CHAPTER 1

Current Theories of Hypnosis

SUMMARY

This chapter reviews the neodissociation theory of hypnosis because it is the most widely accepted theory of hypnosis in the clinical domain. However, this focus on the neodissociation theory does not undermine the role of psychosocial factors emphasized by the sociocognitive theorists. Psychosocial factors can be judiciously utilized in the clinical setting to enhance compliance, positive expectancy and therapeutic alliance.

From the review of the brain-mapping studies of hypnosis and consciousness, it is apparent that it is unrealistic to expect a single physiological signature of hypnosis. The brain correlates of the hypnotic phenomena are determined by the quality (associated with imagery, relaxation or alertness) of the hypnotic induction, the trance level (hypnotic ability, degree of absorption and dissociation), and the nature (specificity and intensity of suggestions) of the hypnotic suggestions.

Just as we do not have a complete theory of hypnosis, we do not have a perfect definition of hypnosis. Several definitions are discussed, and finally a working definition of clinical hypnosis is presented. The chapter also highlights the strengths and limitations of hypnotherapy to provide the reader with a realistic view of the clinical potential of hypnotherapy.
INTRODUCTION

The aim of this chapter is to describe the neodissociation theory of hypnosis, which is one of the most dominant contemporary theories of hypnosis. Apart from having inspired – and still inspiring – extensive research, the theory provides a rationale for clinical work. Rather than reviewing the literature on the applications of hypnosis, the strengths and limitations of clinical hypnosis are reviewed to provide the reader with a critical perspective on the clinical applications of hypnosis to medicine and psychiatry. Finally, a contemporary working definition of hypnosis is provided.

Although hypnosis has existed as a treatment for medical and psychological disorders since time immemorial, as yet we do not have a clear definition or theory of hypnosis. Most of the theories advanced to explain hypnosis can be loosely classified under state and non-state, intrapersonal and interpersonal, or single and multifactor theories (Yapko, 2003).

State, intrapersonal and single theorists conceptualize hypnosis as a trance state or an altered state of consciousness (Barber 1969). The non-state, interpersonal and multifactor theorists, also known as sociocognitive theorists, suggest a social–psychological explanation of hypnosis. These theorists maintain that there is nothing unique about hypnosis and argue that most of the hypnotic phenomena can occur without a hypnotic induction or trance (Barber, 1979). The intrapersonal theories of hypnosis emphasize the subjective and inner states of the hypnotized person, whereas the interpersonal models attach more importance to the social context or relational aspects of the hypnotic interaction (Yapko, 2003). The single model of hypnosis stresses the importance of a single variable such as relaxation or dissociation that influences the hypnotic experience. The multifactorial approaches attach importance to the role of a variety of interactional forces, such as patient expectation and clinician demands, which combine to produce the hypnotic phenomena (Kirsch, 2000).

Although none of these theories have satisfactorily explained all the phenomena associated with hypnosis, the different formulations have certainly broadened our understanding of the subject. It is beyond the scope of this book to discuss the merits and controversies surrounding each theory (see Kallio and Revonsuo, 2003, for a review, and rejoinders in the whole issue of Contemporary Hypnosis, 2005; 22(1): 1–55). For the present purpose it is sufficient to restate the conclusions drawn by Rowley (1986, p. 23) from his review of the well-known theories of hypnosis 20 years ago:
None of them seem to be able to deal adequately with all the phenomena which come under the general heading of hypnosis. This is perhaps not surprising given the tremendous variety of phenomena. Accordingly the theories have different ways of dealing with this variety. Some redefine hypnosis, e.g. Edmonston (1981). Others reinterpret subjective experience, e.g. Spanos (1982) . . . Despite these inadequacies, each of the theories has something to offer, a new conceptualization of the issues, a methodological approach, a new synthesis of the evidence. Of course, in one sense it is impossible to produce a theory which is satisfactory to all researchers, for they are likely to have different criteria for evaluating theories.

A decade later, Yapko (2003, p. 61), from his review of the contemporary theories of hypnosis, came up with similar conclusions, especially when addressing the complexity and multidimensional nature of hypnosis:

With a subject as complex as hypnosis, the inadequacy of a single theory’s ability to explain the broad range of responses on so many different dimensions of experience becomes glaringly apparent. The complexities of the subject of hypnosis, and even greater complexities of the human being capable of hypnosis, are so great that it seems highly improbable that a single theory can evolve to explain its origin and character.

Academics and experimentalists have generally tended to adopt non-state, inter-personal and multifactorial views of hypnosis, whereas clinicians have taken the state, intrapersonal and single views of hypnosis, particularly the neodissociation theory of hypnosis, which is described below. However, proponents of both camps agree that hypnotic suggestions can produce altered states and that some subject variables such as co-operation (Spanos and Barber, 1974), expectations (Barber 1984, 1999), motivation (Araoz, 1981, 1985) and level of involvement in suggestion-related thoughts and images (Erickson and Rossi, 1979; Spanos and Barber, 1974) can influence the hypnotic performance.

For example, Kirsch (2005), a well-known sociocognitive theorist, points out that both state and non-state theorists agree that hypnotic suggestions can produce altered states such as amnesia, analgesia and involuntariness, although there is disagreement about whether these altered experiences depend on the prior induction of a trance state. Similarly, Spiegel (2005, p. 32), a well-known state theorist, underlines that:
Multilevel explanations are an absolute necessity in understanding human mind/brain/body phenomena because we are both neurally-based and social creatures who experience the world in mental phenomenal terms. To choose one of these domains as the complete explanatory context is to be by definition wrong.

Clinicians, who are mainly concerned with reducing patients’ distress, are not overly concerned whether hypnotic trance exists or does not exist, or whether trance induction is necessary or not necessary. To the clinicians, the clinical context and the skilful negotiation of subjects and other variables to maximize therapeutic gains are of paramount importance. Heap (1988, p. 3) regards this bidirectional relationship between the patient and the hypnotist in the clinical context as:

An interaction between two people characterized by a number of inter- and intra-personal processes of which the ‘essence of hypnosis’ only forms a part, if indeed it is present at all. These processes, which are not independent of one another (and which may apply to the behaviour and experience of both the subject and the hypnotist) include the following: selective attention, imagination, expectancy, social conformity, compliancy, role-playing, attribution, usually though not necessarily, relaxation, rapport, suggestion, and hypnotic or trance experience.

Moreover, clinicians emphasize the subjectivity of hypnosis and recognize that hypnotic techniques must be individualized for the patient, which can involve drawing upon techniques from more than one theoretical model. The treatment approach described in this book utilizes different therapeutic techniques derived from diverse theoretical conceptualizations. Golden et al., (1987) describe this approach as technical eclecticism. In this approach the clinician, in order to maximize therapeutic effects, borrows techniques freely from diverse therapeutic approaches without necessarily accepting the theories from which the techniques were derived. In this context, the therapist is more concerned with reducing the patient’s level of distress rather than adhering blindly to a particular theoretical orientation.

NEODISSOCIATION THEORY OF HYPNOSIS

The neodissociation theory of hypnosis is described in detail here because it (a) has inspired extensive research, (b) provides a rationale for clinical work
(Kihlstrom, 2003; Lynn and Kirsch, 2006) and (c) continues to be one of the most influential contemporary theories of hypnosis. The focus on the neodissociation theory is not meant to discredit the contributions made by other competing or complementing theories of hypnosis. The aim here is to describe a theory that has been traditionally embedded within the clinical context. Indeed, the hypnotherapeutic techniques described in this book freely draw on other theories to enhance positive expectancy and treatment gains. For example, the cognitive hypnotherapy for depression described in Chapter 5 actively utilizes the subject’s variables and placebo effects (emphasized in the sociocognitive theories of hypnosis) to maximize treatment gains.

Hilgard (1973, 1974, 1986) describes hypnosis in terms of dissociation or divided consciousness. Dissociation is a psychological process whereby information (incoming, stored or outgoing) is actively deflected from integration with its usual or expected associations, producing alteration in thoughts, feelings or actions, so that for a period certain information is not associated or integrated with other information in the usual manner or in a logical way (West 1967). Such an experience can be regarded to be either normal or pathological.

Ever since Janet (1907), the close relationship between hypnosis and dissociation has been established. Janet (1889) held the view that systems of ideas can become split off from the main personality and exist as an unconscious subordinated personality, but capable of becoming conscious through hypnosis. The theory was applied to hypnosis and various other normal and pathological states such as automatism, amnesia, fugues and multiple personality. Hilgard, by deriving ideas and concepts from information processing, selective attention, brain functioning and the cognitive model of consciousness, reformulated the theory in contemporary terms and called it neodissociation theory.

In Hilgard’s reformulation, dissociation is seen as an extension of normal cognitive functioning. He posited that during ordinary consciousness information is processed at a number of levels by a hierarchy of cognitive operations and controls. Ordinarily these operations are integrated, but during hypnosis or dissociation the integration decreases, and certain aspects of experiences may not be available to consciousness. Within this model, dissociation or hypnotic involvement is not seen as an either/or phenomenon, but a cognitive process ranging on a continuum from minor or limited to profound and widespread dissociation. Hilgard also considered the role of self and will when formulating his neodissociation theory of hypnosis. He maintained that hypnosis and other dissociative experiences all involve some degree of loss of voluntary control or division of control (e.g. a hypnotized subject experiencing eye catalepsy may not
be able to open his or her eyes when challenged to do so).

The neodissociation theory proposes that an individual possesses a number of cognitive systems, hierarchically arranged, with a central control structure (executive ego) and multiple superordinate and subordinate structures, each with its own input and output connections with the world. Although the executive ego is normally in control, the other structures can take over as a result of hypnotic-type suggestions or other similar procedures or situations. In other words, hypnosis or other similar procedures have the effect of dissociating these systems from one another, and as a result some of these systems can be taken out of awareness or consciousness. A hypnotized individual may thus report feeling no pain, but the ‘hidden observer’, which is the name Hilgard gives to the cognitive system which is aware of what is going on, may report feelings of pain.

To investigate the hidden observer effect empirically, Hilgard (1986) utilized experiments involving hypnotic analgesia and automatic writing. This effect was demonstrated by suggesting to the hypnotic subject that when a pre-arranged signal (such as the placing of the hypnotist’s hand on the subject’s shoulder) is given, the hypnotist will be able to contact a ‘hidden part’ unknown to the subject’s present conscious ‘part’. Hilgard claims that when this suggestion is given to responsive subjects, one is able to contact another system of control which can then speak, unaware of the normal ‘waking’ part, or the ‘hypnotized’ part. These parts are not normally aware of each other because they are separated by ‘amnesic barriers’. The amnesic barriers can sometimes break down partially or completely, causing incongruities.

The automatic or involuntary nature of hypnotic responding can be easily explained by this process. For example, in automatic writing the active part that is writing is dissociated or split from the conscious part that is unaware that such an activity is taking place. Instead, the hidden observer or a covert cognitive system is aware of the automatic writing. The hidden observer can also be accessed after the termination of hypnosis by providing post-hypnotic instructions during hypnosis. The neodissociation theory proposes that when a subject is hypnotized, only some of the cognitive systems are involved, others remaining unaffected:

Thus a person who experiences only a vague feeling of relaxation has only a very few low level cognitive systems affected. A person who experiences arm levitation and analgesia has many more cognitive systems affected. (Rowley, 1986, p. 16).
Besides hypnosis, other factors such as fatigue, stress, relaxation and daydreaming can also produce dissociation. Moreover, hypnosis can occur spontaneously, or it can be externally induced or self-induced.

Hilgard was ahead of his time in linking hypnosis with the concept of consciousness. With the recent renewed interest in the scientific study of consciousness in the areas of affective and cognitive neuroscience (e.g. Gazzaniga, 2000; Mesulam, 2000; Zeman, 2001), we have a better understanding of the relationship between consciousness and hypnosis. For example, some striking parallels have been observed in the mental processes involved in dreaming and hypnosis. Llinas and Pare (1991) observed dissociations between specific and non-specific thalamocortical systems underpinning dreaming, implying that a state of hyperattentiveness to intrinsic activity can occur without the registration of sensory input. Similarly, Furster (1995), in dreaming observed a dissociation between context/sensory input and the cognitive features of dreaming such as altered sense of time, absence of temporality, lack of guiding reality and critical judgement, anchoring in personal experience, and affective coloring. These findings led Gruzelier (1998, p. 18) to draw parallels between hypnosis and an altered state of consciousness:

The fragmented networks activated in the dream seem to lack the associative links to a time frame, anchored as they are in the present, without time tags and references. This could equally be a description of the hypnotic state as high susceptibles experience it.

Although Hilgard’s neodissociation theory of hypnosis appears logical, intuitive and subject to empirical validation, his theory is incomplete. For instance, he proposed cognitive structures to explain dissociation, but he gave little information about what happens inside them and it is not clear how many cognitive systems a person possesses and how many of these are engaged in hypnosis. However, Woody and Sadler (1998) have argued that the neodissociation theory of hypnosis is a ‘good’ theory despite being ‘incomplete’. They believe a good theory provides a provisional framework that casts the phenomena in question in a new or distinctive light that can be subjected to empirical verification to extend our understanding of the phenomena. They believe a good theory can serve this role even if it is incomplete or has obvious areas of inadequacy. Since the neodissociation theory has generated and provoked extensive empirical research, the theory can be seen as ‘quite successful’ (Woody and Sadler, 1998, p. 192). Even Hilgard (1991, p. 98) openly admitted: ‘I regret to leave the
theory in this incomplete form, so that it is more of a promise than a finished theory.

The neodissociation theory has also been criticized for ignoring the role of social compliance. This limitation of the theory was again readily acknowledged by Hilgard (1986), who moved towards a moderate position by using the word ‘state’ metaphorically to de-emphasize hypnosis as a purely special state. Moreover, some of his followers have addressed the role of social compliance in hypnosis. For example, Nadon et al., (1991) have proposed an interactionist approach in which both cognitive and social factors play a part.

Some criticisms have also been levelled at the scientific validity of the hidden observer phenomenon. Although Hilgard (1986) and Watkins and Watkins (1979) have provided experimental evidence for the presence of the hidden observer (see Hilgard, 1986), the studies and interpretation of the hidden observer have been questioned by sociocognitive theorists. In several studies, Spanos and his colleagues demonstrated that the reports of the hidden observer varied as a function of the explicitness of instructions the subjects received about the nature of the hidden observer. For example, Spanos and Hewitt (1980) obtained reports of ‘more’ or ‘less’ hidden pain as a function of whether the subjects were told that their hidden parts would be either ‘more aware’ or ‘less aware’ of the actual amount of pain. These findings led Spanos and Coe (1992) to conclude that the hidden observer phenomenon may not be an intrinsic characteristic of hypnosis, but a social artefact shaped by subject’s expectations and situational demand characteristics.

One study (Spanos et al., 1984) manipulated the instructions to produce two hidden observers: one sorting memories of abstract words and the other storing memories of concrete words. This led Lynn and Kirsch (2006) to argue that the hidden observer is implicitly or explicitly suggested by the hypnotist, and hence they dubbed the hidden observer phenomenon the ‘flexible observer’. However, the fact that the hidden observer reports vary with instructions does not disprove the neodissociation theory of hypnosis. On the contrary, Kihlstrom and Barnier (2005) declare that it is in the very nature of hypnosis for the hypnotized subject’s behaviors and experiences to be influenced by the wording of suggestions and the subject’s interpretations of them. Therefore, studies supporting the hypothesis that covert reports are influenced by suggestions are not evidence that the hidden observer is a methodological artefact, or not a reflection of the divided consciousness.

Kihlstrom and Barnier (2005) point out that researchers:
... with their own areas of interest and expertise, will naturally emphasize one or the other aspect of hypnosis in their work. But ... a proper understanding of hypnosis will only come from taking the hypnotic subject’s experience seriously and seeking to understand how that experience emerges from the interaction of cognitive and social processes. (p. 149)

Naish (2005) went even further to state that the hypnotized person’s experience should be the main subject of research, not the behavior of the hypnotized person. He contends that proper hypnosis research should be directed at elucidating the mechanisms that bring about the hypnotic experience and not at extrapolating from simulation (using simulators) studies. He argues that studying simulators may have little to contribute to the understanding of the hypnotic phenomenon because simulators do not share their experience with the hypnotized person. He proposes that the role of simulators should be confined to studies involving spontaneous, non-suggested hypnotic behavior.

Naish believes it is perverse for critics of the neodissociation theory to ignore genuine experiences and associated cortical changes occurring in hypnotized subjects, and to simply confine the investigation to the social context of the experiment. For example, Szechtman et al. (1998), in their brain-mapping studies, demonstrated that when highly hypnotizable subjects were claiming to be experiencing hallucinations, the observed brain activity was extremely like that resulting from true sensory stimulation. Similarly, Kosslyn et al. (2000) showed that hypnotized individuals cortically responded to suggested experiences (colors) rather than to the actual stimuli in measurable ways.

Gruzelier (2005) believes that sociocognitive theorists tend to ignore these findings because of their lack of engagement with neuroscientific evidence, resulting from their pedagogical background and their lack of appreciation of the reductionist levels of neuroscientific explanation. He believes there is, for example, abundant neurophysiological and neurocognitive evidence to support the hypothesis that the anterior cingulated cortex and the left dorsolateral prefrontal cortex are involved in hypnotic analgesia. Gruzelier (2005) laments the fact that the sociocognitive theorists continue to turn a blind eye to these findings, and he is concerned that:

... while it is one thing to make the admission of a lack of understanding, it is quite unscientific to opine that there is no evidence for an ASC [altered state of consciousness] perspective, and to go on to attribute hypnosis to purely psychological constructs. (p. 4)
He believes it is unproductive for scientists from different theoretical backgrounds to work in isolation from each other and continue to ignore findings from opposing theoretical orientations. He claims the field of hypnosis can be easily unified through active collaboration of scientists with neurophysiological and social orientations.

Further support for the state or neodissociation theory of hypnosis comes from the research on pain and hypnosis. From his review of the recent neuroimaging studies of the hypnotic modulation of pain, Feldman (2004, pp. 197–8) highlights several findings that elucidate the nature of hypnosis and the clinical implications for pain management.

- Although the perception of pain is an integrated process, hypnotic suggestions enable subjects to distinguish between the sensory and affective components of pain.
- The degree of hypnotic modulation of sensory or affective response to pain correlates with hypnotic suggestibility.
- Hypnosis enables hypnotically responsive individuals to do what they cannot do in a non-hypnotic state (e.g. control the sensory aspect of pain).
- Hypnosis is a more potent clinical tool for pain management than non-hypnotic approaches such as relaxation and cognitive behavior therapy.
- When utilizing hypnosis for pain management, clinicians should not make the common error that pain is a purely sensory experience.
- In a non-hypnotic state (e.g. distraction, relaxation) a person cannot differentiate between the sensory and affective dimensions of pain. In contrast, a person in a hypnotic state, in response to hypnotic suggestions, can not only make a distinction, but can differentially modulate sensory and affective dimensions of pain while producing corresponding differential activation of brain structures. These findings support the state theory of hypnosis.

- Further support for the state theory of hypnosis is reported by Freiderich et al. (2001), who found that highly suggestible individuals were able to significantly lower pain, either by distraction of attention or via hypnotic analgesia, compared to the control condition. However, amplitudes of laser-evoked brain potential demonstrated that hypnotic analgesia and non-hypnotic distraction of attention involved different brain mechanisms.
The original proposal of the neodissociation theory that hypnotic analgesia involves the disruption or dissociation of sensory information from conscious awareness is supported empirically.

The recent findings provide a new hypnotic technique for moderating or facilitating dissociation from the affective component of pain. If an individual is unable to dissociate from the sensation of pain, especially when in severe pain, the individual may respond to suggestions of diminishing the affective component of pain. Rainville and his associates (e.g. Rainville et al., 2002) have demonstrated that hypnotic suggestions can reduce distress, although the degree of pain sensation may remain unchanged.

Hypnotic induction and hypnotic suggestions activate different brain areas respectively (e.g. Rainville et al., 2002). These findings demonstrate that hypnotic induction alone is not as powerful as hypnosis associated with specific suggestions.

Therefore, crafting of suggestions relevant to the nature of pain is very important.

The left prefrontal cortex is activated by suggestions for pain reduction. This brain area corresponds to the elicitation of positive emotional affect.

The above ‘findings are consistent with the notion that hypnotic states are achieved through the modulation of activity within a distributed network of cerebral structures involved in the regulation of consciousness states’ (Rainville et al., 2002, p. 898).

**ALTERED STATE OF CONSCIOUSNESS**

Because hypnosis is related to the concept of consciousness, a brief description of the different states of consciousness is in order here. Ludwig (1966) defines altered state of consciousness (ASC) as an altered state according to subjective experience and altered psychological functioning. According to Ludwig, alteration in sensory input, physiological changes and motor activity can produce an altered state in which ‘one’s perception of an interaction with the external environment is different than the internal experience’ (Brown and Fromm, 1986, p. 34). Tart (1975), in order to avoid the debate about whether hypnosis is or is not a state, from a clinical perspective distinguishes (a) a baseline state of consciousness (b-SOC), (b) discrete states of consciousness (d-SOC) and (c) a discrete altered state of consciousness (d-ASC).
Baseline consciousness is akin to the concept of ‘cohesive self’ described by Kohut (1977). Kohut defines the cohesive self as a mental and physical unit which has cohesiveness in space and continuity in time. Baseline consciousness is stabilized by a number of processes, including dealing with the variability in the environment. A discrete state of consciousness (d-SOC) is described by Tart (1975) as a unique and dynamic pattern or configuration of psychological structures. Although the components or subsystems of the psychological structures with a d-SOC can show some variation – as in ordinary waking state, sleep or dreaming – the overall pattern and the overall system properties remain recognizably the same. A discrete altered state of consciousness (d-ASC) refers to a state that is different from some baseline consciousness and forms a new system, with unique properties that have been generated as a restructuring of consciousness or reality. The word ‘altered’ is purely a descriptive term, carrying no values. In this sense, the hypnotic experience is seen to be generated from the internal construction of attitudes, values, motivations and expectancies. In other words, a hypnotic experience or a d-ASC is a subjective experience resulting from reconfiguration or repatterning of existing resources or cognitions.

Several reviewers, such as Brown and Fromm (1986) and Rowley (1986), believe that Hilgard’s theory of hypnosis meets Ludwig’s and Tart’s criteria for an altered state of consciousness. Hypnosis as an altered state of consciousness has been described both theoretically and experientially along the dimension of alteration in perception, cognition, awareness of one’s surroundings and absorption in an unusual experience (e.g. Fromm, 1977; Gill and Brenman, 1959; Hilgard, 1977; Orne, 1959; Shor, 1959). For instance, Orne (1959), in an experiment, demonstrated the presence of ‘trance logic’ and negative and positive hallucinations in highly hypnotized subjects, but not in unhypnotized subjects.

The study of consciousness, unconscious processing and ASC is generating lots of interest in the neurosciences, and Gruzelier (2005) believes this is likely to herald fresh approaches to the neuroscientific understanding of hypnosis. The Altered States of Consciousness research consortium, which was formed in Germany in 1998 to study the psychobiology of ASC utilizing the latest models and methods in cognitive neuroscience, has already made an impact on the study of hypnosis and consciousness. The findings of its first six-year funded research were reported by the consortium in the Psychological Bulletin (Vaitl et al., 2005, pp. 98–127). This paper reviewed the psychological and neurobiological investigations of consciousness and concluded that different states of consciousness are influenced by compromised brain structure, transient
changes in brain dynamics such as disconnectivity, and changes in neurochemical and metabolic processes. As regards hypnosis, the review stated that ‘studies suggest that hypnosis affects integrative functions of the brain and induces an alteration or even breakdown between subunits within brain responsible for the formation of conscious experience’ (p. 110). Gruzelier (2005) believes that the reawakening of ASC in cognitive neuroscience will offer new perspectives on the understanding of ASC and will facilitate revisiting old considerations in a fresh way.

From these recent developments it is becoming clear that it will be unrealistic to expect a unique physiological signature of hypnosis. Since the hypnotic induction and production of the hypnotic experience/phenomenon involve a variety of multifactorial and interactional forces, different levels of the hypnotic experience may involve different parts of the brain. In other words, there is no direct neuropsychophysiologial correlate of hypnosis. The neuropsychophiologial correlates of hypnosis depend on the nature and quality of the hypnotic induction and the types of suggestions and imagery used. As noted before, for example, the left prefrontal cortex, which corresponds to the elicitation of positive emotional affect, is activated by suggestions for pain reduction.

STRENGTHS AND LIMITATIONS OF HYPNOTHERAPY

Although hypnotherapy can be used as an adjunct with a variety of medical and psychological conditions, it is not a panacea for all ailments. Just like any other approaches to treatment, hypnotherapy has its strengths and limitations. Recently, Alladin (2007) reviewed the strengths and limitations of clinical applications of hypnosis, and some of these are summarized below.

**Strengths of hypnosis**

*Adds leverage to treatment*

By producing rapid and profound behavioral, emotional, cognitive and physiological changes (De Piano and Salzberg, 1981), hypnosis facilitates treatment and shortens treatment time (Dengrove, 1973).

*Strong placebo effect*

Most of the patients receiving hypnotherapy are self-referred or referred by other therapists or physicians, so an element of positive expectancy already exists. As the therapist gains reputation as a hypnotherapist or an expert in clinical hypnosis, not only do the number of referrals increase but also the credibility
of the therapist increases. According to Lynn and Kirsch (2006, p. 31), these ‘patients almost invariably hold positive attitudes and expectations about hypnosis, which makes them good candidates for hypnotic interventions’. For these patients, hypnosis acts as a strong placebo. Lazarus (1973) and Spanos and Barber (1974) have provided evidence that hypnotic trance induction procedures are beneficial for those patients who believe in their efficacy. The creative and sensitive therapist can build the right atmosphere to capitalize on suggestibility and expectation effects to enhance therapeutic gains (Erickson and Rossi, 1979).

Breaking resistance
Hypnotherapy allows the therapist the flexibility to utilize either direct or indirect suggestions. Very often patients resist direct suggestions for change. Erickson (Erickson and Rossi, 1979) utilized various indirect hypnotic suggestions to break patients’ resistance. For example, he devised paradoxical instructions to minimize patients’ resistance to suggestions. In the case of an oppositional (to suggestions) patient, he would instruct (paradoxically) the patient to continue to resist, as a strategy to obtain compliance.

Erickson also used ‘pacing’ and ‘leading’ strategies for reducing resistance. Pacing is when the therapist’s suggestions match the patient’s ongoing behavior and experiences. As the patient becomes receptive to pacing, the therapist can lead and offer more directive suggestions. For example, the therapist may pace the patient by suggesting ‘as you exhale’ as the patient exhales and then lead by adding ‘you will begin to relax’ (Golden et al., 1987, p. 3).

Therapeutic alliance
Skilful hypnotic induction and repetition of positive hypnotic experience foster a strong therapeutic alliance (Brown and Fromm, 1986). When patients perceive the positive experience to be emerging from their own inner resources, they gain greater confidence in their own abilities, and this helps to foster greater trust in the therapeutic relationship.

Rapid transference
Full-blown transference can occur very rapidly, often during the initial stage of hypnotherapy, because the hypnotic experience allows greater access to fantasies, memories and emotions (Brown and Fromm, 1986). Such transference reinforces the therapeutic alliance and positive expectancy.
**Relaxation response**

The majority of patients treated by hypnotherapists have some element of anxiety. Due to their anxiety, anxious and agitated patients are often unable to pinpoint their maladaptive thoughts and emotions. Deep relaxation is easily induced by hypnosis, and once relaxed the level of anxiety is diminished, making it easier for patients to think about and discuss material they were previously too anxious to confront. Relaxation induced by hypnosis also reduces distraction, which maximizes the ability to concentrate, resulting in greater awareness of thoughts and feelings, and thus facilitates the ability to learn new materials.

**Divergent thinking**

Patients with psychological disorders, particularly depressives, tend to be convergent (narrow) thinkers. Hypnosis facilitates divergent (broader) thinking by (a) maximizing awareness along several levels of brain functioning, (b) maximizing the focus of attention and concentration, and (c) minimizing distraction and interference from other sources of stimuli (Tosi and Baisden, 1984). Because divergent thinking involves broader thinking, it increases the potential for learning alternatives.

**Attention to wider experiences**

In addition to convergent thinking, patients with psychological disorders and chronic medical conditions tend to selectively ruminate on certain negative feelings. Hypnosis provides a frame of mind where attention can be directed to a wider experience, such as a feeling of warmth, or feeling happy. These experiences reinforce the belief that negative experience is not permanent; it can be changed, modified and replaced by alternative feelings.

**Engagement of the non-dominant hemisphere**

Hypnosis provides a vehicle for direct entry into cognitive processing, such as accessing and organizing emotional and experiential information, largely served by the right cerebral hemisphere (in right-handers). By engaging the right hemisphere, the hypnotic experience is intensified, providing strong validation of reality. As humans we do not validate reality by the way we think, but by the way we feel. When an anxious patient is feeling panicky, although this may be due to irrational beliefs (e.g. ‘I’m having a heart attack’ when there is no evidence of heart attack), the feeling is real to the person experiencing it and thus the anxious person’s reality (‘There’s something seriously wrong with
me’ or ‘I can’t handle the situation’) is validated. The induction of an intense positive experience via hypnosis provides the validation of an alternative or positive reality. The best way to change an experience is to produce another experience. Hypnosis provides rapid induction of an alternative reality.

**Access to non-consciousness processes**
Various medical and psychological conditions can be caused and/or maintained by unconscious factors. Hypnosis allows access to psychological processes below the threshold of awareness, thus providing a way to explore and restructure non-conscious cognitions and experience related to the symptoms.

**Integration of cortical functioning**
Hypnosis provides a vehicle whereby cortical and subcortical functioning can be accessed and integrated. Since the subcortex is the seat of emotions, access to it provides an entry into the organization, processing and modification of primitive emotions.

**Imagery conditioning**
Because hypnosis, imagery and affect are all predominantly mediated by the same right cerebral hemisphere (Ley and Freeman, 1984), imagination is easily intensified by hypnosis (Boutin, 1978). Hypnosis thus provides a powerful modality for imagery training, conditioning and restructuring. Hypnotic imagery can be used for (a) systematic desensitization (using imagination the patient rehearses coping with *in vivo* difficult situations), (b) restructuring of cognitive processes at various levels of awareness or consciousness, (c) exploration of the remote past (regression work), and (d) directing attention to positive experiences.

**Dream induction**
Hypnosis can be utilized to induce dreams and increase dream recall and understanding (Golden *et al.*, 1987). Hypnotic dream induction thus provides another vehicle for uncovering unconscious maladaptive thoughts, fantasies, feelings and images.

**Expansion of experience across time**
In addition to facilitating diverse emotional experience, hypnosis also provides a vehicle for exploring and expanding experience in the present, the past and the future. Such strategies can enhance divergent thinking and facilitate the reconstruction of dysfunctional ‘realities’.
Mood induction
Negative or positive moods can be easily induced and modulated by hypnosis, which makes it a useful method for teaching patients (through rehearsal) strategies for modulating and controlling negative or inappropriate affects. Hypnotic mood induction can also facilitate recall. Bower (1981) has provided evidence that certain materials can only be recalled when experiencing the coincident mood (mood-state-dependent memory).

Post-hypnotic suggestions
Post-hypnotic suggestions, especially when delivered during deep trance, can be very powerful in altering problem behaviors, dysfunctional cognitions and negative emotions. Post-hypnotic suggestions can also be used to shape efficacious behavior. Barrios (1973) considers post-hypnotic suggestion to be a form of ‘higher-order-conditioning’, which can function as positive or negative reinforcement for increasing or decreasing the probability of desired or undesired behaviors, respectively. Drawing on this idea, Clarke and Jackson (1983) have utilized post-hypnotic suggestions to enhance the effect of in vivo exposure among agoraphobics.

Positive self-hypnosis
The focus of modern hypnotherapy is on empowering patients by teaching them self-help skills, such as self-hypnosis training, that can be easily transferred to real situations. Self-hypnotic skills increase confidence and reduce dependence on the therapist. Self-hypnosis training can be enhanced by hetero-hypnotic* induction and post-hypnotic suggestions. Most of the techniques mentioned above can be practiced under self-hypnosis, thus fostering positive self-hypnosis by deflecting preoccupation away from negative self-suggestions.

Perception of self-efficacy
Positive hypnotic experience, coupled with the belief that one has the ability to utilize self-hypnosis to alter symptoms, gives one an expectancy of self-efficacy, which can enhance treatment outcome. According to Bandura (1977), expectation of self-efficacy is central to all forms of therapeutic change.

* In the clinical setting it is advisable to start with hetero-hypnosis (hypnosis induced by the therapist) and then introduce the concept of self-hypnosis, as this increases the patient’s confidence in self-hypnosis.
Easy integration
Hypnotherapy provides a broad range of short-term techniques, which can be easily integrated with many forms of therapy (e.g. with behavior therapy, cognitive therapy, developmental therapy, psychodynamic therapy, supportive therapy). Because hypnosis itself is not a therapy, the specific treatment effects will be contingent on the therapeutic approach with which it is integrated. Nevertheless, the hypnotic relationship can enhance the efficacy of therapy when hypnosis is used as an adjunct to a particular form of therapy (Brown and Fromm, 1986).

Limitations of hypnosis
Lacks unique theoretical underpinnings
As mentioned before, hypnotherapy is a set of short-term clinical techniques. Hypnosis itself does not provide a theory of personality or psychopathology. A theoretical framework for conceptualizing hypnotic treatment is therefore lacking, and the manner in which hypnotherapy produces therapeutic outcomes is very often unclear. Hypnotherapy, as a rule, tends to be used in a shotgun fashion without giving adequate attention to the disorder being treated and without stating how hypnotherapy per se will be used to alleviate the symptoms (Wadden and Anderton, 1982).

Over-emphasis on unconscious factors
Influenced by the works of Charcot, Freud and Janet, hypnotherapy was long dominated by psychodynamic theories of psychopathology, and therapists tended to over-emphasize the importance of unconscious factors in the causation of psychological and psychosomatic disorders. This resulted in a propensity to underplay the role of conscious cognitions (e.g. attitudes, beliefs, fantasies, self-talk and thinking), overt behaviors and environmental factors, which can also cause and maintain symptoms and maladaptive behaviors. In fact, conscious and symptomatic interventions were considered harmful within the framework of psychodynamic psychotherapy.

For example, some well-known and respected hypnotherapists such as Brenman and Gill (1947) and Fromm (1984) argued that permanent change will not occur unless the patient’s unconscious conflicts are uncovered and worked through. Although these approaches may be helpful to some patients, they have hindered the expansion and exploration of other models of etiology and intervention. This has resulted in hypnotherapy making little progress or
impact with certain disorders (e.g. depression, obsessive-compulsive disorder). Moreover, these attitudes created the myth that hypnosis is harmful with certain psychological disorders, such as depression (Hartland, 1971). Alladin (1989, 1994, 2006, 2007; Alladin and Heap, 1991) and Yapko (1992, 2001) have challenged these beliefs and have demonstrated that when hypnotherapy is appropriately combined with cognitive therapy, it can become a very effective treatment for clinical depression.

Passivity in therapy
In line with the traditional omnipotent and omniscient view of psychoanalysts, the patient has taken a passive role in hypnotherapy. The patient is not informed how the hypnotherapy will help him or her, or modify the underlying pathology. Often patients are offered post-hypnotic suggestions, but as a rule they are not actively involved in monitoring and restructuring thoughts, feelings, behaviors and physiological responses. In fact, active participation from the patient should be encouraged, especially when treating such chronic psychological disorders as anxiety, depression or chronic pain.

Hypnosis is not therapy
Hypnotic induction, on its own, has no therapeutic value. Hypnotic techniques are mainly used as adjuncts to other forms of psychotherapy. Unfortunately this integration can cause confusion. At times it is difficult to differentiate hypnotic adjunctive techniques from other cognitive behavioral interventions, although some hypnotherapists insist on calling the adjunctive techniques hypnotherapy. However, Wadden and Anderton (1982) state that ‘it is unclear from both a theoretical and practical standpoint what criteria are used to identify a treatment as uniquely hypnotic’. Instead of defining a treatment as hypnotherapy just by labelling it as such (Lazarus, 1973), it would be more beneficial to examine the similarities and differences between the hypnotic and non-hypnotic treatment procedures and try to ensure they complement each other to increase the treatment effect.

Symptom removal
To a large extent hypnotherapy focuses on symptom removal. Few attempts are made to teach and establish active coping skills. Even Ericksonian therapists, who talk of unconscious experiential learning, do not directly teach coping skills to their patients; instead they focus on symptom relief. In fact, some of these therapists believe direct intervention produces patient resistance. Moreover,
traditionally hypnotherapists have not actively addressed maladaptive cognitions and behaviors. In such chronic conditions as anxiety and depression, ‘insight-oriented methods based on persuasion, reasoning and re-education are necessary to achieve symptom alleviation’ (Golden et al., 1987, pp. 1–2) and ‘therapeutic results are more enduring if symptom amelioration includes the modification of thoughts, feelings, and behavior patterns that maintain the symptoms’ (Golden et al., 1987, p. 7).

**Negative self-hypnosis not addressed**

Although hypnotherapists usually emphasize teaching their patients self-hypnosis, the influence of negative self-hypnosis (NSH) (Araoz, 1981, 1985) is not actively addressed. Routine self-hypnosis unmindful of the power of NSH can be easily countered by NSH, thus minimizing treatment effect. When teaching self-hypnosis, both patient and therapist should be aware of the powerful sabotaging effect of NSH.

**Hypotheses lack support**

Data are rarely provided to support the hypotheses as to why hypnotherapy works. For instance, the efficacy of hypnosis is often attributed to either heightened expectancy (Lazarus, 1973), the therapeutic effects of the trance state (Weitzenhoffer, 1963), or enhancement of bodily relaxation and visual imagery (Kroger and Fezler, 1976), but the data are rarely provided to support them.

**DEFINITION OF HYPNOSIS AND TRANCE**

Recently, the Division of Psychological Hypnosis (Division 30) of the American Psychological Association (Green et al., 2005) defined and described hypnosis as a procedure during which the subject is told that suggestions for imaginative experiences will be presented. The hypnotic induction is an extended initial suggestion for one’s imagination, and may contain further elaborations of introduction. A hypnotic procedure is used to encourage and evaluate responses to suggestions.

When using hypnosis, one person (the subject) is guided by another (the hypnotist) to respond to suggestions for changes in subjective experience, alterations in perception, sensation, emotion, thought or behavior. People can also learn self-hypnosis, which is the act of administering hypnotic procedures on oneself. If the subject responds to hypnotic suggestions, it is generally inferred that hypnosis has been induced. Many believe that hypnotic responses and
experiences are characteristic of a hypnotic state. While some think that it is not necessary to use the word ‘hypnosis’ as part of the hypnotic induction, others view it as essential.

The Division 30 definition of hypnosis also focused on the issues of hypnotic procedures, relaxation and hypnotic responsivity (Green et al., 2005). Details of hypnotic procedures and suggestions will differ depending on the goals of the practitioner and purposes of the clinical or research endeavor. Procedures traditionally involve suggestions to relax, although relaxation is not necessary for hypnosis, and a wide variety of suggestions can be used, including those to become more alert.

Suggestions that permit the extent of hypnosis to be assessed by comparing responses to standardized scales can be used in both clinical and research settings. Although the majority of individuals are responsive to at least some suggestions, scores on standardized scales range from high to negligible. Traditionally, scores are grouped into low, medium and high. As is the case with other positively scaled measures of psychological constructs, such as attention and awareness, the salience of evidence for having achieved hypnosis increases with an individual’s score.

The British definition of hypnosis is less descriptive than the APA Division 30 definition and the focus is more on the interaction between the hypnotist and the subject. For instance, Heap and Aravind (2002, p. 55), in the well-known text Hartland’s Medical and Dental Hypnosis, state:

The term ‘hypnosis’ is used to denote an interaction between two people (or one person and a group) in which one of them, the hypnotist, by means of verbal communication, encourages the other, the subject or subjects, to focus their attention away from their immediate realities and concerns and on inner experiences such as thoughts, feelings and imagery. The hypnotist further attempts to create alterations in the subject’s sensations, perceptions, feelings, thoughts and behaviour by directing them to imagine various events or situations that, were they to occur in reality, would evoke the intended changes.

Given that hypnosis is a multidimensional experience and there are many theories of hypnosis, the definition is laudable in its attempt to consolidate the different views of hypnosis while trying to counter public misconceptions. However, the definition has been criticized for being too broad and too descriptive (e.g. Nash, 2005; Yapko, 2003). This is not surprising because hypnosis practitioners and researchers hold different theoretical viewpoints. The APA
Division 30 committee (Green et al., 2005, p. 262) is aware of this limitation and recommends further refining the definition:

‘The current definition and description need not be considered a finished product. Hopefully, it will continue to evolve as various hypnosis organizations grapple with it and as new data add to our understanding of hypnosis’ (1994b, p. 162). We strongly agree with these sentiments. We echo the call for future committees and groups to evaluate research that makes it possible to critique, update, and ultimately challenge the . . . definition. The intent is to welcome improvement to our science as well as informing the public about hypnosis.

**Definition of hypnotic trance**

Zarren and Eimer (2002, p. 4) describe the hypnotic trance as an altered state that is produced by a formal hypnotic induction ritual or ceremony that serves as the focusing method. In contrast to hypnotic trances that are formally induced for therapeutic purposes, there are informal trances that occur spontaneously without any formal hypnotic induction ceremony. Zarren and Eimer (2002, p. 4) differentiate between hypnosis state and trance state:

In the clinical setting, a hypnosis state, as differentiated from a trance state, can be induced without a formal trance induction. This occurs when a clinician communicates with a patient in language and form that are acceptable to the patient’s conscious and unconscious minds. We term this form of communication waking state reframing. In our view, the subsequent formal induction of hypnotic trance serves to fix the information communicated further in place in the patient’s unconscious.

Humphreys (2000) has listed 20 overlapping basic characteristics of the hypnotic trance as an altered state of consciousness (summarized by Zarren and Eimer, 2002, pp. 6–7):

- narrowed focus of attention
- increased absorption and reduced distractibility
- inattention to or disinterest in environmental stimuli other than the therapist
- increased concentration on a particular aspect of experience (e.g. sensation)
- increased suggestibility
- reduction of critical evaluation and screening
- reduction of voluntary activity (mental and/or physical)
- passive responsiveness or non-volitional activity
- relative effortlessness
- reduction in internal dialogue or self-talk
- alteration of cognitive functions
- facilitation of atypical modes of thinking, such as ‘trance logic’
- heightened rapport with the therapist
- some degree of physical relaxation or comfort
- altered sense of one’s body
- increased imaginal processing
- time distortion
- alteration of memory processing
- relative dominance of the parasympathetic branch
- relative dominance of right hemispheric cerebral functioning.

A working definition of hypnosis
As mentioned earlier, this book adopts a state (neodissociation) theory of hypnosis which is widely used in the clinical domain. Within this context I find the following definition and description of hypnosis proposed by Maldonado and Spiegel useful (2003, p. 1285):

Hypnosis is a natural state of aroused, attentive focal concentration coupled with relative suspension of peripheral awareness. It involves an intensity of focus that allows the hypnotized person to make maximal use of innate abilities to control perception, memory, and somatic function. Hypnotic capacities represents both a potential vulnerability to certain kinds of psychiatric illness, such as post-traumatic stress, conversion, and dissociative disorders, and an asset, in that it can facilitate various psychotherapeutic strategies. Because hypnotic capacity is a normal and widely distributed trait, and because entry into hypnotic states occurs spontaneously, hypnotic phenomena occur frequently. Even psychiatrists who make no formal use of hypnosis can enhance their effectiveness by learning to recognize and take advantage of hypnotic mental states.
REFERENCES


