed.) *Handbook of Hypnotic Suggestions and Metaphors*. (pp. 185–187) New York: W. W. Norton.
- Golan, Harold P. (1990b) Suggestions with TMJ and bruxism. In D. C. Hammond (Ed.), *Handbook of Hypnotic Suggestions and Metaphors*. (p. 183), New York: W. W. Norton.
- Holden, G. P. (1983) Dental pain and anxiety control. In M. P. Coplans & R. A. Green (Eds), *Anaesthesia and Sedation in Dentistry*, Vol. 12 (p. 207), of Monographs in Anaesthesiology. Amsterdam: Elsevier Science Publishers.
- Peterson, J. E. Jr & Schneider, P. E. (1991). Oral habits: a behavioral approach. *Pediat. Clin. N. Amer.*, (October), 1289–1307.
- Quarnstrom, F. C. & Milgrom, P. (1989) Clinical experience with TENS and TENS combined with nitrous oxide-oxygen. *Anesth. Prog.*, (March–April), 66.

Dental Anxiety Disorders, Phobias and Hypnotizability

JACK A. GERSCHMAN

University of Melbourne, Australia

In the previous chapter mention has been made of the patients' capacity to enter into spontaneous trance states and the dentist's ability to recognize and manipulate this potentially beneficial or pathological attribute.

The nature and utilization of this phenomenon will be further expanded, linking hypnotizability with both the aetiology and management of Dental Anxiety Disorders.

DENTAL FEARS AND PHOBIAS

Until the discovery of the anaesthetic agents nitrous oxide (1844), ether (1846) and nerve block anaesthesia (1855), dental treatment, primarily extraction, was an agony unsurpassed for most.

Since then the profession has successfully advanced pain control. However, in spite of many modern developments in dental science, fear of dentistry and avoidance of dental care cause continuing concern among dental practitioners.

Fear of dentists is commonly listed in the top five commonly held fears and is among the ten most frequent intense fears. There are few people who do not experience at least some anxiety and fear associated with dental care. According to Lauth (1971) 'a fear of dental treatment is indeed so common that it can almost be considered normal unless of such a degree to interfere with much needed dental treatment'. It has been estimated that 89% of individuals experience pretreatment anxiety when visiting the dentist (Scott & Humphreys, 1987).

CLASSIFICATION OF DENTAL FEARS

The classification of dental fears has taken two primary directions. In one direction the patients have been regarded as having a phobia. The term 'odontophobia' was coined by Borland and is commonly referred to as dental phobia (Borland, 1963).

In the other direction Molin & Seeman (1970) considered the fear suffered by dental patients falling under a more diffuse category referred to as 'dental fear' or 'dental anxiety' and preferred the term 'disproportionate dental anxiety'.

The contemporary classification of dental anxiety is subsumed under the classification of anxiety disorders in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association (DSM-IV, APA, 1994).

The anxiety disorders include panic disorder with or without agoraphobia, agoraphobia without panic disorder, specific phobia, social phobia, obsessive compulsive disorder, post-traumatic stress disorder, acute stress disorder, generalized anxiety disorders and anxiety disorders due to a medical condition.

CAUSES OF DENTAL FEARS

The earliest explanations of dental fears were in terms of psychodynamic and personality theories which emphasized 'symbolic representations from the unconscious drives', 'the orofacial zone being a highly charged emotional area', 'the mouth in childhood being an erotogenic zone', 'orality', 'the threat of mutilation' and 'relationship to major instincts and passions'. In recent years behavioral research has emphasized the role of learned or conditioned responses to negative stimuli. These include family attitudes, repeated dental trauma, low pain tolerance, unfavorable dental experience and high generalized anxiety. Many patients demonstrate multifactorial causes.

Gerschman and colleagues (1979, 1980, 1989, 1991) elucidated the role of spontaneous trance states with actual or perceived dental trauma in moderate to highly hypnotizable individuals as being important in both the genesis and the treatment of phobic individuals.

MANAGEMENT

Treatment should initially be aimed at prevention. This is best achieved by dental health education and by attempting to make early dental treatment as non-stressful as possible.

Fear-reducing interventions may involve a combination of psychological treatment strategies and pharmacological treatment. A prerequisite is the establishment of a good dentist-patient relationship.

HYPNOSIS IN THE MANAGEMENT OF ANXIETY DISORDERS

The psychological treatment of anxiety disorders involves a wide variety of techniques based on psychotherapeutic, behavioral and cognitive principles. Hyp-

nosis provides an additional approach that may enhance the effectiveness of these other strategies (Stanley, Burrows & Judd, 1990).

The primary goals of psychological therapies for anxiety states are: the exposure of the patient (via imagery or reality) to the situation provoking the anxiety, thereby allowing deconditioning, habituation or desensitization; cognitive re-evaluations of the situation to alter the perception of threat; determining the personal significance (symbolic) of the anxiety provocation; increasing the sense of self-efficacy, behaviorally or cognitively, in the patient's ability to deal with the anxiety-eliciting situation and the symptoms; and the rehearsal and effecting of coping strategies.

More specifically, hypnosis may be used to facilitate the use of dissociation, altered perceptions, cognitions and memories, the enhanced control over anxiety symptoms, cued self-control techniques and uncovering for psychodynamic psychotherapy.

HYPNOTIZABILITY AND CLINICAL POPULATIONS

Hypnotizability, that is the individual's capacity to experience hypnosis, is generally described and conceptualized as a stable trait which is relatively resistant to modification (Hilgard, 1975). An opposing view (Spanos, Cross, Menary & Smith, 1988) indicates that cognitive skill training aimed at inculcating positive attitudes and appropriate interpretational sets towards hypnotic responding can produce significant and very substantial enhancement in susceptibility. However, reanalysis of this study using analysis of covariance instead of analysis of variance (Frischolz, 1997) showed that the trait or personal effect accounted for 50% of the variance while the situational effect (type of induction ceremony) accounted for only 17% of the variance, disproving Spanos's claims and confirming that hypnotizability was a trait relatively resistant to modification.

Although hypnotizability has been described as an ability within the repertoire of normal cognitive functioning it appears that individuals manifesting certain psychiatric disorders may be hypnotizable to different degrees. Frankel (1974) was the first to report elevated hypnotizability scores in phobic patients in comparison to different reference groups. This finding was replicated by researchers in mixed clinical populations (Foenander, Burrows, Gerschman & Horne, 1980; Gerschman et al., 1979, 1987; Gerschman & Burrows, 1989; John, Hollander & Perry, 1983; Kelly, 1984). However, Frischolz, Spiegel et al. (1982) and Owens, Bliss, Koester & Jeppsen (1989) failed to replicate these findings (Table 21.1).

There are further disorders which are characterized by high levels of hypnotizability. These include hysteria, multiple personality, post-traumatic stress disorder and some categories of eating disorders such as bulimia (Coman, 1992). Such high hypnotizable groups stand in contrast to schizophrenics (Spiegel et al., 1982), obsessive compulsives and anorexics (Coman, 1992) who have been found to possess lower levels of hypnotizability.

Table 21.1. Studies evaluating the relationship between hypnotizability and phobic disorders

	Population	Rating scale	Confirmation Non-confirmation
Frankel (1974); Frankel & Orne (1976)	Mixed, clinical	Harvard Group Scale (HGSH:A)	Confirmation
Gerschman et al. (1979)	Dental phobic, clinical	Diagnostic Rating Procedure (DRP)	Confirmation
Foenander et al. (1980)	Mixed including dental phobics, clinical	Harvard Group Scale (HGSH:A)	Confirmation
John, Hollander & Perry (1983)	Mixed, clinical	Harvard Group Scale (HGSH:A)	Confirmation
Kelly (1984)	Mixed, clinical	Hypnotic Induction Profile (HIP) Stanford Hypnotic Clinical Scale (SHCS)	Confirmation
Frischholz et al. (1982)	Mixed, clinical	Hypnotic Induction Profile (HIP)	Non-confirmation
Gerschman, Burrows & Reade (1987)	Dental phobic, clinical	Diagnostic Rating Procedure (DRP)	Confirmation
Owens et al. (1989)	Mixed, solicited	Stanford Hypnotic Susceptibility Scale (SHSS C)	Non-confirmation

It is now generally considered that most psychiatric populations have lower hypnotizability levels than non-psychiatric populations and the more severe the disorder the lower is the level of hypnotizability. The discrepancies in hypnotizability levels amongst groups of psychiatric patients have, however, not been clearly understood.

Although some investigators have reported a relationship between high hypnotizability and good outcome with hypnotic treatment the results have not been uniform among all disorders. Hypnotizability has been related positively to the degree of improvement in chronic pain problems, psychosomatic conditions such as asthma, and various dermatological conditions (Hilgard, 1975) and dental phobic disorders (Gerschman, Burrows & Reade, 1987).

These results are contrasted to evaluation of hypnotic treatment for addictive disorders such as obesity, cigarette smoking and alcoholism where hypnotizability levels appear unrelated to outcome (Perry et al., 1979).

HYPNOTIZABILITY AND PHOBIC DISORDERS

Frankel (1974) was the first to report this relationship. He found that 58% of a group of 24 phobic patients were highly responsive to hypnosis when evaluated on the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGHS:A, Shore & Orne, 1962). The phobic group was also found to be significantly more hypnotizable than a control group of patients wishing to stop smoking. He further suggested that there was a relationship between hypnotizability and the aetiology of phobias. Supporting data were presented by Frankel & Orne (1976) and Frankel (1974, 1976).

Gerschman et al. (1979) obtained similar results with dental phobics—48% of the sample of 40 patients scored within the high susceptible range of hypnotizability on the Diagnostic Rating Procedure (DRP, Orne & O'Connell, 1977). In a further study, Foenander et al. (1980) reported similar findings for a group of 33 mixed phobic patients; 45.5% were highly susceptible to the HGSHA:a. John, Hollander & Perry (1983) using HGSH:a found that 55% of a sample of 20 patients who were phobic to snakes, spiders or rats were highly responsive to hypnosis. Kelly (1984), comparing 112 patients with a variety of complaints with 22 phobic patients using the Hypnotic Induction Profile (HIP, Spiegel, 1974) and the Stanford Hypnotic Clinical Scale (SHCS, Morgan & Hilgard, 1975) found that the phobic patients were higher in hypnotic responsivity than are the population in general and non-phobic patients seeking hypnosis in particular.

Two studies have failed to replicate these findings. Frischholz et al. (1982), using the Hypnotic Induction Profile, found no statistical differences in the mean hypnotizability of 95 phobics, 226 smokers and 65 chronic pain sufferers. Owens et al. (1989) compared 25 phobics solicited through the media with a group of subjects with smoking problems, pain syndromes, bulimia and obesity on the Stanford Hypnotic Susceptibility Scale (SHSS C). Phobics obtained significantly lower hypnotizability scores than the controls.

FURTHER CONFIRMING DENTAL STUDIES

Gerschman, Burrows & Reade (1987) and Gerschman & Burrows (1989) further investigated the relationship between hypnotizability and dental phobic disorders in a major study by using a larger sample size, additional measures of phobic behavior and a more stringent methodology.

The study population consisted of 130 dental phobic patients of which 67.7% were female and 33.3% were male. The mean age was 27.2 years and the mean duration of symptoms was 134.7 months. Dental phobic patients showed a significantly higher level of hypnotizability than both the general population and a group of 35 patients with chronic facial pain being treated with hypnosis. There was a significant relationship between hypnotizability and the severity of the phobic

disorders; patients with multiple phobic symptoms were more hypnotizable than patients with a single phobia. There was a strong relationship between hypnotizability and successful outcome of treatment. The present study is the sixth study to find a relationship between hypnotizability and phobic disorders. This indicates replication across laboratories and across cultures and sets up the basis for a robust theory.

DISCUSSION

The majority of the studies described have supported Frankel's (1974) hypothesis about the relationship between hypnotizability and phobias. Dental phobias in particular have all shown a positive relationship with hypnotizability with no failure to replicate. However studies by Frischolz et al. (1982) and Owens et al. (1989) have failed to replicate this relationship. Reasons for these differing results have been described elsewhere (Gerschman & Burrows 1995).

There are strong indications that a significant portion of the dental phobic population is hypnotizable and that a causal relationship may exist relating hypnotizability to both the acquisition and management of phobic disorders. That is not to deny that phobic symptoms may be multidetermined, including psychoanalytic, behavioral, cognitive and biological features.

Further evidence supporting the relationship between hypnotizability and phobic disorders is related to the underlying vivid imagery skills, high absorptive skills and flexibility in information processing strategies found in both high hypnotizables and a substantial number of phobics (Crawford & Barbasz, 1993). Crawford (1997) further indicates that high hypnotizables have more effective attentional and disattentional systems than low hypnotizables as well as the ability for faster processing of information.

IMPLICATION OF THE RELATIONSHIP OF HYPNOTIZABILITY AND DENTAL PHOBIAS

The implications of these findings have significance for the genesis of dental phobias as well as for their management.

One may postulate that phobic patients show a tendency to the same kind of mental functioning that is involved in responding to the hypnotic induction. It has also been suggested (Frankel, 1979) that these patients must also have the capacity to manifest the kind of cognitive functioning that characterizes the hypnotized individual.

A useful treatment strategy offers itself once one recognizes that the phobic patient's propensity for spontaneously occurring trance phenomena may provide the context for the symptom to emerge.

Therapeutically, the approach becomes neither one of suggesting away the symptom nor one primarily based on using hypnosis to look for the specific

dynamic factors. Instead, hypnosis is utilized to facilitate the patient's understanding of his special mode of mental functioning. The state of hypnosis can provide the context in which to conduct an accelerated programme of imaginal desensitization (Frankel, 1976) or it may be used to produce an analogous symptom in the surgery, that closely resembles the psychopathologic abnormalities most troublesome to the individual. If one can produce the symptom and guide the patient to a degree of familiarity with and mastery over this experimentally induced situation he begins to learn something about the shift in functioning that is involved in causing and in controlling his own psychopathological manifestation.

Furthermore, the careful integration of self-hypnosis into the strategy reinforces the patient's conviction that they can exert effective control. This method also articulates well with the procedures involved in counterconditioning implosion and shaping behavior.

The specific implication relative to the dental situation also involves the genesis and management of dental phobic illness. The role of hypnotizability as a facilitator in the acquisition of dental phobias should be recognized. The recognition and management of spontaneous trance states, particularly in children, deserves special attention.

Children have been considered as being particularly hypnotizable (London & Cooper, 1969) and the association of trance states with actual or perceived dental trauma warrants careful consideration. Studies of hypnotizability, particularly in phobic children, may add further evidence as to the involvement of hypnotic responsivity in the development of dental phobias.

The results and foregoing discussion would suggest that hypnosis would be eminently suitable in the management of dental phobias. The literature is replete with accounts of techniques and a multitude of applications of hypnotic techniques to dentistry.

In more recent times, the attempts to relate hypnotic responsivity to the production of dental analgesia have ranged from the excellent work and, more or less expected, findings of Gottfredson (1973) who found a moderate relationship between hypnotizability and pain reduction and the remarkable claims of Barber (1977) who found that hypnosis was effective in pain reduction in virtually all cases and was not related to hypnotizability.

Further dental research should be aimed at relating dental phobic disorders to DSM-IV classification, age of acquisition of dental phobic disorders and hypnotizability of phobic children, biological aspects and twin studies.

Forgione (1988) has emphasized that direct and indirect hypnotic suggestions have been shown to distort perception, induce sensory changes and modify expectancies in both phobic and normal populations. Implicit in these findings is a caution for dentists that even if they are untrained or unwilling to practise hypnosis or hypnotic-like techniques, they should be aware that a significant portion of the population is highly responsive to suggestion. Attention should therefore be given not to deliver suggestions to patients that may be counter-productive to treatment.

Otherwise treatment difficulties and enduring problems may be created inadvertently. Suggestions given formally or informally, explicit or implicit, dramatic or subtle, may impact on behavior and psychopathology.

REFERENCES

- APA (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edn). Washington, DC: American Psychiatric Association.
- Barber J. (1977). Rapid induction analgesia: A clinical report. *Am. J. Clin. Hypn.*, **19**, 138–147.
- Borland, L. R. (1963). Odontophobia—inordinate fear of dental treatment. *Dent. Clin. N. Am.*, **1**, 683–690.
- Coman, G. (1992). Hypnosis in the treatment of Bulimia—A review of the literature. *Aust. J. Clin. Exp. Hypn.*, **20**, 89–104.
- Crawford, H. (1997). Lecture, 14th International Congress of Hypnosis, San Diego, USA.
- Crawford, H. J. & Barbasz, A. F. (1993). Phobias and intense fears: Facilitating their treatment with hypnosis. In J. W. Rhue, S. J. Lynn & I. Kirsch (Eds), *Handbook of Clinical Hypnosis*. Washington, DC: American Psychological Association.
- Foenander, G., Burrows, G. D., Gerschman, J. A. & Horne, D. J. (1980). Phobic behavior and hypnotic susceptibility. *Aust. J. Clin. Exp. Hypn.*, **8**, 41–48.
- Forgione, A. (1988). Hypnosis in the treatment of dental fear and phobia. *Dent. Clin. N. Am.*, **32**, 745–761.
- Frankel, F. M. (1974). Trance capacity and the genesis of phobic behavior. *Arch. Gen. Psychiat.*, **31**, 261–263.
- Frankel, F. M. (1976). *Hypnosis: Trance as a Coping Mechanism*. New York: Plenum Press.
- Frankel, F. M. (1979). Hypnotic responsiveness—Clinically a mixed blessing. *Aust. J. Clin. Exp. Hypn.*, **7**, 117–123.
- Frankel, F. H. & Orne, M. T. (1976). Hypnotizability and phobic behavior. *Arch. Gen. Psychiat.*, **31**, 261.
- Frischolz, E. J. (1997). Lecture, 14th International Congress of Hypnosis, San Diego, USA.
- Frischolz, E. J., Spiegel, D., Spiegel, H., Balma, D. L. & Markell, C. J. (1982). Differential hypnotic responsivity to smokers, phobics and chronic pain control patients. A failure to replicate. *J. Abn. Psychol.*, **91**, 269–272.
- Gerschman, J. A. (1983). An investigation of chronic orofacial pain and dental phobic illness. PhD Thesis, Melbourne University, Melbourne, Australia.
- Gerschman, J. A. (1988). Dental fears and phobias. *Aust. Fam. Phys.*, **17**(4), 261–266.
- Gerschman, J. A. & Burrows, G. D. (1989). Dental phobic disorders and hypnotizability. *J. Dent. Res.*, **68**, (4), Abst. S13, 553.
- Gerschman, J. A. & Burrows, G. D. (1995). Hypnotizability and dental phobic disorders. In G. D. Burrows & R. O. Stanley (Eds), *Contemporary International Hypnosis* (pp. 309–379). Chichester: Wiley.
- Gerschman, J. A. & Burrows, G. D. (1997). Dental anxiety disorders and hypnotizability. In M. Mehrstadt & P. O. Wikstrom (Eds), *Hypnosis in Dentistry* (pp. 25–31). Hypnosis International Monographs.
- Gerschman, J. A., Burrows, G. D. & Reade, P. C. (1980). Hypnosis in dentistry. In G. D. Burrows & L. Dennerstein (Eds), *Handbook of Hypnosis and Psychosomatic Medicine* (pp. 443–479). Amsterdam: Elsevier/North Holland, Biomedical Press.
- Gerschman, J. A., Burrows, G. D. & Reade, P. C. (1987). Hypnotizability and dental phobic disorders. *Int. J. Psychosom.*, **33**, 42.

- Gerschman, J. A., Burrows, G. D., Reade, P. C. & Foenander, G. (1979). Hypnotizability and the treatment of dental phobic illness. In G. D. Burrows & D. R. Collinson (Eds), *Hypnosis 1979* (pp. 33–39). Amsterdam: Elsevier.
- Gerschman, J. A. & Giebartowski, J. (1991). Effect of electronic dental anesthesia on the pain tolerance levels of human teeth subjected to stimulation with an electronic pulp tester. *Anesth. Prog.*, **38**, 45–49.
- Gottfredson, D. K. (1973). Hypnosis as an anaesthetic in dentistry. Doctoral Dissertation. Department of Psychology. Brigham Young University. Dissertation Abstracts International 1973, 33: 7.B:3303, 152, 162, 163.
- Hilgard, E. R. (1975). The alleviation of pain by hypnosis. *Pain*, **1**, 213–231.
- John, R., Hollander, B. & Perry, C. (1983). Hypnotizability and phobic behavior. Further supporting data. *J. Abn. Psychol.*, **92**(3), 390–392.
- Kelly, S. F. (1984). Measured hypnotic response and phobic behavior. A brief communication. *Int. J. Clin. Exp. Hypn.*, **32**, 1–5.
- Kleinknecht, R. A., Kelpac, R. K. & Alexander, L. D. (1973). Origins and characteristics of fear in dentistry. *J. Am. Dent. Assoc.*, **86**, 842–842.
- Lautch, H. (1971). Dental phobia. *Br. J. Psychiat.*, **142**, 199–151.
- London, P. & Cooper, L. M. (1969). Norms of hypnotic susceptibility in children. *Devel. Psychol.*, **1**, 113–124.
- Molin & Seeman (1970). Disproportionate dental anxiety. *Acta Odontol. Scand.*, **28**, 197–212.
- Morgan, A. H. & Hilgard, R. J. (1975). Stanford Hypnotic Clinical Scale. In E. R. Hilgard & J. R. Hilgard (Eds), *Hypnosis in the Relief of Pain* (pp. 209–221). Los Altos, CA: Kaufman.
- Orne, M. T. & O'Connell, D. N. (1977). Diagnostic ratings of hypnotizability. *Int. J. Clin. Exp. Hypn.*, **15**, 125–133.
- Owens, M. E., Bliss, E. L., Koester, P. & Jeppsen, E. A. (1989). Phobias and hypnotizability: A re-examination. *Int. J. Clin. Exp. Hypn.*, **37**(3), 207–216.
- Perry, C., Gelfand, R. & Marcovitch, P. (1979). The relevance of hypnotic susceptibility in the clinical context. *J. Abn. Psychol.*, **88**, 592–603.
- Scott, J. & Humphreys, M. (1987). Psychiatric aspects of dentistry. *Br. Dent. J.*, **163**, 81–87.
- Shore, R. E. & Orne, E. C. (1962). *The Harvard Group Scale of Hypnotic Susceptibility: Form A*. Palo Alto, CA: Consult. Psychol. Group.
- Spanos, N., Cross, W., Menary, E. & Smith J. (1988). Long term effects of cognitive skill training for the enhancement of hypnotic susceptibility. *Br. J. Exp. Clin. Hypn.*, **5**(2), 73–88.
- Spiegel, H. (1974) *Manuals for Hypnotic Induction Profile: Eyeroll Levitation Method* (rev. edn). New York: Soni Medica.
- Spiegel, D., Detrick, D. & Frischholz, E. (1982). Hypnotizability and psychopathology. *Am. J. Psychiatry*, **139**, 431–437.
- Stanley, R., Burrows, G. D. & Judd, F. K. (1990). Hypnosis in the management of anxiety disorders. In R. Noyes, Jr, M. Roth & G. D. Burrows (Eds), *Handbook of Anxiety*, Vol. 4, *The Treatment of Anxiety* (pp. 537–548). Amsterdam: Elsevier.

Applications of Clinical Hypnosis with Children

DANIEL P. KOHEN

University of Minnesota, USA

HISTORICAL PERSPECTIVES

Hypnosis with children has been documented since ancient times. Many cultures have rich histories of healing, religious, and/or initiation rites which involve trance or trance-like phenomena in children. In more modern times Dr Franz Mesmer's application of *animal magnetism* was used in the treatment of children as well as adults. While the Franklin commission's investigation of Mesmer in 1784 concluded that the described clinical effects were not due to magnetism, it also specifically attributed their observations to 'imagination', now recognized as a critical operative ingredient in child hypnosis.

Prior to the development of chemical anaesthesia, Braid and Elliotson successfully applied hypnotic strategies with many children to facilitate their comfort during major surgery. At the end of the nineteenth century, French physicians Liebeault and Bernheim reported the use of hypnotic techniques for childhood habit problems and also reported on child hypnotic susceptibility. In his hypnosis textbook of 1903, J. Milne Bramwell, an English psychotherapist, reported the successful use of hypnotherapy with habits such as nail biting and with recurrent headaches. The use of hypnosis with children in North America did not receive much attention thereafter until the late 1950s when its use was promoted by Drs Milton Erickson and Erik Wright, and the 1960s when the skilled child hypnosis contributions of Dr Franz Baumann led to him becoming the first paediatrician to be President of the American Society of Clinical Hypnosis (ASCH).

Increased documentation of successful clinical applications of hypnosis with children (Gardner, 1976, 1978; Olness, 1975) appeared in the 1970s. During the same time research began to report both the clinical efficacy and psychophysiologic changes associated with self-hypnosis in children. Additionally, the benefits of hypnosis training were recognized for children with chronic illnesses such as cancer, haemophilia, and asthma.

The numbers of child health professionals trained in hypnosis have increased

substantially over the past 25 years. Increasing numbers of substantive research projects seek to understand the clinical effects of these self-regulation methods and to apply them with greater precision.

Hypnotherapeutic methods with and without other self-regulation training (e.g., biofeedback) (Culbert, Reaney & Kohen, 1994) offer child health professionals opportunities to facilitate the development of competency and a sense of personal mastery in the children with whom they work. Successful applications of self-regulation include a focus on personal control and decision-making by the child, and specific attention to the child's preferences in using personal imagery skills. Ongoing research examining the characteristics of children's imagery (Kosslyn, Margolis, Barrett, Goldknopf & Daly, 1990) will hopefully provide clinicians more precise guidelines in selecting individual hypnotherapeutic approaches for a given child.

DEFINITION AND THEORETICAL UNDERSTANDING

Functionally, hypnosis in children can be defined as an alternative state of awareness and alertness (similar in *feeling* to daydreaming or imagination) in which an individual is selectively focused, absorbed, and concentrating upon a particular idea or image (with or without relaxation), with a specific purpose of achieving some goal or realizing some potential.

From this perspective we probably are 'doing' hypnosis work when we engage our young patients in conversation in which they are absorbed, paying attention, listening, and responding as requested. Most children move in and out of spontaneous hypnotic-like states as they focus their concentration, for example on video games, favourite movies (e.g., the *Lion King*, *Pocahontas*), TV football, playing 'house', listening to a story, enjoying puppet play, or otherwise engaging in fantasy. Kuttner has noted (1988), that especially young children have blurred boundaries, and move frequently, naturally, and easily from fantasy to reality.

These natural, spontaneous hypnotic states are usually positive, and are characterized, as are 'induced' hypnotic states, by absorption in fantasy/imagination, focused attention, and heightened suggestibility. While relaxation facilitates children's hypnotic states some of the time, it is neither universal nor necessary for successful child hypnosis. While spontaneous stillness and the relaxation response may be observed with children as with adults, younger children under 6 or 7 years commonly do not visibly relax (and therefore should not be expected to) when in hypnosis. Beyond not being obviously relaxed, younger children in hypnosis commonly move around in their chair or in the room as part of absorption and engagement in fantasy. In such involved hypnotic experiences younger children often prefer to not close their eyes. Mindful of this, clinicians modify their approaches and language accordingly to facilitate this 'active alert hypnosis'.

There are many roads available to the thoughtful child health clinician to guide a child toward these states of focused concentration; whether toward solving a problem, controlling discomfort, easing or eliminating anxiety, alleviating a habit, or modulating disease processes, paths available are limited only by the creativity and therapeutic relationship of the clinician and the child: Induction techniques and strategies to begin hypnosis are myriad, including virtually limitless iterations of relaxation and mental imagery (RMI), biofeedback, art therapy, music and movement therapy (Olness & Kohen, 1996).

Scales of hypnotic 'susceptibility' or 'suggestibility' were described early in the nineteenth century work of Liebeault and Bernheim, and more recently in 1963 in the work of London's Children's Hypnotic Susceptibility Scale, and Morgan and Hilgard's Stanford Hypnotic Susceptibility Scale for children in 1979 (Olness & Kohen, 1996). Unfortunately, none have proven to be of predictive value in anticipating clinical success or failure of hypnosis for a given child, group of children, or diagnosis. Hopefully, ongoing research regarding the properties and characteristics of children's imagery (Kosslyn et al., 1990) will provide more specific clinical guidelines in selecting approaches for each child. Continuing research must define and identify the ideal children's clinical hypnotic susceptibility scale. Minimally, such a scale would be:

1. Brief (e.g., 5–15 minutes long).
2. Interesting and absorbing.
3. Developmentally sensitive and specific.
4. Learning style sensitive and specific.
5. Multisensory and, perhaps, discriminating between senses.
6. Free of cultural bias.
7. Predictive (i.e. would guide a clinician in determining what type of hypnotic strategy would be most helpful for a given child with a given learning style, at a given level of development, and with a given problem).

While we await the creative development of this ideal, existing research and the ever-growing body of clinical knowledge of hypnosis with children allow us an informed position from which to depart. In clinical practice with children we make the assumption that all children (except those with moderate to severe mental retardation) have the potential for very positive hypnotic responsivity. Beginning with this positive expectation allows us to identify those factors which may potentially affect outcome; including the child's (and family's) personal history, and their desire, motivation, and expectation for change and positive outcome. Since we know that hypnosis used properly by appropriately trained clinicians is safe and effective and has no adverse side effects (Kohen & Olness, 1993), it can become an important potential tool in both adjunct and primary management of a wide variety of clinical issues in child health care.

APPLICATIONS TO CHILDREN'S HEALTH CARE

Hypnosis offers opportunities for child health professionals to facilitate mastery and competency in their child patients/clients. As with any treatment strategy one might apply, success is predicated on the patient's understanding of what is going on and why, *rather than* only upon the patient's behavior conforming to the clinician's theoretical framework or expectations. Successful methods of hypnotherapy include a focus on decision-making and control by the child and attention to the child's preferences in using their imagery skills.

DEVELOPMENTAL CONSIDERATIONS

What, when, how, and why child hypnosis occurs depends upon many child clinician, family, and circumstantial variables. Age is of little consequence, and is less important than the child's level of maturation, their ability to demonstrate understanding of language, and their ability to concentrate and/or attend to something. We are more interested in knowing where they are developmentally to know whether they might be reasonably expected to be responsive to the kinds of strategies useful, for example, for preschool-aged children. For such a child we might ask whether they could, for example, pay attention to and enjoy a pop-up book, be engaged in a bedtime story, or listen to and participate in a story on an audiotape.

Hypnotic approaches must be tailored to meet the needs of the child at his/her developmental level. A child of 9 or 10 years who is developmentally delayed and functioning at a 5-year-old level should be approached hypnotically as one might approach a 5 year old. Similarly, a precocious 10 year old might well be more appropriately treated the way one might approach an older child of 12 or 13 years. The individual personality, likes and dislikes, learning style, family constellation, prior experiences, and comprehensive clinical history each contribute critical considerations in the evolution of specific hypnotic techniques, strategies, and in structuring suggestions to help patients.

CLINICAL APPLICATIONS

Clinical applications of child hypnosis can be broadly divided into six categories. (Table 22.1). These categories provide a practical way of thinking about how these techniques may be applied within a variety of clinical practices of child health care. The clinical vignettes which follow illustrate examples of specific applications, and the use of hypnotic language both in pre-hypnosis conversation and during hypnosis for actual clinical encounters.

Table 22.1. Categories of clinical applications of child hypnosis

-
1. *Habit Problems and Disorders*—e.g., thumb sucking, nail biting, hair-pulling (trichotillomania), enuresis.
 2. *Behavioral Problems*—e.g., adjustment disorder, anger, sibling rivalry.
 3. *Biobehavioral Disorders*—e.g., asthma, migraine, Tourette syndrome, inflammatory bowel disease, hypertension, warts.
 4. *Pain*—e.g., acute pain (as with injury, illness, medical procedures) or chronic and recurrent pain (as with chronic illness or disability, trauma, recurrent procedures).
 5. *Anxiety*—e.g., performance (stage fright, recitals, school examinations, sports) acute grief and bereavement (death, divorce, etc.), post-traumatic stress disorders (PTSD), anxiety disorders, phobias.
 6. *Chronic Disease/Multisystem Disease/Terminal Illness*—e.g., haemophilia, AIDS, cystic fibrosis, chronic renal disease (dialysis), cancer, autoimmune disorders.
-

HABIT PROBLEMS

Managing children's *habit problems* by teaching relaxation and mental imagery (RMI) and self-hypnosis skills (Kohen, Olness, Colwell & Heimel, 1984; Gardner, 1978; Sugarman, 1997) has been very successful, and gratifying for clinicians. When a child with a habit displays interest and desire for the habit to end, then one can confidently teach self-hypnosis skills as an approach of choice, conveying to families an expectation that with practice the problem can be expected to disappear. Most children who wish to eliminate a habit learn RMI very quickly (one or two visits). With regular rehearsal children demonstrate beginning resolution of the symptom within four or five visits (Kohen et al., 1984). The dilemma of symptom substitution, described in hypnotherapeutic management of habits in adults, is rarely seen (Gardner, 1978; Olness & Kohen, 1996) with children.

For habits—and for most, if not all, child health problems—it is critical for the clinician to not only develop rapport with the child, but also to provide specific education about how the body functions in relation to their problem. It is important to formulate in child-friendly language how the 'habit' has come about. Computer analog metaphors are often useful in talking with children about what habits are, how they develop, and, in turn, how one can learn to take control of their elimination.

The following example presents hypnotic-like language and suggestion, and sets the tone for the kinds of language, expectations, and suggestions to be offered during more formal hypnosis training which follows.

Nocturnal Enuresis

Although primary nocturnal enuresis is probably not a true habit disorder, elements of the problem include habituated/conditioned behavior, and presenting it as such is often effective in empowering children toward change. Prior to introducing

hypnosis, a comprehensive medical history, physical examination, and urinalysis should be carried out to assure clinician and family alike that no easily remediable medical-physical problem is present to explain the bedwetting (Olness, 1975; Kohen, 1990). Clinicians should strive to understand patient and family beliefs and attitudes about the origin of the bedwetting and their expectations for their roles in successful resolution. An easily understood explanation of normal genitourinary anatomy and physiology allows a process of understanding, education, and eventual mastery to proceed more quickly. In this context, enuresis may be presented as analogous to a habit, while also introducing hypnosis as a useful strategy toward elimination of the habit.

CLINICIAN: So, how come you came to see me?

CHILD (e.g., 9-year-old boy): I have a bedwetting problem.

CLINICIAN: Well, tell me, how many days a week do you wake up in a *dry bed*? [In the absence of formal hypnotic work, a shift in language and focus begins to ‘plant seeds’ for future use in hypnotic suggestions. In this example, a focus on DRY BEDS is more useful than a focus on wetness.]

CHILD: Most days . . . uh . . . oh, how many are *dry*? . . . I never thought of *that*, let’s see . . . about 2, sometimes 3, I guess.

CLINICIAN: Oh, so 2 days each week you wake up dry. And how about the daytime, do you have any wetting in your pants?

CHILD: No way!

CLINICIAN: You mean *every day, all day* is dry, *and* some nights—2 each week—are also dry? Wow, this is going to be *easier* than I thought to help you! [This reframing in the context of routine history-taking continues to ‘set up’ the more formalized, ‘official’ hypnosis which will follow.] Well, how do you *do* that?

CHILD: Do what?

CLINICIAN: How do *you do* it . . . how do *you* stay dry all day long? [The intent here is to teach and reinforce that the child is in charge of their body, and to introduce a discussion about how the body works.]

So, when you *were younger* [an indirect ego-strengthening suggestion to the patient that they are *now older*] your parents taught you. Then pretty soon you knew, like automatically, right? So, now if you have to go, you don’t say out loud ‘I have to pee’ and announce it and then go to the bathroom, do you? Of course not . . . mostly you just go, right? Let’s say you had to urinate [‘pee’, etc.] right now, how would you *know*?

[Most children are perplexed momentarily, then will usually respond by saying, ‘I can *feel* it . . . ’ which is an invitation to ask ‘Yes, but how do you *know* that you feel it?’ In the event the child has no information about nerves and signals

and the brain, it is easy to add ‘How do you *know*, where does the signal or the message come from and where does it go to?’ This allows for the natural evolution into a discussion about the body. A simple explanation includes a description of the heart as a pump, the kidneys as the filter or cleaner for the blood, and the place where urine is made, and the bladder as the sack with a muscle around it, i.e. the place that stores up the urine until it is time to urinate. We emphasize the presence of a ‘door’ or ‘gate’ on the bladder which remains closed while the urine stays in the bladder, and which opens to let the urine out into the toilet *where it belongs*. The idea that this ‘gate’ is made out of muscle is presented as an analogy to the child’s other muscles, along with:

Who is in charge of your muscles? Right, *you* are, and especially which part of you is the ‘boss’ of the muscles? Right, that computer we call the brain. So, when you have to urinate, how do you know . . . ? Well, your bladder sends a signal to your brain to tell you it’s full . . . it doesn’t say it out loud, but if it did, it would be like ‘Hey, brain, I’m full’; and your brain would get the message and say back to your bladder ‘Well, thanks for calling, bladder, but this is an order to please keep the bladder gate closed ’cause it wouldn’t be nice to pee on Doctor’s chair!’ Would you actually *say* that out loud that way, or would you *think* it in your inside thinking, or would it just *happen* that way in your inside mind? [Thus in the framework of education about how the body works, this is introduction and validation of the concept of ‘subconscious’ ideas and an ‘inside mind’. Like other language shifts, these can be easily used later during formal hypnosis work and will have the added benefit of not being new to the child at that time.]

Would you say out loud ‘Okay, feet walk to the bathroom, hands open the door and zip open your pants and aim, and now bladder you open the gate and let the pee out in the toilet?!’ or, would you *just do it*? Of course, *you’d just do it* because **your brain and your bladder know how to talk to each other because you taught them a long time ago, and now** they have the *automatic habit of doing it* without even thinking about it.

Allowing intermittent time to respond to questions, the clinician can move into the suggestion ‘Now that you know that, you probably realize that this problem probably happened (past tense!) because the bladder and the brain haven’t been talking with each other at night ’cause they got into an *accidental* (removes blame) habit of not talking to each other. Using your inside mind like I’ll teach you with hypnosis you can help them *get a new habit going so you can wake up dry in the morning.*’ (The reference ‘you can help’ is an appeal to the growing ego helper in the child. Mention of ‘them’ as a reference to the brain and bladder is purposely dissociative suggestion to distance themselves from responsibility.)

Such explanations are geared toward: (a) beginning relief of guilt and shame; (b) provision of a logical way of thinking about the problem; and (c) planting of seeds for motivation and positive expectations for ultimate resolution of the problem through self-hypnosis.

BEHAVIORAL PROBLEMS

Self-hypnosis skills have value largely as an adjunct in management of the wide range of 'behavioral problems', serving often to help a child and family to interrupt patterns of maladaptive behavior sufficiently to allow change to occur.

An approach to this group of concerns requires the establishment of specific objectives. These might include improved coping, allaying of anxiety, and facilitating improved self-esteem with the aid of self-hypnosis, rather than expecting problem resolution as one might reasonably expect in treating habits.

Children's *anger or temper tantrum responses* lend themselves easily to hypnotic intervention. Teaching self-hypnosis often gives a child something constructive, personal, and relaxing that he/she can do to help interrupt the anger, helplessness, and/or loss of control commonly accompanying tantrum behavior. Children quickly learn that when they practise self-hypnosis regularly when they are *not* having a tantrum, they are teaching themselves to get under control quickly 'when they really need it'.

Case History: Sarah

Eight-year-old Sarah was brought to the Behavioral Paediatrics Program Clinic for 'behavior problems'. These included picking on her 7-year-old sister and 5-year-old brother, disruptive behaviors at after-school day care, and defiance and anger outbursts almost daily in interactions with parents. She met criteria for a diagnosis of Oppositional Defiant Disorder, and had no ADHD or learning difficulties. Therapy for Sarah and her family included primarily behavioral management including family meetings and negotiation. For her angry outbursts, Sarah was taught self-hypnosis which included:

'With your eyes closed have an on-purpose daydream of yourself doing something you like a lot, ... really enjoy it in your mind as though it was happening right now. Maybe you'll be riding your bike with your friends ... When you're very comfortable imagining that, then turn on an imaginary VCR & TV in the corner of your mind. Let me know when it's on (she nods her head). NOW ... to learn something really neat and very important, watch a video from the other day when you were really upset and angry at home about something your brother did (she nods her head without being asked). Now, press STOP! on the remote controller and put on a video of happy, growing-up Sarah ... see how she's smiling, and look at how proud her Mom and Dad are ... and how proud she is ... Great!'

Sarah was taught a second way to manage anger: 'When you notice the mad feeling starting, see what colour it is, and what shape ... and picture a faucet in the side of that red triangle of angry. Now, turn on the faucet in your mind ... let the angry feeling run out of your thinking, down your face, out of your face into

your neck, down your shoulder, and into your arm, and down into your hand. When the angry is all down in your hand, roll your hand into a tight fist, take a deep breath and hold it . . . hold your fist tight while you count . . . slowly . . . down from five . . . 5 . . . 4 . . . 3 . . . 2 . . . 1 . . . 0 and when you get to 0 let your breath out slowly, that's right . . . and feel yourself relax all over, and picture . . . throwing the mad, angry feelings far away . . . into the trash, or to outer space . . . because there is no need for them now that you know how to relax . . . Great! Look back in your mind and see what colour and shape the angry feeling changed to . . . good . . . see the colour and shape of feeling relaxed and comfortable . . . and more controlled . . . And when you're calm like this, you can talk even easier with Mom and Dad . . .'

Analogously, self-hypnosis training focusing on control and relaxation is an effective adjunct in management of adjustment disorders, in building self-esteem through ego-strengthening, and as a key element of *overall stress management*.

A cooperative and informed involvement of the family may be accomplished by teaching parents about self-hypnosis (e.g., through a demonstration experience of hypnosis with themselves or through viewing of brief videotaped examples) so that they may understand what their child is learning. With this awareness and information, parents are so much more willing and comfortable with the subsequent request that they allow their child the freedom and autonomy to develop this skill at home without their reminders, interference, or unnecessary degree of involvement. This may include specific requests to parents to not remind children to 'practise' their self-hypnosis. To facilitate this, children are encouraged to call the clinician with questions that arise, with the focus that the clinician—and not the parent—is the 'coach' or teacher for the hypnosis practice. Such an approach promotes autonomy and allows room for continued development of the clinician–child relationship. This is both appropriate for and acceptable to most families with the exception of children under 4 or 5 years who may not be able to remember or be sufficiently autonomous to carry out self-hypnosis practice on their own. In these situations it is important that parents be trained to be the 'coach' at home, with guidance from the clinician. Parents vary in their acceptance and adherence to these guidelines, and management must be individualized.

BIOBEHAVIORAL DISORDERS

This group of disorders with clearly identified pathophysiologic origins and effects have been traditionally understood to have significant psychoemotional components. Examples include asthma, migraine, encopresis, Tourette's Syndrome, and inflammatory bowel disease, all of which are known to include psychological stress as just one stimulus which may 'trigger' exacerbations or promote difficulties with the disease. Teaching self-hypnosis as an integral component of a comprehensive

management approach has the dual goal of promoting an overall sense of self-control and providing a strategy for reduction of symptoms.

In the case of a child with encopresis, for example, self-hypnosis may be one strategy of a multimodal therapeutic plan involving education about gastrointestinal anatomy and physiology, nutritional guidance (toward an anti-constipating diet), behavior modification and self-monitoring for its value in self-regulation (e.g., regular toilet sitting after meals with a sticker-chart reward system).

The effectiveness of hypnosis to regulate functions previously thought to be involuntary has now been well established in research. These include demonstration of self-regulation of peripheral temperature (Dikel & Olness, 1980), brainstem audio-evoked response (Hogan, Olness & MacDonald, 1985), transcutaneous oxygen flux (Olness & Conroy, 1985), salivary immunoglobulin (Olness, Culbert & Uden, 1989), migraine headaches (Olness, MacDonald & Uden, 1987), pulmonary function (Kotses, Harver, Segreto et al., 1991; Kohen, 1995b), and tics and Tourette's Syndrome (Kohen & Botts, 1987; Kohen, 1995a).

Children with asthma easily learn to use self-hypnosis and biofeedback to modulate acute episodes of wheezing (Kohen, 1986; Kotses et al., 1991; Kohen & Wynne, 1997; Kohen, 1995b). Children with asthma who learn self-hypnosis experience fewer Emergency Room visits, fewer missed school days, and a better sense of control (Kohen, 1995b). Young people with juvenile migraine who learn RMI are more effective in reducing the intensity, frequency, and duration of their migraine headaches than control patients or patients taking propranolol (Olness, MacDonald & Uden, 1987).

With all child hypnotherapy, precise hypnotic suggestions depend upon the child's personal imagery (e.g., favourite activities), on their unique understanding of their problem, and the feelings and imagery they report in association with modulation of the problem. An 11-year-old girl with migraine was asked to draw a picture of migraine, and her image of comfort (i.e. no headache). She drew a chaotic mixture of red, black, and blue scribbled lines labelled 'migraine'; and then drew a scene of a beach, complete with blanket, beach umbrella, a book, a 'boom box' tape player, and a drink with a straw. When the time came to select hypnotic imagery 'where nothing bothers you and where you never had a headache', the choice was clear (Kohen & Olness, 1993)

Case History: Barry

Barry is a boy of over 12 years referred by his paediatric neurologist for self-hypnosis for migraine headaches. A bright young man, Barry said 'We came here upon the recommendation of Dr ____ who said I could learn how to hypnotize myself for my migraines... If I could drop the migraines that would great...' Barry detailed his 7-year history of headaches which began in Kindergarten. Acetaminophen had been helping, but then 'stopped working'. Ibuprofen was said to help about half of the headaches, but they

preferred to not use any medicine. Typical for migraine, Barry's headaches occurred in the forehead, often beginning unilaterally and 'sometimes ocular'. Sonophobic and photophobic during a headache, he noted triggers to include bright lights like the computer or TV, stress like an upcoming test in school, and of being 'very small and getting shoved and jostled a bit.' Barry described fatigue and loss of appetite in association with his headaches. Most headaches lasted 1–2 hours, though some had lasted an entire day. He reported daily headaches, particularly over the past month with half being 'regular' ones and half being 'migraines'.

The idea of a headache ruler from 0 to 12 was introduced. Barry caught on quickly and said 'usually it's a 3 or 4 . . . without Ibuprofen the highest will be 9, highest ever was a 10 or 11 and usually it has to be 6 before I take the medicine. It gets the headache to go 'down to like 2 or 1 or 0'. He says he can be his regular self when it's at 1–2. Barry's goal was to get the headache down 'under 2, maybe to 1.75'.

Barry also had respiratory allergies since age 6, short stature (smallest in his junior high 7th grade), and a history of sleepwalking, having once been discovered trying to leave the house in the middle of the night.

At the second visit Barry's calendar showed headaches most days in the previous 2 weeks, with self-ratings as high as '7'. He and his family watched a video of other children learning self-hypnosis. he was taught a self-hypnosis exercise focusing on favourite place imagery, progressive relaxation, and imagining the headache 'ruler' in his mind, adjusting it whatever way he decided. Stories were told of other children who adjusted *their* rulers, for example, 'I knew this 7-year-old girl who had tummy aches, and every time she had one she'd picture an elevator in her mind and whatever the tummy ache was on, she'd be on that floor . . . so if it was a 4 she'd picture herself on the fourth floor, and she'd reach over and push the elevator button to ride . . . down . . . to 3 . . . the light would go off at 4 and on at 3 . . . then off at 3 on at 2 . . . that's right. Then 1 and then 0 and when she got off the elevator her tummy ache was gone. There was this 11-year-old boy who had headaches, he pictured himself travelling around his own body, made his way to the main computer called the brain, found the switch for headaches, and turned . . . it . . . down . . . I don't know what ways you'll discover, but you will . . .' He was taught self-hypnosis during this first experience and agreed to practise daily.

At the third visit 2 weeks later, Barry proudly reported daily self-hypnosis practice at bedtime, and only three headaches in the preceding 2 weeks. At the fourth visit 2 weeks later he reported two headaches which 'I got rid of in 5 minutes with my self-hypnosis.' Barry's mother was thrilled to note the startling difference in him, noting not only absence of headaches, but that he was no longer coming home from school exhausted, and overall seemed much happier.

PAIN

Children in acute pain are often the easiest patients to help with the use of hypnotic techniques because they are highly motivated to feel better, to re-establish a sense of control in their life, and to rid themselves of—or at least decrease—their discomfort. In an office, Emergency Room, urgent care centre, or even at an accident site it is important to speak to an injured or ill child in a manner at once reassuring, comforting and believable. Children in an emergency situation of acute pain are already in a spontaneous, negatively focused, hypnotic state, negative in its acutely focused concentration on the injury, the bleeding, and the fear that things will get worse (Kohen, 1986; Olness & Kohen, 1996; Kuttner, 1997). It is, therefore, that much more important that we choose our language of communication carefully, and modulate what we say and how we say it to foster attention toward positive feelings, expectations, and ultimately cooperation. When a clinician empathically tells an Emergency Room child-patient ‘Whew . . . that really hurts’, this immediately identifies the clinician as a good observer, fosters the child’s willingness and ability to pay attention to the clinician, and opens the opportunity for additional hypnotic suggestions toward relief: for example, ‘I’m glad you came to the doctor, it will probably hurt less soon’ or ‘It will probably keep right on hurting until it doesn’t need to anymore . . . now that you’re here and know you will be getting help . . .’. Such positive ‘reframing’ expectations may then easily be reinforced by hypnotic strategies designed to allow the child to alter their perception of discomfort; for example, we might say ‘Would it be okay to take your mind somewhere else?’ or ‘What will you do when you get home, after this is taken care of?’ Beyond distraction, this query offers the reassurance to the child that *s/he will* be going home. Similarly, children in acute pain often easily accept direct ‘permission’ or suggestions to dissociate their pain; for example, ‘Close your eyes . . . find the switches in your mind that control discomfort . . . find the one for your leg . . . What colour is it in your mind? . . . What shape? Is it a turn or a flip or a slide kind of switch? Now, turn it down . . . and then 1-2-3-click, off, and notice how different it feels . . . nice going!’ Adding relaxation, dissociation via leaving to a favourite place, or hypnoanaesthesia or analgesia by cleaning the injured part with a ‘special liquid that is cool and comforting’ are additional strategies that may be useful, especially as they are tailored to the child’s needs (Kohen & Olness, 1993; Olness & Kohen, 1996).

For procedures such as injections, venipunctures for blood withdrawal or intravenous hookups, a bone marrow or spinal taps more time is usually available to plan treatment and hypnotic assistance. This allows for, and should include, a creative exploration of the techniques that may be of greatest benefit to a given child, and for rehearsal in preparation for the designated procedure. A myriad of pain (and anxiety) control methods with hypnosis (Olness & Kohen, 1996) might include:

1. Re-creating a feeling of numbness from memories of previous (local) anaesthesia.
2. Practising modulating discomfort through turning down a ‘pain switch’.

3. Sending discomfort away by blowing it away in bubbles (literally and imaginatively) (Kuttner, 1986, 1988, 1997, 1999; Sugarman, 1997).
4. Imagining taking an adventure trip around the body to install a protective barrier to prevent the signal from the potential pain site from getting through to the mind. When the procedures are recurrent, and what is anticipated is predictably emotionally charged by the recalled pain from the previous procedure, adding hypnotic amnesia for the prior event may be very beneficial.

Memories of previous pain may dramatically affect a child's perceptions and behaviors with the next episode of some recurrent pain syndrome (e.g., recurrent abdominal pain, migraines, inflammatory bowel disease, etc.) or in association with their chronic illness. As with biobehavioral problems, the application of hypnosis in management of chronic or recurrent pain in children and adolescents is best viewed and understood as one strategy within a comprehensive pain management programme tailored to the child's personal, individual needs (Kuttner, 1999).

ANXIETY

A sensitive, complete history and assessment, along with careful pacing of the emerging therapeutic relationship, will commonly yield ideas about the proper role of hypnotherapy for a particular child. For the common performance anxiety of stage fright, or palpitations or 'butterflies in the stomach' before a big game or a recital, it is often easily demonstrated to the child that their response, like a habit, has become a conditioned reaction association with negative expectations, and that it can in fact learn similarly to be modified and mastered.

This may be accomplished easily by discussing the everyday phenomena of physiologic responses to stressful events. One easily understood example is that of blushing with embarrassment. The clinician can explain that one first experiences something, followed by a feeling reaction of embarrassment, followed often 'instantaneously' by a physical response of blushing which in itself may be embarrassing. When the clinician asks the child if they *stay* blushed, they usually comment that they can and do act in some way to *relieve* the feeling of embarrassment, thus curtailing the blushing episode. This brief conversation can provide an everyday example of how a shift in the way a child *feels* can provide a shift in the physical response (of blushing) without even thinking about it. Graphic representative of changes in autonomic responsivity in response to feeling or 'thinking' changes can be even more dramatically demonstrated to children through computerized biofeedback reflection of EMG (electromyographic), EDA (electrodermal activity), or peripheral temperature changes during hypnosis/relaxation and imagery experiences (Culbert, Reaney & Kohen, 1994).

Cognitive mastery then allows the hypnotic approach to reinforce whatever approach one wishes to take to allay anxiety. This may include the 'split screen approach' in which the child imagines himself *at home* successfully and flawlessly

practising a speech, soccer kicks, dancing, the violin solo; and then hypnotically sees himself transfer that positive, success image to an adjacent image of himself on the stage in the auditorium or at the site of the big game. Other options might include using the idea of 'switches' to teach a child to 'Just turn down the dial on that nervous feeling from 4 to 3 . . . That's right . . . from 3 to 2 . . . great . . . and either 2 to 0 right away or 2 to 1 and then to 0, whichever you prefer.' Motivating, ego-strengthening suggestions might include so-called 'future projection', that is picturing in their mind 'how the audience is applauding, how proud you feel, and the wonderful things you hear your proud Mom and Dad saying'.

Other anxiety reactions, such as phobias, or post-traumatic stress disorder may require more intensive hypnotherapeutic treatment and incorporate elements of desensitization procedures. Detailed descriptions of integration of hypnosis with psychotherapy can be found elsewhere (Hammond, 1990; Rhue, Lynn & Kirsch, 1993; Olness & Kohen, 1996).

The use of hypnotherapy as an adjunct to supportive counselling is often very effective in helping children and families with the common experience of separation anxiety. These include sadness and other symptoms associated with moving away from old friends, re-entering school after a long recess/holiday, or helping children with the natural but difficult process of grief and bereavement following the death of a grandparent, other relative or friend, or pet. The use of positive imagery of happy memories, re-experienced by way of age regression, may provide a respite from feelings of loneliness, as well as a bridge to learning about and accepting death (Kohen & Olness, 1996).

CHRONIC DISEASE, MULTISYSTEM DISEASE, TERMINAL ILLNESS

Less is known about the influence of hypnosis and self-hypnosis on the progress of malignant disease than about anxiety. Children with cancer do quickly learn RMI strategies and apply them in a variety of ways to aid in coping with their disease. In 'No Fears, No Tears' and its sequel, 'No Fears, No Tears – 13 Years Later' (Kuttner, 1986, 1999), informative and optimistic films, children with cancer demonstrate the range and usefulness of hypnotic techniques in helping themselves to modify discomfort, effectively manage difficult and repetitive medical procedures, and manage the effects of these challenging treatments.

Studies also indicate that children are able to use hypnotic skills to reduce nausea and vomiting associated with chemotherapy (Zeltzer & LeBaron, 1982; LeBaron & Hilgard, 1984; Jacknow, Tschann, Link & Boyce, 1994). It also has been demonstrated (Olness & Singher, 1989) that children use RMI most effectively when they learn the techniques soon after their initial diagnosis (LaClave & Blix, 1989). With terminally ill children, hypnosis has been a particularly effective adjunctive modality in assisting them and their families to cope with and navigate the last moments of life (Gardner, 1976; Olness & Kohen 1996).

CONCLUSION

Hypnosis and hypnotherapy are both effective and efficient strategies when used thoughtfully by well-trained, skilled clinicians. As with any therapeutic modality, clinicians should obtain appropriate training in paediatric clinical hypnosis to apply and integrate it within general or specialty paediatric care. Clinicians consistently discover that their patients learn hypnosis by applying innate imaginative skills as described here, and in the process develop an increased sense of mastery in the context of their ongoing maturation. Whereas many therapeutic interventions may have untoward side effects, the major by-product of hypnotherapy with children is that which we hope and strive to promote, that is a sense of increased competence.

NB: Training in paediatric clinical hypnosis is available through the Society for Developmental and Behavioral Pediatrics (c/o Ms Noreen Spota, 19 Station Lane, Philadelphia, PA 19119-2939), The American Society of Clinical Hypnosis (130 E. Elm Court, Suite 201, Roselle, IL, 60172-2000, USA, FAX 630 351 8490, and the Society for Clinical and Experimental Hypnosis (SCEH, PO Box 642114, Pullman, WA 99164-2114. Phone 509 332 7555 FAX 509 335-2097. email sceh@pullman.com).

REFERENCES

- Culbert, T., Reaney, J. & Kohen, D. P. (1994). Cyberphysiologic strategies in children: The biofeedback-hypnosis interface. *Int. J. Clin. Exp. Hypn.*, **42**, 97–117.
- Dikel, W. & Olness, K. (1980). Self-hypnosis, biofeedback and voluntary peripheral temperature control in children. *Pediatrics*, **66**, 335–340.
- Gardner, G. G. (1976). Childhood, death, and human dignity: Hypnotherapy for David. *Int. J. Clin. Exp. Hypn.*, **24**, 122–139.
- Gardner, G. G. (1978). Hypnotherapy in the management of childhood habit disorders. *J. Pediatrics*, **92**, 838–840.
- Hammond, D. C. (Ed.) (1990). *Handbook of Hypnotic Suggestions and Metaphors*. New York: W. W. Norton.
- Hogan, M., Olness, K. & MacDonald, J. (1985). The effects of hypnosis on brainstem auditory responses in children. *Am. J. Clin. Hypn.*, **27**, 91–94.
- Jacknow, D. S., Tschann, J. M., Link, M. P. & Boyce, W. T. (1994). Hypnosis in the prevention of chemotherapy related nausea and vomiting in children. A prospective study. *J. Develop. Behav. Pediatrics*, **154**, 258–264.
- Kohen, D. P. (1986). Applications of relaxation/mental imagery (self-hypnosis) in pediatric emergencies. *Int. J. Clin. Exp. Hypn.*, **34**(4), 283–294.
- Kohen, D. (1990). A hypnotherapeutic approach to enuresis. In D. C. Hammond, (Ed.), *Handbook of Hypnotic Suggestions and Metaphors* (pp. 489–493). New York: W. W. Norton.
- Kohen, D. P. (1994). Self-regulation by children and adolescents with cystic fibrosis: Applications of relaxation/mental imagery (self-hypnosis). Paper presented at the 36th Annual Scientific Meeting of the American Society of Clinical Hypnosis, 15 March, 1994.

- Kohen, D. P. (1995a). Ericksonian communication and hypnotic strategies in the management of tics and Tourette Syndrome in children and adolescents. In S. R. Lankton & J.K. Zeig (Eds), *Ericksonian Monographs Number 10: Difficult Contexts for Therapy* (10, pp. 117–142). New York: Brunner/Mazel.
- Kohen, D. P. (1995b). Relaxation/mental imagery (self-hypnosis) for childhood asthma: behavioral outcomes in a prospective, controlled study. *HYPNOS, Swedish J. Hypn. Psychother. Psychosom. Med.*, **22**(3), 133–144.
- Kohen, D. P., Olness, K. N. Colwell, S. O. & Heimel, A. (1984). The use of relaxation/mental imagery (self-hypnosis) in the management of 505 pediatric behavioral encounters. *J. Develop. Behav. Pediatrics*, **5**(1), 21–25.
- Kohen, D. P. & Botts, P. (1987). Relaxation-imagery (self-hypnosis) in Tourette Syndrome: Experience with four children. *Am. J. Clin. Hypn.*, **29**(4), 227–237.
- Kohen, D. P. & Wynne, E. R. (1997). Applying hypnosis in a preschool family asthma education program: Uses of storytelling, imagery, and relaxation. *Am. J. Clin. Hypn.*, **39**(3), 2–24.
- Kohen, D. P., Mahowald, M. W. & Rosen, G. M. (1992). Sleep-terror disorder in children: The role of self-hypnosis in management *Am. J. Clin. Hypn.*, **34**, 233–244.
- Kohen, D. P. & Olness, K. (1993). Hypnotherapy with children. In J. W. Rhue, S. J. Lynn & I. Kirsch (Eds), *Handbook of Clinical Hypnosis* (pp. 357–381). Washington, DC: American Psychological Association.
- Kosslyn, S. M., Margolis, J. A., Barrett, A. M., Goldknopf, E. F. & Daly, P. F. (1990). Age differences in imagery abilities. *Child Develop.*, **61**, 995–1010.
- Kotses, H., Harver, A., Segreto, J., Glaus, K. D., Creer, T. L. & Young, G. A. (1991). Long term effects of biofeedback-induced facial relaxation on measures of asthma severity in children. *Biofeed. Self-Reg.*, **16**, 1–22.
- Kuttner, Leora (1986). 'No Fears, No Tears: Children with Cancer Coping with Pain' (30-minute videotape & manual). Canadian Cancer Society, Vancouver, BC, Canada.
- Kuttner, L. (1988). Favourite stories: A hypnotic pain-reduction technique for children in acute pain. *Am. J. Clin. Hypn.*, **30**, 289–295.
- Kuttner, Leora (1996). *A Child in Pain: How to Help, What to Do*. Hartley & Marks Publisher, Canada.
- Kuttner, Leora (1999). 'No Fears, No Tears – 13 Years Later' (Videotape). Canadian Cancer Society, Vancouver.
- LaClave, L. & Blix, S. (1989). Hypnosis in the management of symptoms in a young girl with malignant astrocytoma: A challenge to the therapist. *Int. J. Clin. Exp. Hypn.*, **37**, 6–14.
- LeBaron, S. & Hilgard, J. R. (1984). *Hypnotherapy of Pain in Children with Cancer*. Los Altos, CA: William Kaufmann.
- Olness, K. (1975). The use of self-hypnosis in the treatment of childhood nocturnal enuresis: A report on 40 patients. *Clin. Pediatrics*, **14**, 273–279.
- Olness, K. (1981). Imagery (self-hypnosis) as adjunct therapy in childhood cancer: Clinical experience with 25 patients. *Am. J. Pediat. Hematology/Oncology*, **3**, 313–321.
- Olness, K. (1990). *Pediatric Psychoneuroimmunology: Hypnosis as a Possible Mediator: Potentials and Problems in Hypnosis: Current Therapy, Research and Practice*. Amsterdam: VU University Press.
- Olness, K. (1990). Reflex sympathetic dystrophy syndrome in children treated successfully with cyberphysiologic strategies. *Swedish J. Hypn. Psychother. Psychosom. Med.*, **17**, 15–18.
- Olness, K. & Conroy, M. (1985). Behavioral considerations in leukemia management. In C. Pochedley (Ed.), *Acute Lymphoid Leukemia in Children*. New York: Masson Publishing.

- Olness, K., Culbert, T. & Uden, D. (1989) Self-regulation of salivary immunoglobulin A by children. *Pediatrics*, **83**(1), 66–71.
- Olness, K. & Singher, L. (1989), Pain and symptom management training for children with cancer: A five year study. *Topics in Pediatrics*, **7**, 2–6.
- Olness, K. & Kohen, D. P. (1996). *Hypnosis and Hypnotherapy with Children* (3rd edn). New York: Guilford Press.
- Olness, K., MacDonald, J. & Uden, D. (1987). Prospective study comparing propranolol, placebo and hypnosis in management of juvenile migraine. *Pediatrics*, **79**, 593–597.
- Rhue, J. W., Lynn, S. J. & Kirsch, I. (Eds) (1993), *Handbook of Clinical Hypnosis*. Washington DC: American Psychological Association.
- Sugarman, L. I. (1997). *Imaginative Medicine: Hypnosis in Pediatric Practice*. (Videotape Documentary). New York: Rochester.
- Zeltzer, L. & LeBaron, S. (1982) Hypnosis and non-hypnotic techniques for reduction of pain and anxiety during painful procedures in children and adolescents with cancer. *J. Pediatrics*, **101**, 1032–1035.

The Negative Consequences of Hypnosis Inappropriately or Ineptly Applied

ROBB O. STANLEY and GRAHAM D. BURROWS
University of Melbourne, Australia

Over the years there have been those who have proposed that hypnosis *per se* may pose some risks for vulnerable individuals (Meares, 1961) while others have proposed that there were no risks at all in the use of hypnosis (Le Cron, 1961). In coming to a conclusion on the issue of adverse effects one must as always consider under what conditions, by whom and with whom hypnotic techniques are being used (Stanley, 1994).

MacHovec (1988) attempted to specify such adverse effects in relation to hypnotic practices.

Hypnosis complications are unexpected, unwanted thoughts, feelings or behaviors during or after hypnosis which are inconsistent with agreed goals and interfere with the hypnotic process by impairing optimal mental function. There is no prior incidence or history of similar mental or physical symptoms. They are non-therapeutic . . . or anti-therapeutic. (MacHovec, 1988, p. 46)

In relation to hypnosis, is there evidence of adverse effects from its use in any domain and to what are such adverse effects attributable? Is there evidence that hypnosis itself, as a state or set of phenomena, can cause harm in any of these domains or are adverse effects the result of the way hypnosis is utilized and the suggestions given in trance?

ADVERSE EFFECTS OF THE EXPERIENCE OF HYPNOSIS

Early concerns about the possible adverse effects of hypnosis were related to the issue of volitional control and the potential for the hypnotized subject to act in ways in which they would not otherwise behave or accept. In particular, concern

focused on the commission of criminal offences and the alteration of volitional control in the many cases of sexual abuse and seduction that had come to the attention of the authorities. These concerns were expressed as early as 1784 by the Commission to Investigate Mesmerism set up by the French Government.

The issue of volitional control and hypnosis is beyond the scope of this chapter. It is sufficient to comment that the answer to the question ‘can subjects be caused, as a result of hypnosis, to act in ways that they would find unacceptable or potentially harmful to themselves or others?’ remains equivocal. ‘Maybe yes, maybe no’ seems to be the answer, varying with the context, subject characteristics, the techniques used, and the psychological processes which may be outside the participant’s awareness.

Does the state of altered cognitive processes resulting from hypnosis itself pose a danger? It is unlikely that a ‘state’ that is available within most peoples’ repertoire of psychological functioning could in itself be physically harmful. Seldom does nature provide a species with a characteristic that by its very nature causes harm to a member of that species.

The context within which the state is induced may present some problems. If the alteration of cognitive processes interferes with what a person may need to do to maintain their safety then it may be harmful. Such a situation arises with so-called ‘highway hypnosis’ where the danger lies in the distraction from activities that need to be attended to. Such spontaneous states are not of concern here. It is possible that similar difficulties can arise through the deliberate induction of the hypnotic phenomena, but this is not a consequence of the phenomena but the context in which it is being used.

Similarly, it is feasible that the use of specific suggestions may interfere with the usual ability of a person to protect themselves. In particular, the alteration of pain perception may, if not done carefully, present the patient with increased risk of failing to respond protectively to a new source of pain, or alterations in the condition being treated.

Does hypnosis pose a risk to anyone’s psychological health and well-being? Since the beginnings of the professional therapeutic use of hypnosis (in fact since the work of the Marquis de Puységur in 1784), there has been concern expressed about the possible adverse effects of clinical hypnosis (Conn, 1981; Eastabrooks, 1943; Rosen, 1960; Meares, 1960, 1961; Orne, 1965, Weitzenhoffer, 1957; Williams, 1953; Wolberg, 1948) and, in particular, the use of hypnosis by lay practitioners or as a form of entertainment (Weitzenhoffer, 1957; Wolberg, 1948).

Reported adverse effects have included depressive reactions, the precipitation of panic attacks, and the onset of psychotic disorders. However, clinicians and researchers do not agree on this issue. Some suggest hypnosis is without any dangers (Janet, 1925; Le Cron, 1961). Others maintain hypnosis may only pose risks if incorrectly applied (Yapko, 1992). Others suggest hypnosis is, in itself, potentially dangerous with some patients.

What is the evidence that such adverse effects exist? Three types of evidence are

available: clinical anecdotes or case reports; surveys of practitioners; and interviews with participants in clinical, research and entertainment settings.

CLINICAL ACCOUNTS

The Marquis de Puységur in 1784 expressed concerns about the potential adverse effects of hypnosis when he created 'accidental somnambulism' (Conn, 1981). By the middle of the nineteenth century, frequent concerns were being raised about the use of hypnosis, although in the first instance these related to the manipulation of patients to act against their will or to their seduction (Conn, 1981; Reiter, 1958).

Clinical accounts of complications arising from hypnosis appeared sporadically and in his landmark text on fact and fiction in hypnosis, Marcuse (1959) highlighted 11 major areas of concern. These related to the psychological well-being of the subject involved; suggested physiological sequelae; acute distress reaching hysterical proportions; and hypnotically suggested mutism, blindness, or disturbances of memory. These generally resulted from the inexperience of the clinician involved and complications in the suggestions or metaphors used, rather than the hypnosis itself.

In the first half of this century numerous reports appeared concerning the sequelae of hypnosis. Hilgard, Hilgard, and Newman (1961) reviewed this literature in which it was claimed that headaches, tremor, neurotic and psychotic symptoms could arise from the clinical application of hypnosis. They noted 15 cases of hypnosis related to the development of psychotic symptoms in the previous 50 years and argued that, in most cases, these adverse effects occurred in subjects who had a long history of pre-existing disturbance.

Meldman (1960) reported a case of 'personality decompensation' following hypnotically based treatment for a flying phobia. Rosen (1960) warned against the ineffective management of abreactions and unspecified psychological sequelae. Meares (1961) expressed concerns about the application of hypnosis with the overly dependent personality type; the pre-psychotic schizophrenic patient; the schizoid personality type; and the depressed patient. He highlighted problems that might arise in dealing with acute panic reactions, abreactions, the incomplete removal of non-therapeutic suggestions, difficulties in terminating 'trance' and symptom substitution. Similarly, Haberman (1987) reported a deterioration in psychological functioning when a non-professional practitioner used hypnosis with a patient with pre-existing psychotic difficulties.

Concerns about the potential for the use of hypnosis to encourage the acting out of suicidal ideas in the depressed patient have been expressed by many clinicians and researchers. Cheek and Le Cron (1968) warned against the use of hypnosis with depressed patients. Similarly, Spiegel and Spiegel (1978), Miller (1979), Burrows (1980), Crasilneck and Hall (1985) and Watkins (1987) expressed the same concerns about the potential for hypnotically based treatments encouraging

patients to act on suicidal ideation. Such views are not universally accepted, particularly by those who use indirect techniques (Gilligan, 1987; Yapko, 1992), but even here there is the caution about the care needed in selecting appropriate techniques.

In a dental setting, Kleinhauz and Eli (1987) reported four cases of anxiety, depression, post-hypnotic confusion, and cognitive impairment after the clinical use of hypnosis.

Kleinhauz and Beran (1981) reported on a case where 'stage hypnosis' appeared to precipitate a severe psychological reaction which resulted in threats to the sufferer's physical health and resulted in several hospital admissions. Kleinhauz, Dreyfuss, Beran and Azikri (1984) also reported a case of 'stage hypnosis' being implicated in a participant's psychological distress including anxiety, depression and 'episodic psychotic decompensation' in a subject with pre-existing traumatic experiences. Kleinhauz and Beran (1984) described two further cases where hypnosis appeared to precipitate depression and antisocial behavior respectively. Similarly Allen (1995) reported on an the apparent precipitation of a 'schizophreniform psychosis' following involvement in hypnosis in the setting of 'entertainment'.

Page and Handley (1990) reported two cases of adverse effects in a research setting.

SURVEYS OF PRACTITIONERS

Averback (1962) surveyed 828 psychiatrists and elicited 210 adverse reactions coincident with the use of hypnosis from the 120 of these practitioners who responded, expressing concerns about the application of hypnosis. The frequent reporting of psychotic decompensation ($N = 119$) was notably higher than in other studies, but may have resulted from the fact that these difficulties would have been referred to a psychiatrist for treatment whereas other difficulties may not require such professional help.

Levitt and Hershman (1962) obtained responses from 866 of the 2500 questionnaires mailed to members of the two principal American Societies of Hypnosis. Of the replies, 301 reported 'unusual reactions' to hypnotic interventions, with anxiety, panic, depression (9.63%); headache, vomiting, dizziness, fainting (4.98%); crying and hysteria (2.99%); and overt psychoses (1.66%) being the most common. This study had many methodological problems and as a consequence, the results are difficult to interpret.

Judd, Burrows and Dennerstein (1985), in their survey of 1086 members of the Australian Society of Hypnosis, reported 88 adverse effects from the 202 responses received. Again the most common of the complications were panic and anxiety (60%); as well as 'over-dependency' (28%); difficulties in terminating trance (28%); and worsened or precipitated psychoses (15%).

SURVEYS OF PARTICIPANTS IN HYPNOSIS RESEARCH

After testing hypnotic susceptibility with the Stanford Hypnotic Clinical Scale (SHSS), Hilgard, Hilgard and Newman (1961) found 8% of their 220 subjects reported transient experiences of headaches, dizziness and confusion. Hilgard's (1974) study of negative effects in 120 subjects, tested for hypnotizability using the SHSS, demonstrated that 16% showed transient negative effects while another 15% experienced negative effects of greater than one hour duration. Crawford, Hilgard and MacDonald (1982) compared the negative effects reported after administration of the Harvard Group Scale of Hypnotic Susceptibility (HGSHS) with those of the Stanford Hypnotic Susceptibility Scale (SHSS), which has a greater number of cognitive items. The use of HGSHS resulted in 5% of the 107 subjects reporting negative experiences with 1% reporting that these lasted for more than one hour. In contrast, the use of the SHSS resulted in 29% reporting negative effects with 12% of these effects lasting over one hour. There was a tendency for more cognitive distortions to be found in the more hypnotizable subjects. Brentar and Lynn (1989) were not able to confirm this association in a study of 240 subjects using the HGSHS.

Echterling and Emmerling (1987) interviewed 105 students who had attended an 'hypnosis stage show'. Of these subjects, 33% reported negative experiences, although they were generally transitory. Misra (1985) reported 16 of 2000 participants who attended a 'stage hypnotist' were referred for negative effects and again these were mostly transitory in nature. Crawford, Hilgard and MacDonald (1992) reported in their study of subjects involved in hypnosis in the 'entertainment' setting, that approximately one-third of those studied reported mild to severe adverse responses although usually of a transient nature. Anxiety and confusion figure prominently in the reported negative effects.

CONCLUSION

In his reviews MacHovec (1986, 1988) reported 86 case examples of adverse effects of hypnosis, with 50% of cases occurring in a clinical setting, 25% in research settings and 25% as a result of stage performances. He generally concluded that the risk of moderate to severe after-effects of hypnosis is 7% in research and clinical samples and 15% in relation to stage performances. His review of the complications of hypnosis began by noting under-reporting of adverse effects of hypnosis in the clinical setting. This may occur because most clinicians, when faced with adverse effects, deal with them utilizing their therapeutic skills and hence the complications are short-lived. In his second review of the complications MacHovec (1988) listed 48 adverse symptom reactions reported by participants who had no such previous problems.

If we consider hypnosis as an altered state of consciousness and a form of

persuasive communication (Yapko, 1992), then it is not the hypnosis itself that may cause any such harm, but the communication that is associated with the hypnotic process, the context in which the hypnosis takes place and the adequacy of the management of the suggestions given (the appropriateness of suggestions used; individual unwanted associations to the suggestions or state; and failure to adequately complete suggestion removal). As Yapko (1992) noted, it is the unintentionally directed associations to other experiences that may be anti-therapeutic.

The risks of adverse effects may be attributed to subjective characteristics such as psychopathology, previous unresolved emotional trauma, and hypnotizability. Adverse effects have also been attributed to practitioner characteristics, such as lack of screening for at risk subjects, misdiagnosis of disorders, ambiguous suggestions, inappropriate interventions, ineffective trance termination, and inadequate debriefing.

A review of the clinical and research literature brings us to the following conclusions:

1. There are adverse effects that can arise through the use of hypnosis in clinical and other settings.
2. While most adverse effects are transitory and mildly distressing there is the potential for serious deleterious effects, including psychotic decompensation, depressive and panic reactions, and suicidal acting out.
3. There is no evidence that hypnosis *per se* is the cause of these deleterious effects. Adverse reactions may arise from pre-existing patient vulnerabilities, therapist inexperience in dealing with psychotherapeutic problems, the use of inappropriate suggestions and metaphors, failure to remove unwanted non-therapeutic suggestions, failure to fully reorientate the patient, and failure to debrief the patient adequately.
4. These problems are more likely to arise if the context does not allow them to be adequately addressed (as in stage performances) or if the training and experience of the practitioner is not sufficient for them to deal with the problems as they arise (inadequate training in the areas of hypnosis or psychological functioning).
5. Lay practitioners lacking in the appropriate level of psychological and clinical training are, therefore, more likely to encounter and cause adverse reactions. They are less likely to be able to respond to them therapeutically and ensure the patient's recovery.
6. The practice of hypnosis requires the demonstration of a level of knowledge, skills and supervised training in therapy approaches relevant to the problem being addressed. Most professions require their members to offer treatment only in those fields in which they have appropriate training. The protection of the patient requires this limitation be maintained.
7. Adequate training and accreditation procedures need to be in place to ensure

the patient is not subject to treatment approaches of which the practitioner does not have adequate understanding.

8. The use of hypnosis in contexts that pose greatest dangers ought to be controlled or disallowed for the public protection. Despite the claims to the contrary, there are a significant number of reports of serious sequelae following the use of hypnosis on stage.

The context within which the state is induced may present some problems. If any alteration of cognitive processing interferes with what a person may need to do to maintain their safety, then it may be harmful. Inappropriate associations that facilitate the hypnotic state or failure to return to the usual mode of cognitive functioning may potentially pose a danger, if the person is in a context that needs full attention. These effects are not a consequence of the hypnosis *per se*, but a failure of awareness of cues that may facilitate the hypnotic alteration of attention in some potentially dangerous context. Similarly, failure to return the subject to the usual state of cognitive functioning is not a problem of hypnosis but of its use.

REFERENCES

- Allen, D. S. (1995). Schizophreniform psychosis after stage hypnosis. *Br. J. Psychiat.*, **166**, 680.
- Averback, A. (1962). Attitudes of psychiatrists to the use of hypnosis. *J. Am. Med. Assoc.*, **180**, 917–921.
- Brentar, J. & Lynn, S. J. (1989). Negative effects and hypnosis: A critical examination. *Br. J. Clin. Exp. Hypn.*, **6**, 75–84.
- Burrows G. D. (1980). Affective disorders and hypnosis. In G. Burrows & L. Dennerstein (Eds), *Handbook of Hypnosis and Psychosomatic Medicine* (pp. 149–170). Amsterdam: Elsevier/North Holland.
- Cheek, D. & Le Cron, L. (1968). *Clinical Hypnotherapy*. New York: Grune & Stratton.
- Conn, J. H. (1981). The myth of coercion through hypnosis: A brief communication. *Int. J. Clin. Exp. Hypn.*, **29**, 95–100.
- Crasilneck, H. B. & Hall, J. A. (1985). *Clinical Hypnosis: Principles and Applications*. New York: Grune & Stratton.
- Crawford, H. J., Hilgard, J. R. & MacDonald, H. (1982). Transient experiences following hypnotic testing and special termination procedures. *Int. J. Clin. Exp. Hypn.*, **30**, 117–126.
- Crawford, H. J., Kitner-Triolo, M., Clarke, S. W. et al. (1992) Transient positive and negative experiences accompanying stage hypnosis. *J. Abnorm. Psychol.*, **101**, 663–667.
- Eastabrooks, G. H. (1943). *Hypnotism*. London: Dutton.
- Echterling, L. G. & Emmerling, D. A. (1987). Impact of stage hypnosis. *Am. J. Clin. Hypn.*, **29**, 149–154.
- Gilligan, S. (1987). *Therapeutic Trances: The Cooperation Principle in Ericksonian Hypnosis*. New York: Brunner/Mazel.
- Haberman, M. A. (1987). Complications following hypnosis in a psychotic patient with sexual dysfunction treated by a lay hypnotist. *Am. J. Clin. Hypn.*, **29**, 166–170.
- Hilgard, J. R. (1974). Sequelae to hypnosis. *Int. J. Clin. Exp. Hypn.*, **22**, 281–298.

- Hilgard, J. R., Hilgard, E. R. & Newman, M. R. (1961). Sequelae to hypnotic induction with special reference to earlier chemical anesthesia. *J. Nerv. Ment. Dis.*, **133**, 461–478.
- Janet, P. (1925). *Psychological Healing*. New York: Macmillan.
- Judd, F. K., Burrows, G. D. & Dennerstein, L. (1985). The dangers of hypnosis: A review. *Aust. J. Clin. Exp. Hypn.*, **13**, 1–15.
- Kleinhauz, M. & Beran, B. (1981). Misuses of hypnosis: A medical emergency and its treatment. *Int. J. Clin. Exp. Hypn.*, **29**, 148–161.
- Kleinhauz, M. & Beran, B. (1984). Misuse of hypnosis: A factor in psychopathology. *Am. J. Clin. Hypn.*, **26**, 283–290.
- Kleinhauz, M., Dreyfuss, D. A., Beran, B. & Azikri, D. (1984). Some after-effects of stage hypnosis: A case study of psychotic manifestations. *Am. J. Clin. Hypn.*, **27**, 219–226.
- Kleinhauz, M. & Eli, I. (1987). Potential deleterious effects of hypnosis in the clinical setting. *Am. J. Clin. Hypn.*, **29**, 155–159.
- Le Cron, L. (1961) *Techniques of Hypnotherapy*. New York: Julian Press.
- Levitt, E. E. & Herschman, C. (1962). The clinical practice of hypnosis in the United States: A preliminary survey. *Int. J. Clin. Exp. Hypn.*, **32**, 55–65.
- MacHovec, F. J. (1986). *Hypnosis Complications: Prevention and Risk Management*. Springfield, IL: Charles C. Thomas.
- MacHovec, F. J. (1988). Hypnosis complications, risk factors, and prevention. *Am. J. Clin. Hypn.*, **31**, 40–49.
- Marcuse, F. L. (1959). *Hypnosis: Fact and Fiction*. Baltimore: Penguin Books.
- Meares, A. (1960). *A System of Medical Hypnosis*. New York: Julian Press.
- Meares, A. (1961). An evaluation of the dangers of medical hypnosis. *Am. J. Clin. Hypn.*, **4**, 90–97.
- Meldman, M. J. (1960). Personality decompensation after hypnosis symptom suppression. *J. Am. Med. Assoc.*, **173**, 359–364.
- Miller, M. M. (1979). *Therapeutic Hypnosis*. New York: Human Sciences Press.
- Misra, P. (1985). Psychiatric casualties of stage hypnosis. Paper presented at the 10th International Congress of Hypnosis and Psychosomatic Medicine, Toronto, Canada.
- Orne, M. T. (1965). Undesirable effects of hypnosis: The determinants and management. *Int. J. Clin. Exp. Hypn.*, **13**, 226–237.
- Page, R. A. & Handley, G. W. (1990). Psychogenic and physiological sequelae to hypnosis: Two case reports. *Am. J. Clin. Hypn.*, **32**, 250–256.
- Reiter, P. J. (1958). *Antisocial or Criminal Acts and Hypnosis: A Case Study*. Springfield, IL: Charles Thomas.
- Rosen, H. (1960). Hypnosis: Applications and misapplications. *J. Am. Med. Assoc.*, **172**, 683–687.
- Spiegel, H. & Spiegel, D. (1978). *Trance and Treatment: Clinical Uses of Hypnosis*. New York: Basic Books.
- Stanley, R. O. (1994) Adverse effects of hypnosis: Inappropriately or ineptly applied. In B. J. Evans and R.O. Stanley (Eds), *Hypnosis and the Law: Principles and Practice* (pp. 189–197). Melbourne: Australian Society of Hypnosis.
- Watkins, J. G. (1987). *Hypnotherapeutic Techniques*. New York: Irvington.
- Weitzenhoffer, A. M. (1957). *General Techniques of Hypnotism*. New York: Grune & Stratton.
- Williams, G. W. (1953). Difficulties in dehypnotizing. *J. Clin. Exp. Hypn.*, **1**, 3–12.
- Wolberg, L. R. (1948). *Medical Hypnosis*. New York: Grune & Stratton.
- Yapko, M. D. (1992). *Hypnosis and the Treatment of Depression—Strategies for Change*. New York: Brunner/Mazel.

Index

Note: page numbers in *italics* refer to figures and tables

- abreactions 23, 39
 - eating disorders 214
 - management 25
 - post-traumatic stress disorder 125
- abreactive techniques 64
 - fractionated 188, 194
- absorption 11, 42
 - post-traumatic stress disorder 148
- absorptive skills 304
- abuse potential 45
- acetylcholine 71
- active-alert hypnosis 226
 - children 310
- acupuncture for pain control 252
- addictive disorders 302
- adjustment disorders 317
- adult education 19, 20
- adverse effects of hypnosis 327–9
 - practitioner surveys 330
 - research participant surveys 331
 - risks 332–3
- affect bridging 25
 - technique 193
- age progression
 - eating disorders 212–3
 - finger sucking 294–5
 - sexual dysfunction 239
- age regression 25, 181
 - anxiety 126
 - depression 132–3, 136
 - dissociative amnesia 193
 - eating disorders 214
 - finger sucking 294–5
 - intentional hypnotic falsification of memory 103–5
 - post-traumatic stress disorder 125
 - sexual dysfunction 239
- agoraphobia 10, 120, 122–3
 - anxiety-managing skills 122
- alcohol use 114, 117
- alcoholism 302
- alertness 292
- allergens, asthmatic reaction 73
- alter accessing 196–8
- alternative medicine 16
- American Boards of Clinical Hypnosis 21
- American Society of Clinical Hypnosis (ASCH) 20, 21
- amnesia
 - Acute Stress Disorder 152
 - dissociative 146, 187, 192–4
 - dissociative fugue 195
 - permissive 192, 194
 - physical abuse 149
 - post-hypnotic 7
 - post-traumatic stress disorder 150
 - recognition 64
 - sexual abuse 149
 - trauma 149
- amnesic gap elimination 195
- analgesia *see* hypnotic analgesia
- analgesics for burns patients 277
- andragogy 20
- anesthesia 26
- anger
 - burn patients 273, 278
 - children 316
 - chronic pain 254
 - depression 133
 - internalized in chronic pain 254
 - outbursts 147
- animal magnetism 4, 309
- anorexia in burn patients 273
- anorexia nervosa 12–13, 205–16
- antidepressants 115, 135
- antisocial behavior 330
- antisocial personality disorder, axis II 144
- anxiety/anxiety disorders 4, 10–11, 15, 28, 115, 117–26
 - adverse effects of hypnosis 330
 - age regression 126
 - benzodiazepines 264
 - children 316, 321–2
 - cognitive restructuring 126

- anxiety/anxiety disorders (*cont.*)
 deconditioning 301
 dental 300, 330
 desensitization 301
 dissociation 301
 from symptoms/situations 121–6
 enhanced control 301
 generalized 125–6
 habituation 301
 hypnotizability 118
 inability to cope 114
 loss of control 180
 management 118–26, 253, 300–2
 agoraphobia 122
 coping strategies 301
 depression 133
 pain 263
 chronic 253–4
 management 249
 pathological 117, 118
 personal significance 301
 phobic 124
 provocation 301
 reduction 264
 relaxation techniques 175
 relief 193
 suicide risk 135
 self-hypnosis 126
 sexual dysfunction 236
 stress 115
 threat 114
 treatment 118–26
 approaches 121
 weight loss 229
 Approved Consultant in Clinical Hypnosis 20–1
 archaic involvement 51
 arousal
 focused 63
 management 116–17, 119
 physiological 113
 art therapy 311
 arthritis 71
 assault, aggravated 144
 assertive problems 138
 associations, driving behaviour 85
 asthma 15
 allergen reactions 73
 childhood 309, 317
 hypnotizability 302
 reaction to histamine 73
 self-hypnosis 318
 treatment 73
 attention 62
 focused 62
 children 310
 reallocation 249
 sustained 64
 attentional effort 74
 attentional filtering 74
 attentional processing
 hypnotizability 72
 performance measures 63
 attentional tasks 63
 attitude change 115–16
 attribution 249
 audio tapes 286, 287
 generic 290
 Australian Psychological Society 56
 Australian Society of Hypnosis (ASH) 21–2
 autohypnotic techniques 12
 see also self-hypnosis
 automaticity 42
 automobile accidents 143–4
 autonomic reactivity to pain 71
 autonomy
 hypnotic dream process 178
 pain control 265
 positive 181
 autosuggestion in eating disorders 209
 audiovisual imaging 286
 avoidance symptoms 147
 avolitional change 6

 B cell function 73
 back from the future technique 212–13
 behavior modification techniques 181
 behavioral change 131–2
 induction 4
 behavioral control in anxiety management 122
 behavioral problems 15
 children 316–17
 behavioral therapy 4, 22
 weight loss 223
 benzodiazepines 114, 115
 anxiety/pain relief 264
 bereavement, children 322
 bicycle ergometer 226
 bingeing behavior 224
 see also bulimia
 biobehavioral disorders 15
 children 317–19
 biofeedback
 arousal management 116
 children 311, 318
 computerized 321

- hypnosis combination for pain
 - control 247–9
- bipolar I disorder 130
- bite guard appliance 309
- body image 205, 216
 - burn patients 281
 - obesity 222
- body–mind effects 292
- bonding 179, 181
- bone marrow transplant 248
- Braid, James 4
- brain
 - hypnotic phenomena 74
 - metabolism 66
 - organic brain syndromes 44
 - somatosensory event-related potentials (SEPs) 69
- breathing techniques
 - agoraphobia 122
 - panic disorder 121
- Breuer, Josef 4
- bridges, dental 309
- brief therapy model 234–5
- bruxism 14, 286
 - cause 309
 - relaxation 292
 - sequelae 309–10
- bulimia 12, 205–16
 - hypnotizability 301
- burn patients 14, 15, 73, 273–81
 - analgesics 277
 - anger 273, 278
 - body image 281
 - cooled wound 274
 - depression 280
 - dressing changes 279
 - fear 273, 275–8, 280
 - guilt 273, 278
 - helplessness 280
 - icewater application 277
 - infection 279–80
 - inflammatory response 274
 - local edema 274
 - nutrition 281
 - opioids 279
 - pain 275–8
 - control 265
 - physical rehabilitation 281
 - procedural pain 279
 - regression 280
 - resting pain 278–9
 - sepsis 279
 - wound healing 281
- burn stimulus 274
- calmness in eating disorders 208, 209, 211
- calorie intake restriction 221–2
- cancer 28, 30, 73
 - childhood 309, 322
 - pain control 247, 265
- carbohydrates, dietary 222
- catalepsy
 - induction 167
 - sexual dysfunction 239
- catatonic behavior 176
- catecholamines 280
- catharsis 153
 - eating disorders 214
- causalgia 261
- cerebral blood flow, regional (rCBF) 9, 65–6
 - cognitive activity 72
 - hypnotic analgesia 68
- cerebral cortex
 - metabolism 65–7
 - pain perception 67
 - pain processing 67–8
- certification 27
- chemotherapy for children 322
- Chevreul pendulum 256
- childbirth, pain control 265
- children 309–11
 - abuse 38, 54
 - potential of self-hypnosis 45
 - anxiety 321–8
 - behavioral problems 316–17
 - biobehavioral disorders 317–19
 - biofeedback 311, 318
 - cancer 309, 322
 - chemotherapy 322
 - chronic disease 322
 - clinical applications of hypnosis 312–22
 - development 182, 312
 - dissociation 320
 - habit disorders 309, 313–15
 - health care 312
 - hypnosis definition 310
 - hypnotic responsiveness 40, 309
 - imagery 310
 - migraine 317, 318–19
 - nocturnal enuresis 313–15
 - pain 320–1
 - painful procedures 320–1
 - phobias 322
 - post-traumatic stress disorder 322
 - relaxation 317, 320
 - relaxation and mental imagery (RMI) 311, 313
 - self-hypnosis 14–15, 313, 315, 316–17
 - trauma 39, 192

- children (*cont.*)
 - troubled 192
 - victimization 38
- Children's Hypnotic Susceptibility Scale 311
- cingular gyrus 68
- cingulate cortex 69
- classical conditioning 124
- client, abuse potential 45
- client–therapist interaction 8, 22
 - control 42
 - self-hypnosis 41
 - social–psychological 249
- clinical practice, hypnosis integration 26
- Coconut Grove Night Club fire 145
- coercive persuasion 200
- cognition 250
 - altered 301, 328, 333
 - obesity 227–8
 - negative about sexual functioning 236
 - unconscious 162
- cognitive activity, regional cerebral blood flow 72
- cognitive change 115–6
- cognitive control in anxiety management 122
- Cognitive Dissociative Model 131–2, 137
- cognitive effort 62, 74
 - enhanced for hypnosis 66
- cognitive flexibility 74
- cognitive impairment 330
- cognitive mastery 321–2
- cognitive process alteration 328, 333
- cognitive reframing in eating disorders 210–13
- cognitive rehearsal strategy 138
- cognitive resources 177
- cognitive restructuring
 - anxiety 126
 - depression 138
 - eating disorders 210–13
 - post-traumatic stress disorder 125
 - techniques 205
 - trauma 125
- cognitive skills in pain management 250
- cognitive strategies for chronic pain 255
- cognitive therapies 4–5, 22
 - social phobia 123
- cognitive–behavioural management
 - depression 137–8
 - obesity 223
- cognitive–behavioral techniques 119–20
 - post-traumatic stress disorder 152, 153
 - stress 116
- combat
 - conversion disorders 160
 - dissociative symptoms 151
 - see also* Vietnam veterans
- Commission to Investigate Mesmerism 328
- communication 40–1
 - connotation 86
 - deep structure 86
 - denotation 86
 - dual nature 85–6
 - Ericksonian injunctive 14
 - indicative 86
 - injunctive 86–8
 - latent 208
 - manifest 208
 - multilevel 9–10, 85–6
 - surface structure 86
 - techniques 25
 - therapeutic 85
 - see also* persuasive communications
- community 155
- compensation in chronic pain 256
- complementarity, rigid 92
- complementary relationships 88–90
- concentration difficulties 147
- confabulations
 - defensive 194
 - retrieval 193
- confidence in stress management 116
- conflictual resolution 215
- confusion 86, 91, 176
 - post-hypnotic 330
 - states 215
- consciousness, altered state 331–2
- constructs, uninformed 41
- contraindications 44–5
- control
 - children 317
 - client–therapist interaction 42
 - dissociative trance disorder 199–200
 - potential loss 180
 - self-hypnosis 72
 - volitional 327, 328
- conversion disorders 11, 159–61
 - case histories 164–8
 - diagnosis 160, 168
 - dissociation 161–2
 - hypnotherapeutic strategies 163–8
 - hypnotic trance 162
 - misdiagnosis 168
 - onset 160
 - revivification 163, 164
 - suggestibility 162
- coordination disorder of torso muscles 166–8

- coping 15, 116
 - children 316
 - dissociative partial 125
 - mechanisms 113–14
 - rehearsal 121, 122–3
 - self-hypnosis 30
 - strategies in anxiety management 118, 301
- cortical frontalization 66
- cortical processing 9, 74
- cortisol 280
- counselling, children 322
- countertransference 27, 29
- court settings, recovered memory 100, 103
- covert modelling 124
- Creative Imagination Scale 267
- creator control technique 176
- criminal offences 328
- critical thinking reduction 5
- crowns, dental 309
- cytokines 280

- debriefing 332
- deconditioning 301
- delusional systems 176
- delusional thought patterns 176
- delusions in schizophrenia 174, 175
- demand characteristics 28
- denial 249
- dental environment 287
 - adverse reactions 330
- dental fears 286, 299–300
- dental implants 309
- dental malocclusion 292
- dental patients, pain control 247, 265
- dental phobia 299–300
 - hypnotizability 303–6
 - recovered memory 104
 - self-hypnosis 305
- dental surgery
 - EEG theta power 71
 - hypnotic analgesia 70–1
- dental trauma 300, 305
- dentistry 285
 - covert hypnotic interaction 287–9
 - habit management 294–6
 - healing suggestions 289
 - nitrous oxide/oxygen conscious sedation 286, 287, 297
 - oral cavity 285–6
 - pain 292–4
 - patient fear 286, 299–300
 - postoperative hemostasis 286, 289
 - relaxation 291–2
 - smoking cessation 289–90
- dentists 14
- depersonalization/depersonalization disorder 146, 187, 198–9
 - Acute Stress Disorder 152
 - hypnotizability 198
 - trauma 150–1
- depression 10–11, 114
 - adverse effect of hypnosis 328, 330
 - age regression 132–3, 136
 - anger 133
 - anxiety management 133
 - behavior change 131–2
 - burn patients 273, 280
 - chronic pain 253–4, 256
 - cognitive rehearsal strategy 138
 - cognitive restructuring 132, 138
 - cognitive–behavioural management 137–8
 - contraindication 44
 - deterioration precipitation 136
 - dream analysis 132
 - ego-strengthening inductions 133
 - empowerment 133
 - hopelessness 141–2
 - hypnoanalysis 132
 - hypnosis
 - combination with therapeutic approaches 137
 - interrelationship 129–30
 - potential problems 134–6
 - process 134
 - hypnotic interventions 131–4
 - hypnotizability 135–6
 - imagery 138
 - learned helplessness model 138
 - loss resolution 133
 - major 130
 - management 136–7
 - masked 264
 - nature 130
 - pain 263
 - psychotic 176
 - rating scales 130, 138
 - reinforcement 136
 - self-esteem 133
 - severe 135–6
 - skills enhancement 131–2
 - stress 115
 - suicidal ideation 329–30
 - suicidal impulse modification 133–4
 - suicide risk 133, 134–5
 - symptom removal 131
 - uncovering of repressed material 132–3
 - unipolar 131–2, 137

- depression (*cont.*)
 weight loss 229
- depressive turmoil 135
- derealization 146
 Acute Stress Disorder 152
 without depersonalization 200
- dermatological conditions 302
- descending inhibitory control system 71
- desensitization 181
 anxiety states 301
 sexual 237
 sexual phobia 241
 systematic 153
 imagination 236
- desensitization techniques 64
 eye movement 125
 systematic 120, 123–4, 125
- despair, chronic pain 254
- despondency, chronic pain 254
- development, children 182, 312
- diagnosis 38
- Diagnostic and Statistical Manual of Mental Disorders* see DSM
- Diagnostic Rating Procedure 303
- diagnostic skills 8, 37
- diet change 117
- dieting history 222, 223
- dilemma symptom substitution 313
- disability
 feigning 162–3
 pain 262
- disattention 62
- disease, chronic 322
- disproportionate dental anxiety 300
- disruptive behavior 316
- dissociated control 74
- dissociated ego states 215
- dissociated thought 99
- dissociation 11, 42, 54
 anxiety symptoms/situations 121–6, 301
 children 320
 conversion disorders 161–2
 eating disorders 205, 207
 enhancement of from anxiety 123
 fear-inducing situation 124
 hand 167
 hypnotic pain management 250–3
 hypnotic trance 162
 memory 100
 pain 68
 pain relief 268–9
 post-traumatic stress disorder 148, 150–1
 scales 207
 trauma 148, 150–1, 160, 191
 reaction 12
- Dissociation Experiences Scale 207
- dissociative disorder not otherwise specified 187, 188, 200
- dissociative disorders 11, 12, 27, 39, 187–200
 age regression 25
 controversies around hypnosis use 188–90
 current use of hypnosis 190–1
 dissociativity and hypnosis relationship 191
 inconsistencies 161
 trauma 161
- Dissociative Experiences Scale 151
- dissociative identity disorder 12, 28, 151, 187, 188, 195–8
 alter accessing 196–8
 hypnotizability 190
 iatrogenesis 189
 manifestations 55
 trauma 189, 196
 see also multiple personality disorder
- dissociative mechanism 123
- dissociative phenomena 161–2
- dissociative response 146–7
- dissociative responsiveness 88
- dissociative state 11
 trauma 149
- dissociative symptoms
 combat 151
 trauma 146
- dissociative trance disorder 11, 188, 199–200
- distraction 249
- distress, subjective 113
- doctor–patient interaction 287–9
- dolphins 270
- dopamine 65, 71
- Draw a Person Test 216
- dream analysis 181
 depression 132
- dream imagery 176
- dreams
 hypnotic 175, 177–8
 interpretation in schizophrenia 173
- DSM II 38
- DSM-IV 121, 130
 Acute Stress Disorder 151–2
 conversion disorder 160
 dental anxiety 300
 dental phobia 300
 dissociative disorders 187
 post-traumatic stress disorder components 147

- sexual dysfunction 234, 235
- dying patients 30
 - children 322
- dyspareunia 242, 243
- dysthymic disorder 130

- early learning set induction 87
- eating behavior
 - control 224–5
 - normal habits 225
- eating disorders 12–13, 205–16
 - abreactions 214
 - age progression techniques 212–13
 - age regression 214
 - autosuggestion 209
 - back from the future technique 212–13
 - behavioral change 216
 - body image 216
 - calmness 208, 209, 211
 - catharsis 214
 - cognitive reframing/restructuring 210–13
 - effectiveness assessment of treatment 215–16
 - ego state therapy 215
 - ego-strengthening inductions 208, 209
 - hypnotizability 301
 - ideomotor signaling 210–11, 214
 - imagery 208, 209
 - metaphorical prescriptions 214
 - patient assessment 206–8
 - post-traumatic stress disorder 214
 - relaxation 209, 211
 - self-esteem 216
 - self-hypnosis 208, 209
 - symptom relief 216
 - therapeutic interventions 208
 - see also* anorexia; anorexia nervosa; bulimia
- Eating Disorders Inventory 216
- education, patient 121
- educational alliance 26
- educational phase 36, 41–3
- ego
 - fragile structure 44
 - function profiles 25
 - strength in burn patients 281
- ego-building techniques
 - dissociative fugue 195
 - messages 175
 - schizophrenia 175, 176
- ego-state disorders 200
- ego-state model 196
- ego-state therapy 188, 215
 - obesity 229
- ego-strengthening inductions 40
 - children 317
 - chronic pain 255
 - depression 133, 138
 - eating disorders 208, 209
 - obesity 228
 - personality disorder 177
 - post-traumatic stress disorder 152
 - psychosis 177
 - weight loss 224
- ejaculation, premature 244
- electrodermal activity (EDA) 321
- electroencephalogram (EEG) 74
 - 40-Hz band 63–4
 - alpha power 64
 - hypnotizability 62–7
 - theta power 63, 71, 74
- electromyography (EMG) 321
- embarrassment fears 121
- emotion
 - forensic subjects 57
 - memory and hypnosis 59
 - recall 57
 - strong 149
 - unconscious 162
- emotional resources 177
- emotional stimuli 64–5
- emotionally laden imagery intensity 64
- empowerment 288, 290
 - depression 133
- encopresis 15
 - self-hypnosis 318
- endorphins 263–4
- enuresis 313–15
- erectile disorder, metaphors 242
- erectile firmness, post-hypnotic
 - suggestion 242
- Erickson, Milton 23, 85, 86, 131, 132
 - finger sucking strategy 295
 - psychotic patients 174
- Ericksonian injunctive communication
 - 14–15
 - burn patients 281
 - depersonalization disorder 199
- Esquirol 171
- ethical codes 42
- ethical guidelines 9, 57
- ethical principles 27
- evaluation phase 36–41
- evoked potentials 74
- exercise programmes, arousal
 - management 116, 117
- expectancy modification 305
- expectations
 - heightening 7

- expectations (*cont.*)
 positive 36, 41, 44
 experiences, self-report 49
 exposure
 phobia treatment 123–4
 post-traumatic stress disorder 125
 Eye Roll Sign 207
- face saving 164
 false memory syndrome 27
 see also recovered memory
 family hierarchies 92
 fantasy 7
 anxiety disorders 120
 children 310
 display 265
 exercises for obesity 224
 future-oriented 228
 guilt-inducing 152
 heightened 6
 pain control 265
 reinterpretation 237
 sexual 237, 242
 fear
 burn patients 273, 275–8, 280
 dentistry patient 286
 pain 263
 unconscious 145
 fetish-based focuses 237
 fibromyalgia 248
 finger signaling 229
 finger sucking 286, 294–5
 firearms 144
 flail arm 266
 flashbacks, intrusive 148, 192
 forensic subjects 8, 27
 contraindications 44
 emotion 57
 motivational forces 58
 forgetting 249
 free association 181
 Freud, Sigmund 4
 frontal attentional system 66, 68, 70, 74
 hypnotizability 72
 pain inhibition 71
 frontal inhibitory action 65
 frontal inhibitory processing system 65
 frontal lobe
 activity 65
 hypnotic analgesia 72
 pain inhibition 68
 fugue, dissociative 187, 194–5
 fusional alliance 51
 gag reflex, hyperactive 296
 gagging, exaggerated 295–6
 Ganser's syndrome 200
 gender identity disturbance 200
 generalized reality orientation 5
 genital anesthesia 244
 glove anesthesia 267
 chronic pain 256, 268
 dyspareunia 243
 herpes zoster pain 267
 sexual dysfunction 239, 240
 glucagon 280
 governor 91
 grief
 acute 145
 children 322
 grief work 145, 153
 group practice sessions 24–5
 guided imagery 36, 227
 guilt
 burn patients 273, 278
 chronic pain 254
 dysfunctional 212
 fantasized 152
 relief 315
- habit disorders
 childhood 309, 313–15
 habituation 301
 hallucinations
 psychosis 172
 schizophrenia 174, 175
 Harvard Group Scale of Hypnotic
 Susceptibility 24, 303, 331
 hayrake oral attachment 294
 headache
 children 318
 chronic 248–9
 constant 262
 muscle tension 15
 tension 292
 see also migraine
 headphones, stereophonic 290
 healers 29
 healing
 psychology 73
 scripts 179, 182
 suggestions 289
 helplessness 114
 burn patients 280
 chronic pain 254
 post-traumatic stress disorder 152
 hemispheric dominance 74
 EEG alpha power 64

- hemispheric involvement in hypnosis 66–7
- hemophilia
 - childhood 309
 - enhanced blood clotting 73
- hemostasis, dental extractions 286, 289
- herpes zoster pain 267
 - see also* post-herpetic neuralgia
- hidden observer method 250
- highway hypnosis 328
- hippocampal region 71
- histamine, asthmatic reaction 73
- Hoek, Andries 171
- homovanillic acid 65
- hopelessness 10, 135, 138
 - depression 141–2
- hunger feelings 225
- hyperarousal 117, 147–8
 - community 155
 - post-traumatic stress disorder 149
- hypervigilance 147
- hypno-analysis 132
- hypno-exploration for sexual
 - dysfunction 240
- hypnodynamic therapies for sexual
 - dysfunction 240
- hypnoprojective techniques 64
- hypnosis
 - aptitude 52
 - definitions 3–4, 131
 - faking 49
 - historical figures 23
 - historical use 4–5
 - integration into clinical practice 26
 - intervention goals 131–4
 - motivational factors 58
 - myths/misperceptions 23, 41
 - nature of 49
 - training 7–15
- hypnotherapeutic strategies 11
 - conversion disorders 163–8
- hypnotherapy facilitation 64
- hypnotic analgesia
 - arthritis 71
 - children 320
 - cingulate cortex 69
 - dental surgery 70–1
 - frontal region 72
 - male dyspareunia 243
 - pain 263–4
 - management 67–72
 - tolerance 251–2
 - peripheral nervous system 71–2
 - peripheral reflex activity 72
 - regional cerebral blood flow 68
 - sexual dysfunction 239–40
 - thalamus 69
 - validity 264
- Hypnotic Clinical Scale 303
- Hypnotic Induction Profile (HIP) 136, 207, 287, 303
- hypnotic instructions 66–7
- hypnotic phenomena 9
 - brain 74
- hypnotic process 5
- hypnotic relationship 8, 36
- hypnotic responsiveness 36
- hypnotic restructuring 152
- hypnotic state 3
 - induction 333
 - spontaneous in children 310
- hypnotic susceptibility
 - adverse effects 331
 - level 62
 - pseudomemory 50
 - scales 311
- hypnotic techniques, indirect 174
- hypnotizability 5, 6, 8, 24
 - addictive disorders 302
 - alcoholism 302
 - anxiety disorders 118
 - assessment 36, 43
 - asthma 302
 - attentional processing 72
 - cerebral metabolism 65–7
 - clinical populations 301–2
 - dental phobia 303–6
 - depersonalization disorder 198
 - depression 135–6
 - dissociative identity disorder 190
 - eating disorders 301
 - electroencephalogram 62–7
 - frontal attentional system 72
 - frontal lobe activity 65
 - high 62–7
 - hypnotic instruction interaction 52
 - imagination 265
 - instruments 43
 - low 62–7
 - obesity 302
 - pain control 252–3, 302, 303
 - pain tolerance 251
 - participants in research 331
 - phobias 301, 302, 304
 - phobic disorders 302
 - psychiatric populations 302
 - psychosomatic conditions 302
 - responsiveness of client 43
 - scales 24, 42, 43

- hypnotizability (*cont.*)
 smoking cessation 302, 303
 Vietnam veterans 153
 weight loss 223
- hypoxia, arterial 297
- hysteria
 conversion 159
 hypnotizability 301
 male 160
- iatrogenesis, dissociative identity disorder 189
- ICD-10
 conversion disorder 160
 sexual dysfunction 234
- ideodynamic effect 85
- ideomotor questioning 229
- ideomotor signaling 25, 40
 alters 198
 eating disorders 210–11, 214
- ideomotor suggestion in chronic pain 256
- illicit drugs 114, 117
 sexual dysfunction 233
- illness
 chronic 30
 development/maintenance 37
- imagery 7
 anxiety disorders 120
 children 310
 chronic pain 255, 256, 268–70
 depression 138
 display 265
 eating disorders 208, 209
 enhancing 7
 future-oriented 212–13
 heightened 6
 hypnotic 175
 manipulation 269
 pain-blocking 263
 pain management 249
 phobia treatment 124
 post-traumatic stress disorder 125
 safe place 197, 270, 276, 278
 shifts 176
 skills and hypnotizability 304
 techniques 179
 utilization 25
 vividness 6
- imagination
 children 310
 hypnotizability 265
 pain dissociation 269
- immune system 263
- immunity 280
- immunoglobulins 289
 salivary 318
- inappropriate application of hypnosis 327–33
- incest victims
 conversion disorders 160
see also sexual abuse
- independence
 hypnotic dream process 178
- induction procedure 43
- inept application of hypnosis 327–33
- infants
 developing 182
 mothers of newborn 160
- inflammation 280
- inflammatory bowel disease 15, 248, 317
- inflammatory response in burn patients 274
- information
 false 101
 processing strategies 304
 retrieval 9
- informed consent 43, 56, 191
- injunctions 87–8
- inner place 270
- insight, psychosis/personality disorder 177
- interleukin 1 (IL-1) 280
- interleukin 6 (IL-6) 280
- International Classification of Diseases (10th Edition) (WHO) *see* ICD-10
- International Society of Hypnosis (ISH) 20
- interoceptive sensations 225–6
- interpersonal relationships 58
- interspersal technique 91
 multilevel 85
- intervention
 skills 106
 strategies 92
- intrusive symptoms 147
- intuition 29
- involvement, depth 64
- irritability 147
 rating 73
- irritable bowel syndrome
 pain control 248
see also inflammatory bowel disease
- ischemic pain tolerance 251
- laughing place 276, 278
- learned helplessness model 138
- learning 124
 hypnotic 87
 theories 22
- lifestyle changes, arousal management 117
- lingual spurs 294

- litigation, chronic pain 256, 257
 long-term therapy 29
 loss
 grief 145
 of interest with trauma 150–1
 resolution in depression 133
 lost time 215
 lying 59
- magnetic resonance imaging, functional (fMRI) 9, 66
 cortical involvement in pain processing 67
 cortical pain perception 68
 magnetoencephalographic (MEG)
 studies 67–8
 maladaptive behavior 215
 mandible malalignment 309
 Mantoux reaction inhibition 73
 marijuana 114
 masseter muscles 292
 master control room technique 238, 241
 mastication muscles 309
 maxillofacial surgery 73
 McGill Pain Questionnaire 261
 medical etiology 37–8
 medical evaluation 8
 medications, sexual dysfunction 233
 meditation 36
 arousal management 116
 memory 8–9, 42–3
 accuracy 57, 58
 inappropriate confidence 101
 activated 8
 altering 56, 301
 avoidance 55
 blocked 55
 categorization system 161
 changes 101
 clinical aspects 56–8
 clinical setting 97–8
 clinician knowledge 106
 cues 56
 dissociation 99, 100
 distortions 7, 52, 53, 55, 105
 emotional 64–5
 encoding 7
 enhancement 27, 101–5
 explicit 162
 hypnotic creation 52
 impact of hypnosis 103
 impairment in post-traumatic stress disorder 150
 implicit 162
 intact 56
 intentional hypnotic falsification 103–4
 loss 106
 meaning 100
 metaphorical exploration 43
 nature 50
 perinatal 8
 postevent information 98
 prenatal 8
 reconstruction 10
 reporting 52
 reliability 57
 reports 55
 repressed 8, 98–101
 sexual abuse 9, 55
 restructuring 154
 retrieval 7, 29
 trauma 149
 source confusion 98
 state-dependent 153
 suggestion 98
 test 53
 traumatic 154
 traumatic events 54, 55
 see also recovered memory
 meningeal tumor, dorsal spinal 268
 mental health and sexual/physical abuse 54
 mental illness, severe 172, 173
 Mental Status Examination 216
 Mesmer, Franz 4, 23, 309
 metabolic rate 221–2
 burn patients 273
 obesity 226
 metacomplementary relationships 10, 90
 metaphors, hypnotic 194
 eating disorders 214
 erectile disorder 242
 sexual dysfunction 238
 vaginismus 243–4
 migraine 15, 248–9
 childhood 317, 318–19
 dolphins 270
 see also headache
 military situations *see* combat; Vietnam veterans
 mind–body effects 292
 misinformation, postevent 50
 Monkey God rituals 279
 mood 73
 swings 215
 mothers of newborn infants 160
 motivation 7, 8, 37, 39–40, 58
 enhancement and weight loss 224
 forensic subjects 58
 pain control 265, 266

- motivation (*cont.*)
 smoking cessation 290
 strengthening in obesity 228
 motor neuron excitability 71
 motor reactions, extreme threat 163
 motor symptoms in conversion hysteria 159
 motorcycle crash patients 266–7
 mourning 145, 192
 multiple cognitive pathways 250
 multiple personality disorder 173
 hypnotizability 301
 see also dissociative identity disorder
 multisystem disease 322
 muscle tension discrimination 119
 music and movement therapy 311
- nail biting 286
 naloxone 71
 National Institute of Mental Health Treatment
 of Depression Collaborative Research
 Programme 137
 nausea
 burn patients 273
 children 322
 control 248
 Nederlandse Vereniging voor Hypnotherapie
 (NVvH) 21
 negative experiences 331
 see also adverse effects of hypnosis
 neodissociation 250
 neuroimaging techniques 9, 74
 neurological disorders 168
 neuropeptides 280
 neurophysiology of hypnotic state 62–7
 neuropsychophysiology 61–2
 neurosignatures, pain 70
 neurotransmitters
 non-opioid 9, 71
 opioid 9
 nicotine 114
 nitrous oxide/oxygen conscious sedation 286,
 287, 297
 nociceptive reflex 264
 R-III 72
 nocturnal enuresis 313–15
 noradrenaline 71
 numbing 146
 Acute Stress Disorder 152
 trauma 150–1
 nurturance 179
 nutrition for burn patients 281
- obesity 12, 221–30
 ambivalence towards change 229–30
 body image 222
 cognition alteration 227–8
 cognitive–behavioral management 223
 ego-state therapy 229
 ego-strengthening inductions 228
 hypnotic technique applications 224–30
 hypnotizability 302
 interoceptive sensations 225–6
 metabolic rate 221–2, 226
 motivation strengthening 228
 physical exercise 225, 226
 post-hypnotic suggestion 230
 prognostic factors 221–2
 relaxation 224, 226
 self-control 224–5
 self-esteem 222
 self-hypnosis 223, 227, 228
 time of onset 222, 223
 trauma concealment 229, 230
 see also weight loss
 obsessive–compulsive disorders 120
 odontophobia 299
 office design 28
 Oklahoma City bombing 143, 155
 one-down people 89, 90
 one-up people 89, 90, 93
 opioids, burn patients 279
 Oppositional Defiant Disorder 316
 oral cavity
 centrality 285–6
 examination 288
 oral fixation 285
 oral stimulation 295–6
 organic brain syndromes 44
 organic etiology 37–8
 orgasmic response disorders 244–5
 orthodontic treatment 309
 over-dependency 330
 overeating, unconscious motives 224
- pacifier sucking 294–5
 pain/pain control 13–14
 acupuncture 252
 affective 67
 anxiety 263
 assessment of potential for hypnotic
 response 266
 attention allocation 70
 autonomic reactivity 71
 burns patients 275–8
 children 320–1
 cold 261–2
 cold pressor 69–71
 constant 262

- contraindications 45
- cues to hypnotic approaches 261
- dental 299
- depression 263
- descriptor categories 261
- diagnosis 262
- disability 262
- dissociation 68
- early intervention 70
- economic reinforcement 262
- fear 263
- herpes zoster 267
- hypnosis techniques 266–8
- hypnotic analgesia 67–72, 263–4
- hypnotizability 252–3, 302, 303
- intensity perception 68, 70
- intermittent 262
- low back 70, 248, 267–8
- management 16, 30
 - flexibility 264–5
 - strategies 249–50
- neurosignatures 70
- nitrous oxide 297
- organically caused 265–6
- patient choice 257
- perception
 - cerebral cortex 67–8
 - cingular gyrus 68
 - somatosensory event-related potentials (SEPs) 69–70
- procedural 279
- process 69
- processing models 67
- recurrent 321
- response 69
- resting 278–9
- self-efficacy in reduction 70
- self-hypnosis 265–6
- self-management 13
- sensory 67
- severe intractable 266
- therapeutic strategy 262
- tolerance 251, 264
- warmth 261–8
- see also* hypnotic analgesia
- pain, chronic 13, 16, 28, 67, 247–57
 - depression 129
 - describing 255–6
 - direct suggestions of relief 268
 - dissociation 268–9
 - hypnotizability 302, 303
 - imagery techniques 268–70
 - inner place 270
 - management 262
 - relaxation 268
 - secret room 270
 - time distortion 269
- panic 10, 193
 - adverse effects of hypnosis 330
 - attacks 328
 - sexual arousal 241
- panic disorder 120, 121–2
 - social phobia 123
- paralysis, flaccid of legs 164–5
- paranoia 44
- paranoid schizophrenia 44
- parents, self-hypnosis 317
- patient(s)
 - assessment/evaluation 25
 - empowerment 288, 290
 - depression 133
 - evaluation 36–41
 - selection 35–41
 - education 41–3
 - untreatable 29
- pedagogy 20
- perceptions 162
 - alterations 6–7, 301
 - distortion 305
- performance
 - goal-directed 53
- peripheral nervous system 71–2
- peripheral reflex activity 72
- permissive amnesia 192, 194
- persecutory ideation 172
- personal invulnerability loss 145
- personal relationships 54
- personality
 - compensation 329
 - state integration 195
- personality disorder 11, 176, 177–9
 - current status of clinical hypnosis 179–82
 - development progression failure 181
 - historical perspective 171–9
 - psychotherapy with hypnosis 175
 - severe disturbance 180
 - susceptibility to hypnosis 178
 - see also* dissociative identity disorder
- persuasive communications 5, 120, 122, 332
 - coercive 200
- phantom limb pain 266
- pharmacotherapy for anxiety
 - management 118
- phenomena of hypnosis 4, 5–7
- phobias 10
 - anxiety-management skills 124
 - children 322

- phobias (*cont.*)
 hypnotizability 301, 302, 304
 reinterpretation of circumstances 124
 sexual 241
 specific 120, 123–4
 systematic desensitization 120–1
 traumatic experience 124
 see also dental phobia
- physical abuse, amnesia 149
 physical exercise 222
 arousal management 117
 obesity 226
- physical rehabilitation, burn patients 281
 physical relaxation 62
 physiological flexibility 74
 physiological processes, altered 6
 placebo, hypnotic pain management 250–3
 playing possum 162
 pleasurable sensations 237
 positive suggestions 14
 positron emission tomography (PET) 9, 66
 cortical involvement in pain processing 67
- post-herpetic neuralgia 261
 see also herpes zoster pain
- post-hypnotic suggestion 25
 conversion disorders 164
 erectile firmness 242
 obesity 230
- post-traumatic stress disorder (PTSD) 11, 27,
 28, 38, 124–5
 absorption 148
 age regression 25
 amnesia 150
 anxiety 120
 avoidance symptoms 147
 children 322
 cognitive reframing 125
 cognitive–behavioural techniques 152,
 153
 developmental history 145
 diagnostic criteria 143, 146–51
 dissociation 148–9, 150–1
 dissociative symptoms 150–1
 eating disorders 214
 ego-strengthening inductions 152
 experience 147
 exposure 125
 helplessness 152
 history 144–2
 hyperarousal 147–8, 149
 hypersensitivity 150
 hypnotic-restructuring 152
 hypnotizability 301
 imagery 125
 intrusive symptoms 147
 memory impairment 150
 phenomenology 147
 predictors 151
 prevalence 143–4
 psychodynamic therapy 152
 psychotherapy 152
 with hypnosis 154–5
 response 147
 responsibility evasion 144
 suggestibility 149–50
 treatment 152–5
 Vietnam veterans 146
- postevent information 98
 posthypnotic responding 53
 practitioner surveys 330
 prehypnotic suggestion 275
 presenting problem 37, 40–1
 previous treatments 38
 professional conduct 27
 Progressive Relaxation 119
 projective techniques 181
 pseudo-ataxia 166–8
 pseudomemory 9, 50–3, 101
 contextual factors 51
 cues 51
 hypnotic susceptibility 50
 interpersonal parameters 51
 mediating factors 51
 psychoanalytic framework 11
 psychodynamic therapy 181
 post-traumatic stress disorder 152
- psychological health/well-being 328, 329
 psychoneuroimmunology 72–3
 psychosis 11, 176, 177–9
 adverse effects of hypnosis 328, 330
 borderline 44
 current status of clinical hypnosis 179–82
 defense 173
 development progression failure 181
 dissociative 200
 hallucinations 172
 historical perspective 171–9
 hypnoanalysis 177
 persecutory ideation 172
 severe disturbance 180
 susceptibility to hypnosis 178
- psychosomatic conditions 302
 psychotherapy
 anxiety management 118
 with hypnosis 154–5
 insight-oriented 118–19
 integration of hypnosis 175
 techniques 11

- age regression 25
- pulmonary function 318
- Puysegar, Marquis de 328, 329
- questions, open-ended 39
- rape victims, female 100, 144
 - image 149–50
- rapid induction techniques 25
- rapport 51
- ratification 87
- Raynaud's disease 73
- reality 5
- recall, emotion 57
- reciprocal inhibition 181
- recollections from past lives 8
- reconnection 192
- recovered memory 53–6, 97–8
 - accuracy doubt 103
 - age regression 25
 - benefits 105
 - corroboration 105
 - court settings 100, 103
 - credibility 105
 - ethical guidelines 9
 - evidence 53–5
 - evidence-based practice 105–7
 - hypnosis 101–5
 - intentional hypnotic falsification of memory 103–4
 - repression 98–101
 - risk management procedures 106
 - risks 105
 - sexual abuse 8, 10, 25, 98, 104–5
 - therapeutic leverage for recovery 105
 - therapeutic suggestions 105
 - traumatic events 56
 - validity 54–5
- Recovered Memory Therapy 55
- recreation 117
- recreational drugs, sexual dysfunction 233
- Red Balloon Technique 212
- reflex sympathetic dystrophy 261
- regression, burn patients 280
- rehabilitation
 - conversion disorders 164
- reinforcement, conversion disorders 164
- reinterpretation process 237
- relational capacity, positive 179
- relaxation 27
 - agoraphobia 122
 - anxiety reduction 175
 - arousal management 116, 117
 - children 310, 317, 320
 - chronic pain 256, 268
 - cued 236
 - eating disorders 209, 211
 - exercises 36
 - headache 262
 - indirect techniques 175
 - induction 4, 291
 - nitrous oxide therapy 297
 - obesity 224, 226
 - panic disorders 121
 - peripheral temperature change 321
 - physical 62
 - progressive 181
 - psychosis 173
 - sexual dysfunction 236
 - suggestions 292
 - techniques 119
 - temporomandibular disorder 309
- relaxation and mental imagery (RMI) 311
 - children 313, 322
- relief, relaxation induction 291
- religious groups 190
- remembrance and mourning 192
- renurturing 181
- reporting 52
- representations, pre-existing 50
- repressed material 193
- repression 54
 - trauma 99–100
 - validity 54
 - see also* memory, repressed
- resistance management 27
- respiratory allergies 319
- responsiveness
 - dissociative 88
 - hypnotic 88
 - promotion 10
- retraumatization 153
- revivification
 - conversion disorders 163, 164
 - flaccid paralysis of legs 164–5
- right hemisphere
 - cortical frontalization 66
 - techniques 93
- risk management procedures with recovered memory 106
- role model observation 124
- role-playing 249
- role rehearsal 181
- room, secret 270
- safe place imagery 197, 270
 - laughing place 276, 278
- safety 192

- satanic rituals, reported 55
- satiation feelings 225
- schizoid personality disorder 176
- schizophrenia 172, 173, 175
 - anxiety reduction 176
 - borderline 175–6
 - dream interpretation 173
 - ego-building techniques 175, 176
 - group therapy 174
 - hebephrenic 172–3
 - paranoid 175, 176
 - therapeutic guidelines 174–5
- schizophreniform psychosis 330
- secondary gain 90
 - chronic pain 253, 254, 255
- self-awareness 180–1, 223
- self-concept, positive 175, 181
- self-confidence
 - increase 124
- self-control 15
 - children 318
 - cued techniques 301
 - diminished 254
 - enhancement 124
 - obesity 224–5
 - self-hypnosis 30
- self-efficacy
 - anxiety management 118, 122
 - pain reduction 70
 - perceptions 122
- self-entrapment 211
- self-esteem 10, 15, 16
 - children 316, 317
 - depression 133
 - improvement 216
 - obesity 222
 - schizophrenia 175
 - sexual/physical abuse 54
 - stress management 116
- self-hypnosis 8, 10, 16
 - abuse potential 45
 - agoraphobia 122
 - anxiety 126
 - anxiety states 122
 - arousal management 116, 117
 - asthma 318
 - children 14, 313, 315, 316–17
 - client–therapist interaction 41
 - control 72
 - conversion disorders 164
 - coping 30
 - dental phobias 305
 - dentistry patient 287
 - dissociative identity disorder 190
 - dissociative trance disorder 188
 - dying patients 30
 - eating disorders 208, 209
 - encopresis 318
 - obesity 223, 227, 228
 - pain 14
 - chronic 256
 - control 248
 - panic disorders 121
 - parents 317
 - practice 44
 - relapse prevention 198
 - self-control 30
 - teaching 36, 43–4
 - training 266
- self-image
 - changing 123
 - positive 138, 179
- self-love 181
- self-management skills 290
- self-mastery 215
- self-perception, depersonalization disorder 199
- self-reliance
 - reinforcement 138
- self-report 49
- self-representation 103
- self-talk 121
- self-worth 10
- sensate focus technique 234
- sensory change 305
- sensory skills and pain management 250
- separateness 181
- separation–individuation 180–1
- sequelae of hypnosis 329
- sex
 - inappropriate attitudes 242
 - therapy 234, 235
- sexual abuse 160
 - amnesia 149
 - children 54
 - recovered memory 8, 9, 10, 25, 98, 104–5
 - repressed memory 9, 55
 - victimization of children 38
 - witness 102–3
- sexual arousal 237
 - female disorder 242–3
 - male 244
 - panic 241
- sexual aversion disorder 241–2
- sexual behavior targeting 235
- sexual desire, hypoactive disorder 241
- sexual dysfunction 13, 28, 233–45
 - age progression 239

- age regression 239
- anxiety reduction 236
- cataplexy 239
- diagnostic criteria 234
- diagnostic evaluation 235
- dissociation away from sexual fears 236
- distancing from past experiences 237–8
- educative phase 235
- fantasy 237
- glove anesthesia 239, 240
- hypno-analgesia 239–40
- hypno-dynamic therapies 240
- hypno-exploration 240
- hypnotically-assisted treatment 240
- hypnotically-based techniques 236
- medical evaluation 233
- metaphorical therapies 238
- open discussion 235
- orgasmic response disorders 244–5
- physiological influences 239
- post-sexual distress 245
- relationship quality 245
- relaxation 236
- sexual arousal disorders 242–3
- sexual interest/desire disorders 240–2
- sexual penetration disorders 243–4
- therapeutic interventions 235
- time distortion 238–9
- treatment 234–5, 236–40
- sexual experience
 - reinterpretation 237
 - trauma 238
- sexual fears 236
- sexual interest/desire disorders 240–2
- sexual penetration disorders 243–4
- sexual responsiveness 239
- shame, relief 315
- shame-attacking exercises 123
- shell shock 144–5
- shock state 42
- short-term therapy 29
- sickle cell anemia 30
- single photon emission computed tomography (SPECT) 9, 66
 - cortical involvement in pain processing 67
- skills enhancement in depression 131–2
- skin reactivity 73
- sleep disturbance 147
 - control 192
- sleepwalking 41
 - children 319
- slow-leak techniques 197
- smoking cessation 14, 117, 289–90
 - hypnotizability 302, 303
- social cues 149
- social phobia 121, 123
- social relationship factors 51
- Society for Clinical and Experimental Hypnosis (SCEH) 20, 21
- soleus muscle, Hoffman reflex amplitude 71
- somatic function loss 145
- somatization disorder 166
- somatosensory event-related potentials (SEPs) 69
 - pain perception 69–70
- somatosensory information inhibition 68
- somnambulism, accidental 329
- source confusion 98
- spinal surgery, blood loss 73
- split screen techniques 199, 321–2
- stage hypnosis 330
- Stanford Hypnotic Suggestibility Scale 136, 162, 331
 - children's 311
- startle response, exaggerated 147
- state dependency 149
- state instruction 52, 58–9
- stimulus pull 53
- strength gaining 211
- stress 113, 263
 - chronic 114–17
 - extreme 161
 - headache 262
 - inoculation procedure 252
 - prevention programmes 115
 - process response 113
 - traumatic 146–7, 152
- stress disorder, acute 151–2
- stress management 114–17
- stress reduction 27
 - techniques 36
- stress-related disorders 115
- stress response 114
 - hyperarousal 117
- stressor, traumatic 155
- stupor, Acute Stress Disorder 152
- subcortical processing 9, 74
- substance P 280
- suggestibility 11
 - conversion disorders 162
 - heightened 310
 - level 53
 - post-traumatic stress disorder 149–50
 - scales 311
- suggestion(s) 98, 173
 - ambiguous 332
 - burn patients 274, 275, 278

- suggestion(s) (*cont.*)
 classic effect 6
 direct 164, 165–6
 expectancy modification 305
 headache 262
 healing 289
 indirect 164, 165–6
 perception distortion 305
 prehypnotic 275
 relaxation 292
 repeated 278
 responsiveness 15
 risks 55
 sensory change 305
 therapeutic 105
- suggestive therapy 171
- suicidal ideation 176, 329–30
- suicidal impulse modification 133–4
- suicide risk 10
 depression 133, 134–5
 predictors 135
- surgery
 pain control 265
- survival mechanisms 163
- symbiotic alliance 51
- symbolic transformation 238
- symmetric relationships 88–9, 90–2
- symmetry
 escalating 91
 styles 92
- symptom
 removal suggestion 131
 substitution 25
- T cell function 73
- temper tantrums 316
- temperature change, peripheral 321
- temporalis muscles 292
- temporomandibular disorder 292–3
- temporomandibular joint pain 292–3
 pain control 248
- tension, relaxation induction 291, 292
- terminal illness 30, 322
- thalamus 68
 hypnotic analgesia 69
- Thematic Apperception Test 216
- therapeutic alliance 22
 dying patients 30
- therapeutic applications of hypnosis 26
- therapeutic modality 35
- therapists 29
 mind 28–9
 role 93
 styles 45
 values 45
- thermal stimulus 274
- thought disorders 44
- threat, motor reactions 163
- thumb sucking 294–5
- tics 318
see also Tourette's syndrome
- time distortion
 pain relief 269
 sexual dysfunction 238–9
- time management 117
- tooth clenching, nocturnal 309
- tooth grinding 309
- Totstellreflex 162
- Tourette's syndrome 15, 317, 318
- training 19–31
 training programs 19, 22–30
 advanced workshop 22, 28–30
 group practice sessions 24–5
 introductory workshop 22–8
 senior seminar 30
 worldwide 20–2
- trance 41–2
 adverse effects of hypnosis 330
 aptitude 58
 behaviours 38
 cognitive restructuring 138
 dental trauma 300, 305
 frightened dentistry patient 286
 hypnotic 162
 ineffective termination 332
 personality disorder 177
 possession states 200
 psychosis 177
 self-hypnotic 210, 211
 somnambulistic 280
 spontaneous 190, 304
see also dissociative trance disorder
- Transactional Analysis 85–6
- transcutaneous electrical nerve stimulation (TENS) 297
- transference 27, 29, 51
 relationship 180
 traumatic 153
- trauma/traumatic events
 amnesia 149
 avoidance of stimuli 125
 childhood 39, 99–100, 192
 clinician understanding 106
 cognitive restructuring 125
 concealment with obesity 229, 230
 consolidation of memory 99
 dental 300
 depersonalization 151

- dissociation 148, 150–1, 160, 191
- dissociative disorders 161
- dissociative identity disorder 189, 196
- dissociative response 146–7
- dissociative state 149
- dissociative symptoms 146
- history 38–9
- memory 54
- phobias 124
- reaction 12
- recovered memory 56
- relevance of previously forgotten 100
- remembrance 10
- repression 99–100
- sexual experience 238
- storage of memory 99
- triphasic treatment 191–2
- uncontrollable intrusive memories 55
- working through 146
- traumatic neurosis 145
- traumatic stress 146–7, 152
- traumatic transference 153
- treatment
 - interactive process 36
 - planning 26–7
- trigeminal nerve stimulation 68
- triphasic model
 - dissociative identity disorder 196
 - dissociative trance disorder 199–200
- triphasic treatment for trauma 191–2
- tuberculin, Mantoux reaction inhibition 73
- uncovering of repressed material 132–3
 - anxiety management 301
 - psychosis/personality disorder 177
- unlearning, exposure-based 120–1
- untreatable patient 29
- vaginismus 243–4
- verbal relabeling 249
- victimization
 - of children 38
 - post-traumatic stress disorder 144
 - of women 38
- video tapes 286, 287
- Vietnam veterans
 - conversion disorders 160
 - dissociative symptoms 151
 - hypnotizability 153
 - post-traumatic stress disorder 144, 146
- viral infections 279
- Visual Analogue Scale 261
- visual mental rehearsal 256
- Voisin, Auguste 171
- vomiting control 248
 - children 322
- war veterans, psychotic 173
- warts 279
 - hypnotic treatment 73
- weight
 - stabilization 230
 - time of onset of problems 222, 223
- weight loss
 - anxiety 229
 - behavioral therapy 223
 - depression 229
 - ego-strengthening inductions 224
 - fantasy exercises 224
 - hypnotizability 223
 - ideomotor questioning 229
 - motivation enhancement 224
 - relapse prevention 230
 - see also* obesity
- welfare of client 9
- Women's Movement 38
- wound healing in burn patients 281
- xenon inhalation technique 66, 68
- Zung Scale for rating Anxiety/
 - Depression 216

Index compiled by Jill Halliday