THE INFLUENCE OF HYPNOTIC SUSCEPTIBILITY AND TWO INDUCTION TECHNIQUES ON HYPNOTIC DEPTH

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy

Ву

Pete S. Hamilton, B.S., M.S.

Denton, Texas

August, 1983

QD.D.

Hamilton, Pete S., The Influence of Hypnotic Susceptibility and
Two Induction Techniques on Hypnotic Depth. Doctor of Philosophy

(Counseling and Student Personnel Services), August, 1983, 57 pp.,

3 tables, bibliography, 113 titles.

This study investigated depth of hypnosis self-reported by subjects on the Field Inventory of Hypnotic Depth (FIHD) after experiencing one of two formal hypnotic inductions. The 68 subjects (41 females and 27 males) ranged in age from 17 to 47 (mean 25.3) and were placed into a high susceptibility group or a low susceptibility group based on their scores on the Harvard Group Scale of Hypnotic Susceptibility (HGSHS:A). Both the low susceptibility group and the high susceptibility group were further divided randomly so that half of each group received an indirect induction treatment and the other half received a direct induction treatment.

The direct induction was a traditional eye-fixation/arm-levitation induction conducted face-to-face with one of four experimenters. The confusion induction was the same induction with the addition of a tape-recorded induction played concurrently with the face-to-face induction. In each case, the taped induction was recorded by the experimenter working with that subject from a common script.

The results of a two-way analysis of variance suggested that subjects receiving the confusion induction treatment reported reaching similar depth of hypnosis regardless of their HGSHS:A score. Of those subjects receiving the direct induction treatment, those who scored as high susceptible on the HGSHS:A reported depth of hypnosis similar to the confusion induction group while those who scored as low susceptible reported reaching a statistically lesser depth of hypnosis than that reported by the other three groups.

The discussion suggests that the HGSHS:A may only measure susdeptibility to a direct induction technique and not susceptibility to hypnosis when another type of induction is used. Additional research questions are suggested. Copyright by

Pete S. Hamilton

1983

TABLE OF CONTENTS

																									gе
LIST	OF	TA	BLE	S	•	•	•	• •	•				•	•	•	•	•	•	٠	٠	•	•	•	•	ív
	Sta	ate	۷e	rs	us	Ne	on-	-st	tat	t e	Τh	e	or	i e	s		•					•			4
	Sus	sce	pti	bí	l í	t y	to	o i	Нуμ	pno	si	s			•				•		•				7
	Díi	ec	t a	nd	I	nd:	ire	ect	t I	Нур	no	t:	i c	I	nc	luc	ti	or	ıs						10
	Pui	ро	se	o f	t	h e	St	tuc	iу			i				-									1 3
	Нур	oc	hes	es		•			•			ı				•									14
	Met	ho	ď	•	•		-								•	-					٠	•			1 4
			Des Ins Pro	tr	u m	e n	tal	t i (nc		Ū				t i	or	ı								
	Sta	ati	sti	.ca	1 .	Ana	al	ysı	í S	o f	F	≀e:	s u	l t	s	-									19
	Dis	scu	ssi	on			•	•	•				•		•	•	•	-	-		•	•			2 2
APPE	NDI	κ.	•			•	•	•											•	٠					2 7
DIDI	1001	3 A D	T I 37																						

LIST OF TABLES

Table		Page
1.	The Four Experimental Groups	15
2.	Standard Deviations and Means for the Field Hypnotic Depth Inventory	18
3.	Analysis of Variance of the Field Inventory Of Hypnotic Depth By Induction Type and Level of Susceptibility	19

THE INFLUENCE OF HYPNOTIC SUSCEPTIBILITY AND TWO INDUCTION TECHNIQUES ON HYPNOTIC DEPTH

Over two centuries ago (1778) Franz Anton Mesmer practiced mesmerism in Paris. He based his treatment on the belief that hypnotic effects were caused by "animal magnetism" which was passed on from the hypnotist to other living bodies in the form of invisible magnetic fluids.

Mesmer submitted the subject to a series of bodily manipulations which he felt produced crises which resulted in a harmonious redistribution of the individual's magnetic fluids (Chertok, 1981). Mesmer also thought that the fluid could be transmitted and stored in inanimate objects such as a large tub of iron filings. This would allow several patients to hold iron bars projecting from the tub and simultaneously receive the benefits of the fluid.

During this time Mesmer's theories were controversial and not widely accepted by the scientific community. This controversy eventually led to the discrediting of hypnosis as an acceptable form of treatment. One of the questions that came out of Mesmer's conflict with his peers remains unanswered to this day: what is the nature of hypnotic influence? (Chertok, 1981).

The word <u>hypnosis</u> was first coined by James Braid (1785-1860), from the Greek word "hypnos" or sleep. Braid, an English physician, emphasized suggestion as a basis for hypnosis rather than magnetism. This idea was more

acceptable to the scientists of the time and hypnosis became a subject of investigation, particularly as a form of anesthetic.

By the turn of the century chemical anesthetics and a growing interest in the treatment of emotional and psychological disorders using psychoanalysis resulted in reduced study of hypnosis by the scientific community. Once again, hypnosis was set aside.

The use of hypnosis in treating traumatic war neurosis victims of World War II helped rekindle interest in hypnotherapy. Hypnosis was found to be effective when short term therapy was desired. This revived interest was reflected in the founding of The Society For Clinical and Experimental Hypnosis in 1949 and The American Society of Clinical Hypnosis in 1957.

In 1958, the American Medical Association recognized hypnosis as a legimate treatment method in both medicine and dentistry. In 1969 the American Psychological Association created a division concerned primarly with hypnosis. These events served to add additional creditability to hypnosis as a study for professionals.

Kraft and Rodolfa (1982) report that today 47% of the general membership of the American Psychological Association have some training in hypnosis. Their survey also indicates that overall, psychologists reflect favorable attitudes toward the use of hypnosis in psychology.

In their book <u>Clinical Hypnosis</u>: <u>Principles and Application</u>, (1975), Crasilneck and Hall report that the contribution of hypnosis rests in three important areas:

- l. Hypnosis offers unique opportunities to demonstrate mental mechanisms for teaching purposes. Some defense mechanisms, such as amnesia, can be dramatically demonstrated to the medical resident or student, to the graduate student in psychology, or to the dentist in training. For example, the concept of regression can be vivified by a demonstration of hypnotic age regression. The use of hypnosis in teaching can bring life to theoretical constructs, and in our experience it has often increased the interest and motivation of students who witnessed demonstrations of hypnotic technique.
- 2. Hypnosis has great potential in research, not only into the nature of the hypnotic state itself but also as a means of more controlled emotional variables in psychological and psychosomatic research. Psychological factors involved in pain, for example, can be studied without the pharmacological effects of medication. Residents in surgery and anesthesiology may find hypnosis useful as a control in studies evaluating other forms of pain relief since the hypnotic effects are clearly initiated by psychological means.
- 3. Hypnosis is of great value in medical, psychological, and dental treatment, both for psychological problems and as part of the treatment of many physical disorders or compulsive habit patterns, such as cigarette smoking by emphysema patients (p. 50).

While empirical studies on the use of hypnosis as a treatment technique are inconsistent as to its effectiveness, the volume of studies and case reports reflect a great deal of interest in the use of hypnosis. Hypnosis is reported to be effective in the treatment of addictive disorders, such as obesity (Mott & Roberts, 1979; Wick, Sigman, & Kline, 1971), smoking (Zieg, 1982; Holroyd, 1980; Sanders, 1977; and Hall & Crasilneck, 1970), and alcoholism (Wadden &

Penrod, 1981; Katz, 1980). Psychosomatic illnesses have also been sucessfully treated utilizing hypnosis. Some of these include hysteria (Greenleaf, 1971; Kroger, 1963), asthma (Munn, 1982; Kroger & Fezler, 1976; and Collison, 1975), migraine (Cedercreutz, 1978; Graham, 1975; and Melzack & Perry, 1975), ulcers (Zane, 1966), warts (Johnson & Barber, 1978; Clawson & Swade, 1975; Surman, Gottlieb, & Hackett, 1972; and Sinclair-Gieben & Chambers, 1959), and hypertension (Deabler, Fidel, & Dillenkoffer, 1973; Wadden & de la Toree, 1980).

Hypnosis has been used in clinical settings to treat impotence (Erickson, 1973; Levit, 1971; and Schenck, 1970), enuresis (Haley, 1973; Koster, 1954), depression (Erickson, 1980; Greene, 1973; and Abrams, 1964), and schizophrenia (Bowers, 1961). Pain has also responded very well to hypnotic treatment (Finer 1979; Hilgard & Hilgard, 1975; and Erickson, 1967). Hypnotic analgesia is a well known phenomenon (Hilgard and Hilgard, 1975; Barber, 1977; and Cangello, 1962) and the use of hypnotic anesthesia in surgery (Chaves & Barber, 1976; Bernstein, 1965), and childbirth (Clark, 1956; Gueguen, 1962) is well established.

State versus Non-state Theories

Hypnosis has been conceptualized along a statenonstate continuum by various theorists. Theodore Barber (1969) takes a behaviorialist position and says that hypnosis is not a special state. Barber attributes hypnotic behavior to anticedent variables found in a wide variety of interpersonal situations. He focuses on instruction—suggestion variables, subject variables, experimenter variables, and experimenter—subject interpersonal variables. Barber believes that most behaviors demonstrated under hypnosis can be elicited without hypnosis.

The social role theory of hypnosis (Sarbin, 1950), declares that there is nothing that sets hypnosis apart from other psychological phenomena. Sarbin suggests that the subject is playing a role defined for him by the "hypnotic" suggestions. With this theory hypnotic success is a function of the subject's role expectations, perceptions, and relevant skills, along with the subject's sensitivity to role demands (Frankel, 1976).

Shor (1970) speaks of a special hypnotic state which is distingushed from an "everyday trance" state. The sit—uation defined as hypnosis involves interaction between the subject and a hypnotist. According to Shor, when subjects are oriented to a small range of conscious focus, to the exclusion of a more generalized reality orentation, they are said to be in a trance. Hypnosis is a special trance state achieved at the direction of the hypnotist.

The neo-dissociation theory of hypnosis supported by Hilgard (1974) postulates that a series of cognitive controls are operating at any one time. This suggests that the

cognitive subsystems are functionally autonomous and arranged so that while one is acted upon the others are latent. Hilgard's theory states that hypnosis effects a change in the monitoring function of the ego and that hypnosis changes the hierarchy of the subsystems (Hilgard, 1979). This process, called dissociation, occurs at different degrees at different times. According to Hilgard, the greater the degree of dissociation experienced, the more likely it will be reported by the individual as a special mental state. Hilgard is between the non-state theorists and the state theorists.

Milton Erickson used hypnosis extensively in psychotherapy and supported the special state theory of hypnosis. He felt that the hypnotic induction technique usually utilized tended to bridge the gap between the waking state and the trance state. Erickson supported a naturalistic approach to hypnosis and utilized indirect induction techniques. This allowed the subject a great freedom in choosing how the hypnotic experience might be personally experienced.

This study assumes that hypnosis is a special state and that hypnotherapy has two major phases, induction and utilization. The induction phase helps the subject experience a special psychological state known as hypnosis.

After the hypnotic state is reached the therapist uses the

hypnotic condition to help promote therapeutic change; this is the utilization phase.

All researchers have noted that there seems to be a difference in the ease with which different individuals may enter a hypnotic trance. This difference has been viewed as hypnotic susceptibility.

Susceptibility to Hypnosis

The term hypnotic susceptibility refers to the ability of subjects to respond positively to hypnotic suggestions. The term has been used to help convey an understanding of how effectively an individual can respond to hypnosis or personally experience hypnosis (Weitzenhoffer, 1980).

Susceptibility to hypnosis has been seriously studied with systematic interest for only the last few decades (Hilgard, 1981). To assist in this process, several scales have been developed to measure hypnotic susceptibily. Some of the most used are: the Stanford Hypnotic Susceptibility Scale, Forms A and B (Weitzenhoffer & Hilgard, 1959); the Hypnotic Induction Profile (Spiegel & Bridger, 1970); the Harvard Group Scale of Hypnotic Susceptibility (Shor & Orne, 1962); the Stanford Hypnotic Susceptibility Scale, Form C (Hilgard, 1978); the Stanford Hypnotic Clinical Scale: Adult (Morgan & Hilgard, 1979); and the Stanford Hypnotic Arm Levitation & Test (Hilgard, Crawford & Wert, 1979). These tests demonstrate the demand for susceptibility scales as

well as shape the approach that the susceptibility research has taken.

Some studies report that when it comes to hypnotic susceptibility, approximatly 15% of the population is highly susceptible, 15% not susceptible, and the other 70% susceptible in varying degrees (Faria, 1906; Hilgard, 1965). Others indicate that over 50% of the population can experience hypnosis (Spiegel & Spiegel, 1978). Susceptibility has also been reported as being higher in normal population than in a clinical population (Gill & Brenman, 1961). However, there are those who claim that everyone is susceptible to some degree (Barber, 1980; Erickson, 1965) and that hypnotizability is more a function of the language used, the situation, and the relationship between the subject and the hypnotist than a trait in the subject (Barber, 1980, Reyher & Wilson, 1973).

One of the areas that has been studied is susceptibility scale scores and the relationship of these scores to therapeutic outcome. Some studies indicate that scores on the susceptibility scales are not predictors of therapeutic outcome (Nace et al, 1982; Perry, Gelfand & Marcovitch, 1979, Perry & Mullen, 1975; Orne, 1966; Gill & Brenman, 1961; and Weitzenhoffer, 1953). Others have indicated that such scores will predict success in therapy (Cedercreutz, Lahteenmaki, & Tulikoura 1976; Evans & Paul,

1970; and Spiegel, 1970). Both positions reflect an interest in the measurment of susceptibility.

Subjects who score high on susceptibility tests have demonstrated an ability to modify physiological responses. Physiological responsiveness has been shown in such areas as controlling body temperature (Engstrom, 1976), changing heart rate (Cowings, 1977), and lowering diastolic pressure (Friedman & Taub, 1977). Individuals with high susceptibility have also demonstrated a higher attention capacity (Karlin, 1979), as well as a higher capacity for task absorption (Hilgard, 1970; and Tellegen & Atkinson, 1974) than low susceptibles.

Diamond (1980) reports that susceptibility to hypnosis is a learned skill, while others have indicated that susceptibility is a stable trait (Perry, 1977; Perry & Mullen, 1975; Morgan, Johnson, & Hilgard, 1974; London, 1969; Shore, Orne, & O'Connell, 1966; and Hilgard, 1965). Simon and Salsberg (1981) indicate that the answer to the trait-skill question is a function of the studies reviewed and how they are interpreted.

Authors asserting that hypnotic susceptibility can be accurately measured and that it is a good indicator of the potential benefit that an individual could receive from hypnotherapy, suggest the use of susceptibility tests as screening devices. However, this implies that low susceptibles will not respond to hypnotic inductions.

Indirect and Direct Hypnotic Inductions

The primary difference in indirect and direct inductions is the level of consciousness toward which they are directed. Direct suggestions make an appeal to the conscious mind and try to impose control over the subject's behavior. An example might be "your eyelids are getting heavy and you will close them."

An indirect suggestion can also ask the subject to initiate action but on an unconscious level. This is accomplished by facilitating mental associations and unconscious processes. The hypnotic response is thought to be a natural outcome of such an unconscious search (Erickson & Rossi, 1979). An example of an indirect suggestion might be "when we are tired, our eyes blink, and sometimes even close without our being aware of it" (Erickson & Rossi, 1979).

Bypassing the conscious mind facilitates hypnosis.

This can be done by confusing the conscious mind to depotentiate consciousness (Erickson, Rossi, & Rossi, 1976).

One method of providing such confusion is by assigning two tasks to do at the same time. A tape recording of one induction played during a live induction provides such a double task for the subject.

Little work has been reported which investigates indirect induction techniques and their relationship to hypnotic susceptibility scores. Barber (1977) indicates that

virtually everyone will respond to indirect induction techniques. This is based on the results of his study in which he reported that 99 subjects of 100 experienced effective hypnotic dental analgesia. A problem with Barber's study was that he did not control for hypnotic susceptibility. It is possible that only high susceptible subjects were studied.

Edwards (1979) studied the relative effectiveness of an indirect induction and a direct induction in the relief of chronic spinal cord pain. He used Barber's (1977) induction for Rapid Induction Analgesia (RIA) as the indirect induction, and a conventional relaxation induction for the direct induction. He found no significant difference in the effectiveness of the inductions in the reduction of pain. However, RIA effects were found to be uncorrelated with hypnotic susceptibility as measured by the Stanford Profile Susceptibility Scale, Form II (Weitzenhoffer and Hilgard, 1967). This raises the question of whether susceptibility scores predict hypnotic outcome when indirect techniques are utilized for inductions.

Angelos (1978) compared indirect and direct inductions and the perception of pain. Again, there was no significant difference in effectiveness reported; however, he did find that subjects with measured low susceptibility reported less pain to emersion in ice water when the induction used was indirect. Again, scores from

susceptibility tests are suspect when an indirect induction is used.

Another study comparing direct and indirect inductions was done by Alman and Carney (1980) in California. matched volunteers on susceptibility scores, age, and previous experience with hypnosis and used an indirect induction with half and a direct induction with the other half. The inductions were both modified versions of Barber's (1977) Rapid Induction Analgesia. The modifications were made to make one clearly indirect and the other clearly direct, and both were administered via tape recordings. The effectiveness of the hypnotic inductions was measured by each subject's response to a post hypnotic suggestion. Higher overall success rates were obtained with the indirect inductions. Also, posthypnotic behavior of subjects in the direct group was significantly correlated with their susceptibility scores on the Harvard Group Hypnotic Susceptibility Scale (Shor & Orne, 1962), while the indirect group had less correlation. It should be noted that the use of a taped induction precluded the pacing of the induction with each subject.

Much of the research in hypnosis has been done in an experimental setting. Because there is evidence in the literature that more controlled studies need to be done in a clinical setting (Spiegel, 1970, 1977; Hilgard & Hilgard,

1975), this study used a setting similar to that which might be found in a clinic.

Purpose of the Study

The standardized tests of susceptibility use direct hypnotic inductions for the testing procedure. It is possible that the susceptibility scales actually measure susceptibility to direct induction techniques only rather than susceptibility to hypnosis altogether. This study seeks to further investigate the relationship between induction method (indirect and direct) and susceptibility.

If in fact susceptibility scales are only a measure of traditional induction techniques, and if Barber is correct in his assumption that everyone can utilize indirect induction techniques to experience hypnosis, then screening with susceptibility scales may exclude low susceptibles from an effective form of therapy.

This study used a controlled procedure that more nearly replicates what actually occurs in a clinical hypnosis session. One consideration was the use of a hypnotist doing a live induction rather than a taped induction. Also, the subjects came in to learn how to use hypnosis with a real problem for which they were seeking help. Both the direct induction and the indirect induction were similar to what might be utilized by a private practitioner.

Hypotheses

- 1. The depth of hypnosis mean score obtained for the Low Susceptibility-Confusion Induction (LC) Ss will be sig-nificantly greater than the mean score obtained for the Low Susceptibility-Direct Induction (LD) Ss.
- 2. There will be no significant difference between the depth of hypnosis mean score obtained for the High Susceptibility-Confusion Induction (HC) Ss and the mean depth of hypnosis score for the High Susceptibility-Direct Induction (HD) Ss.
- 3. The depth of hypnosis mean score obtained for the High Susceptibility-Direct Induction (HD) Ss will be significantly greater than the mean score obtained for the Low Susceptibility-Direct Induction (LD) Ss.
- 4. There will be no significant difference between the depth of hypnosis mean score obtained for the High Susceptibility- Confusion Induction (HC) Ss and the mean depth of hypnosis score for the Low Susceptibility-Confusion Induction (LC) Ss.

METHOD

Description of Subjects

Sixty-eight subjects volunteered to learn hypnosis for self improvement. The twenty-seven males and forty-one females ranged in age from 17 to 47 with a mean age of 25.3 years. They were drawn from the student population of North

Texas State University, Denton, Texas. Advertisement in both the school paper and the undergraduate psychology classes was used to obtain subjects.

The procedure for soliciting volunteers for this study assumed that the subjects were typical of those who would come in for the use of hypnosis to learn personal improvement skills. There were no known reasons for believing that this population is not typical of a much larger population of college students and persons in the general population. Strictly considered, however, the conclusions can only be generalized to the population sampled.

There were four experimental groups (see TABLE 1):
High Susceptibility-Confusion Induction (HC); High
Susceptibility-Direct Induction (HD); Low Susceptibility-Confusion Induction (LC); and Low Susceptibility-Direct Induction (LC); Subjects were randomly assigned to the induction groups.

TABLE 1

THE FOUR EXPERIMENTAL GROUPS

Susceptibility	Confusion Induction	Direct Induction
~ -		
High	нс	нр
Low	LC	LD

Instrumentation

Harvard Group Scale of Hypnotic Susceptibility. The Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) is an adaptation of the Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A) designed for group administration (Shor & Orne, 1962). After the group administration, the subjects used self-report scoring to indicate their performance on the twelve different behaviors requested in a hypnotic induction (Appendix A).

Tellegen (1978) reports a correlation of .83 between the Field Inventory of Hypnotic Depth and the HGSHS:A when both are used for college students. Bentler and Hilgard (1963) report that the self-scoring correlated .83 for a group session and .89 for an individual session when compared with observer's scores.

Two additional studies compared the HGSHS:A with Stanford scales. A correlation of .74 was found between the HGSHS:A and the Stanford Hypnotic Susceptibity Scale, Form C administered later (Bentler & Roberts, 1963). And Bowers (1982) compared the HGSHS:A and the Stanford Group Scale of Hypnotic Susceptibility finding a correlation of .71.

These reported correlations suggest that the HGSHS:A has utility in measuring suggestibility. McConkey, Sheehan, & Law (1980) suggest that the HGSHS:A is the standard in-strument for group testing of hypnotic succeptibility. Hilgard (1977) seems to agree when he reports that the

HG5H5: A is an efficient instrument for obtaining initial ratings of hypnotic susceptibility.

The possible scores on the HGSHS: A range from 0 to 12 with a score of 0 indicating very low susceptibility and a score of 12 very high susceptibility. For this study subjects scoring 0-5 were placed in the low susceptibility groups and subjects scoring 8-12 were placed in the high susceptibility groups. Those subjects who scored in the 6-7 range were not included in the study.

The Field Inventory of Hypnotic Depth (FIHD).--The

Field Inventory of Hypnotic Depth (see Appendix B), was

developed by Field (1965) to allow subjects to report the

intensity of experience change as a result of induction. It

consists of 38 true-false questions derived from 300 items

describing the experiences of subjects during hypnosis.

The sample population used by Field consisted of 102 students who had just awakened from hypnosis. He reported a range of total scores on the final 38 items from 0 to 36 with a mean of 14.54. The standard deviation was 9.05 and the odd-even reliability (Spearman-Brown prophecy formula) was .915. The Pearson r concurrent validity coefficient between these 38 items and the Harvard Group Scale of Hypnotic Susceptibility was .745, and the test-retest reliability was .87 (Field, 1965). Tart (1978) reported a correlation of .66 between the FIHD scores and the mean depth reported from the SHSS:C, while Tellegen (1978)

reported a correlation of .83 between the FIHD and the HGSHS:A.

Procedures For Data Collection

presentations. After the study was explained to them, they each completed an Informed Consent form (Appendix C) and were administered the <u>Harvard Group Scale of Hypnotic Susceptibility</u>, Form A (HGSHS:A) and assigned to appropriate experimental groups. The experimenter who administered the HGSHS:A was not involved further with the subjects to insure that the experimenters were blind to subject susceptibility.

Each subject met with one of the experimenters who conducted an appropriate experimental induction. After this induction each subject was asked to respond to the FIHD. The subjects were then scheduled for additional sessions to fulfill the stated objective of helping each develop skills in self improvement.

The Direct Induction was a conventional induction conducted by four experimenters using the induction shown in Appendix D. Subjects were randomly assigned to each experimenter.

The Confusion Induction was conducted by the same four experimenters again using the same induction; however, for this group a tape-recorded collection of confusion statements was played concurrently with the Direct Induction done live. In each case the script for the confusion tape

(Appendix E) was recorded by the same experimenter who conducted the live induction.

Statistical Analysis of Results

The data accumulated as a result of the procedures were analyzed statistically on the basis of their relevance to the presented hypotheses. The analysis of the results was made utilizing two statistical techniques: two-way analysis of variance and the Scheffé comparison.

TABLE 2
STANDARD DEVIATIONS AND MEANS FOR THE
FIELD HYPNOTIC DEPTH INVENTORY

			
Group	Mean	5 D	N
Total	20.71	5.98	68
High Susceptible	22.23	4.96	47
Low Susceptible	17.28	6.73	21
Confusion Induction	21.48	5.15	33
Direct Induction	19.97	5.33	35
High Confusion	21.91	5.20	22
High Direct	22.52	4.82	2 5
Low Confusion	20.64	5.04	1 1
Low Direct	13.60	6.60	10

An analysis of variance (Table 3) indicated the presence of main effects for susceptibility (F (1, 64)= 13.31, p<.001). However the F-ratio for main effects for induction was not significant (F (1, 64)= 1.88). The analysis of variance also showed significant interaction of susceptibility by induction (F (1, 64)= 7.64, p<.01). Since a significant interaction term was computed the analysis of cell by cell comparisons could be analyzed. The hypotheses were related to the interaction term. Each hypothesis was examined by the use of the Scheffe test to investigate the particular cell differences (Nie, et al, 1975). The .05 level was used in all cases. Each hypothesis was supported by the statistical analysis of the data.

TABLE 3 ANALYSIS OF VARIANCE OF THE FIELD INVENTORY OF HYPNOTIC DEPTH BY INDUCTION TYPE ANE LEVEL OF SUSCEPTIBILITY

Source	Sum of Squares	d f	F
Induction	52.10	1	1.88
Susceptibility	368.60	1	13.31 **
Induct. X Suscept.	211.61	1	7.64 *
Error	1773.00	64	
* P<	.01	** P<.001	

Hypothesis One predicted that the mean depth of hypnosis score obtained for the Low Susceptibility-Confusion

Induction (LC) group would be significantly greater than the mean obtained for the Low Susceptibility-Direct Induction (LD) group.

The mean obtained for the LC group was 20.64 while the mean obtained for the LD group was 13.60. The direction was as predicted and a Scheffé test found the difference statistically significant (P<.05).

Hypothesis Two predicted that there would be no statistical difference between the mean depth of hypnosis score obtained for the High Susceptibility-Confusion Induction (HC) group and the mean depth of hypnosis score obtained for the High Susceptibility-Direct Induction (HD) group. The mean obtained for the HC group was 21.91 and the mean for the HD group was 22.52. The difference in their means was not statistically significant.

Hypothesis Three predicted that the mean depth of hypnosis score obtained for the High Susceptibility-Direct Induction group (HD) would be significantly greater that the mean obtained for the Low Susceptibility-Direct Induction (LD) group. The mean obtained for the HD group was 22.52 and the mean for the LD group was 13.60. The direction of the difference was as predicted, and the Scheffe test indicated significance at the .05 level.

Hypothesis Four predicted that there would be no significant difference between the mean depth of hypnosis score obtained for the High Susceptibility-Confusion Induction (HC) group and the mean depth of hypnosis score for the Low Susceptibility-Confusion Induction (LC) group. The mean obtained for the HC group was 21.91 and the mean for the LC group was 20.64. The Scheffe test yielded no statistically significant difference between these mean scores.

Discussion

The results of this study seem to indicate that there is a difference in the response of hypnotic subjects that is a function of the type of induction utilized. The data suggest that the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) did discriminate between those subjects who were susceptible to a direct induction technique. However, the HGSHS:A did not discriminate between subjects who were exposed to the confusion inductions.

The direct induction used in this study was similar to that used in the HGSHS:A. The HGSHS:A utilized a series of direct suggestions to ask the subjects to perform various tasks. As the examiner read the hypnotic script to the subjects, the test assumed that their ability to experience the suggested sensations was a function of their hypnotic susceptibility. After the fifty-minute session the subjects responded to twelve questions in a test booklet. The more sensations that the subjects reported having experienced,

the higher their susceptibility scores. The twelve tasks included head falling, eye closure, hand lowering, fingers locking together, arm rigidity, hands moving together, communication inhibition (not shaking head "no"), hal-lucinating a fly buzzing, eye catalepsy, post-hypnotic suggestion of touching the left ankle, and amnesia for the experience. The Direct Induction used in the experimental procedure also asked the subjects to follow the experimentary suggestions and experience those things that were suggested. The direct induction is representative of the direct inductions found in the literature.

These direct induction techniques seem similar to those used in the days when the hypnosis was thought to be only in the control of the hypnotist. With this point of view, if the subject did not respond to the hypnotist's suggestions, then it was assumed that something was missing in the subject. The hypnotist was not thought responsible for the result and little flexibility was generally demonstrated in the inductions used. The indirect techniques, such as the confusion procedure used in this study, are typically more oriented toward the idiosyncracies of the subject.

Perhaps one of the greatest concerns of subjects about to experience hypnosis is the issue of control. The media has portrayed hypnosis as a strange state in which the subject gives up control to the hypnotist and the hypnotist then can mold the subject's life in any sinister manner that

is advantageous to the hypnotist. Because subjects often have this concern about control issues, inductions that emphasize the control nature of the relationship may highten these concerns and inhibit the hypnotic process.

The direct induction techniques highlight the control issue by instructing the subjects to do exactly what the hypnotist asks them to do. An example of this from the direct induction used in this study would be "at the count of three you will close your eyes." The confusion technique may keep the conscious mind so busy trying to follow both voices that it is not concerned with the control issue.

Another view of the confusion technique might be that while the conscious mind is focusing on one induction, the unconscious mind is allowed to attend to the other induction without the conscious mind's editing process. This could allow the subject to enter a trance more easily. Further research is suggested to help understand the process that allows the confusion induction to be more effective.

One limitation of this study is the use of self-report measures throughout. The self-report format was used in the HGSHS:A for an independent measure and in the <u>Field Inventory of Hypnotic Depth</u> (FIHD) for the dependent measure. There is presently no generally accepted objective measure for hypnosis that allows an observer to gage trance depth. In the present study, as is the standard in the hypnosis literature, each subject was asked to share their experience

by responding to standardized instruments. The standardization of these instruments cannot completely control for
the variation between the subject's experiences. Even with
this limitation, it is reasonable to think that the dependent scores are indicative of a variation in the depth of
hypnosis experienced.

Another limitation is the general lack of agreement in the field as to the exact nature of hypnosis. This limits any analysis of what goes on in the hypnotic process. If the field could specify the phenomena of hypnosis more precisely further strides in research as well as application could surely be realized. Perhaps some new manner of conceptualizing hypnosis will need to be made. Because the anticipated experience cannot be charted, hypnotic progress for an individual cannot be followed exactly. This limits analysis of this study as well as any other hypnosis study.

A third possible limitation is that this study did not investigate the possibility that the subjects were responding to the induction on the confusion tape and ignoring the live direct induction. It is possible that it was the taped induction that induced the trance and not the depotentiation of the consciousness through confusion. Further research to control for this possibility is warranted.

The results reported in this study may imply that hypnotic susceptibility as measured by the HGSHS:A is not susceptibility to hypnosis in general, but rather susceptibility to hypnosis when a direct induction is utilized. There is a practical implication for those who use hypnosis with their clients: If a confusion induction is to be utilized, then the data suggest that the use of a test of hypnotic susceptibility such as the HGSHS:A is of little use in predicting the result of the process. This is consistent with Barber's (1980) suggestion that perhaps everyone can be hypnotized, and that it is not a question of susceptibility, but rather one of the setting, the hypnotist, the language used, and the interpersonal relationship between the subject and the hypnotist.

APPENDIX A

The Harvard Group Scale of Hypnotic Susceptibility

HARVARD GROUP SCALE OF HYPNOTIC SUSCEPTIBILITY

by Ronald E. Shor and Emily Carota Orne

The Scale is a standard procedure for estimating susceptibility to hypnosis. An individual's susceptibility to hypnosis may change, however, over time and with differing circumstances. An individual who appears relatively unsusceptible at this time by these standard procedures will not necessarily still be relatively unsusceptible at a later time or under different circumstances.

PLEASE SUPPLY THE INFORMATION REQUESTED BELOW

Name:						Date:			
Age: Sex: School:						Class:			
Occupation: .									
Present Add	ress:								
	_			·		Phone:			
Permanent A	lddress:								
						Phone:			
Have vo	u ever b	een hypnotized?	Circle:	Yes	No				

Have you ever been hypnotized? Circle: Yes No If so, please cite the circumstances and describe your experiences. Please be brief:

DO NOT OPEN THIS BOOKLET until the examiner specifically instructs you to do so



Please write down now briefly in your own words a *list* of the things that happened since you began looking at the target. Do *not* go into detail. Spend three minutes, no longer, in writing your reply.

PLEASE DO NOT RETURN TO PAGE 2

On this page write down a list of anything else that you now remember that you did not remember previously. Please do not go into detail. Spend two minutes, no longer, in writing out your reply.

SECTION ON OBJECTIVE, OUTWARD RESPONSES

Listed below in chronological order are the eleven specific happenings which were suggested to you during the standard hypnotic procedure. We wish you to estimate whether or not you objectively responded to these eleven suggestions, that is, whether or not an onlooker would have observed that you did or did not make certain definite responses by certain specific, predefined criteria. In this section we are thus interested in your estimates of your outward behavior and not in what your inner, subjective experience of it was like. Later on you will be given an opportunity to describe your inner, subjective experience, but in this section refer only to the outward behavioral responses irrespective of what the experience may have been like subjectively.

It is understood that your estimates may in some cases not be as accurate as you might wish them to be and that you might even have to guess. But we want you to make whatever you feel to be your best estimates regardless.

Beneath a description of each of the eleven suggestions are sets of two responses, labeled A and.B. Please circle either A or B for each question, whichever you judge to be the more accurate. Please answer every question. Failure to give a definite answer to every question may lead to disqualification of your record.

I. HEAD FALLING

You were first told to sit up straight in your chair for 30 seconds and then to think of your head falling forward. Would you estimate that an onlooker would have observed that your head fell forward at least two inches during the time you were thinking about it happening?

- Circle one: A. My head fell forward at least two inches.
 - B. My head fell forward less than two inches.

II. EYE CLOSURE

You were next told to rest your hands in your lap and pick out a spot on either hand as a target and concentrate on it. You were then told that your eyelids were becoming tired and heavy. Would you estimate that an onlooker would have observed that your eyelids had closed (before the time you were told to close them deliberately)?

- Circle one: A. My eyelids had closed by then.
 - B. My eyelids had not closed by then.

III. HAND LOWERING (LEFT HAND)

You were next told to extend your left arm straight out and feel it becoming heavy as though a weight were pulling the hand and arm down. Would you estimate that an onlooker would have observed that your hand lowered at least six inches (before the time you were told to let your hand down deliberately)?

- Circle one: A. My hand had lowered at least six inches by then.
 - B. My hand had lowered less than six inches by then.

IV. ARM IMMOBILIZATION (RIGHT ARM)

You were next told how heavy your right hand and arm felt and then told to try to lift your hand up. Would you estimate that an onlooker would have observed that you did not lift your hand arm up at least one inch (before you were told to stop trying)?

Circle one: A. I did not lift my hand and arm at least one inch by then.

B. I did lift my hand and arm an inch or more by then.

V. FINGER LOCK

You were next told to interlock your fingers, told how your fingers would become tightly interlocked, and then told to try to take your hands apart. Would you estimate that an onlooker would have observed that your fingers were incompletely separated (before you were told to stop trying to take them apart)?

Circle one: A. My fingers were still incompletely separated by then.

B. My fingers had completely separated by then.

VI. ARM RIGIDITY (LEFT)

You were next told to extend your left arm straight out and make a fist, told to notice it becoming stiff, and then told to try to bend it. Would you estimate that an onlooker would have observed that there was less than two inches of arm bending (before you were told to stop trying)?

Circle one: A. My arm was bent less than two inches by then,

B. My arm was bent two or more inches by then.

VII. MOVING HANDS TOGETHER

You were next told to hold your hands out in front of you about a foot apart and then told to imagine a force pulling your hands together. Would you estimate that an onlooker would have observed that your hands were not over six inches apart (before you were told to return your hands to their resting position)?

Circle one: A. My hands were not more than six inches apart by then.

B. My hands were still more than six inches apart by then.

VIII. COMMUNICATION INHIBITION

You were next told to think how hard it might be to shake your head to indicate "no", and then told to try. Would you estimate that an onlooker would have observed you to make a recognizable shake of the head "no"? (That is, before you were told to stop trying.)

Circle one: A. I did not recognizably shake my head "no".

B. I did recognizably shake my head "no".

IX. EXPERIENCING OF FLY

You were next told to become aware of the buzzing of a fly which was said to become annoying, and then you were told to shoo it away. Would you estimate that an onlooker would have observed you make any grimacing, any movement, any outward acknowledgement of an effect (regardless of what it was like subjectively)?

Circle one: A. I did make some outward acknowledgement.

B. I did not make any outward acknowledgement.

X. EYE CATALEPSY

You were next told that your eyelids were so tightly closed that you could not open them, and then you were told to try to do so. Would you estimate that an onlooker would have observed that your eyes remained closed (before you were told to stop trying)?

Circle one: A. My eyes remained closed.

B. My eyes had opened.

XI. POST-HYPNOTIC SUGGESTION (TOUCHING LEFT ANKLE)

You were next told that after you were awakened you would hear a tapping noise at which time you would reach down and touch your left ankle. You were further informed that you would do this but forget being told to do so. Would you estimate that an onlooker would have observed either that you reached down and touched your left ankle, or that you made any partial movement to do so?

Circle one: A. I made at least an observable partial movement to touch my left ankle.

B. I did not make even a partial movement to touch my left ankle, which would have been observable.

YOU MAY NOW REFER TO EARLIER PAGES — BUT PLEASE DO NOT WRITE ANYTHING FURTHER ON THEM

SECTION ON INNER, SUBJECTIVE EXPERIENCES

1) Regarding the suggestion of EXPERIENCING A FLY—how real was it to you? How ividly did you hear and feel it? Did you really believe at the time that it was there? Was here any doubt about its reality?
2) Regarding the two suggestions of HAND LOWERING (LEFT) and HANDS MOVING OGETHER—was it subjectively convincing each time that the effect was happening entirely itself? Was there any feeling either time that you were helping it along?
•

APPENDIX B

The Field Inventory of Hypnotic Depth

NAME:

These questions will help you clarify your thinking about your experience. They will also help us understand how you experienced the session. There are no "right" or "wrong" answers so please be as honest as you can in your responses.

Please read each statement and decide how it applies to your experience. Circle either true (T) or false (F) as each statement applies to you. You may have as much time as you wish, but your first reaction to the question will probably be the most accurate.

- T F Time stood still.
- T F My arm trembled or shook when I tried to move it.
- T F I felt dazed.
- T F I felt aware of my body only where it touched the chair.
- T F I felt I could have tolerated pain more easily during the experiment.
- T F I could have awakened any time I wanted to.
- T F I was delighted with the experience.
- T F The experimenter's voice seemed to come from very far away.
- T F I tried to resist but I could not.
- T F Everything happened automatically.
- T F Sometimes I did not know where I was.
- T F It was like the feeling I have just before waking up.
- T F When I came out I was surprised at how much time had gone by.
- T F I came out of the trance before I was told to.
- T F During the experiment I felt I understood things better or more deeply.
- T F I was able to overcome some or all of the suggestions.

- T F At times I was deeply hypnotized and at others times I was only lightly hypnotized.
- T F During the final "countdown" to wake me up I became more deeply hypnotized for a moment.
- T F At times I felt completely unaware of being in an experiment.
- T F I did not lose all sense of time.
- T F It seemed completely different from ordinary experience.
- T F I was in a medium hypnotic state, but no deeper.
- T F Things seemed unreal.
- T F Parts of my body moved without my conscious assistance.
- T F I felt apart from everything else.
- T F It seems as if it happened a long time ago.
- T F I felt uninhibíted.
- T F At times I felt as if I had gone to sleep momentarily.
- T F I felt quite conscious of my surroundings all the time.
- T F Everything I did while hypnotized I can also do while I am not hypnotized.
- T F I could not have stopped doing the things the experimenter suggested even if I tried.
- T F It was a very strange experience.
- T F I felt amazed.

APPENDIX C

Informed Consent Form

INFORMED CONSENT

NAME OF SUBJECT:
1. I here by give consent to P. Hamilton and/or G. Neuger to perform or supervise the following investigational procedure or treatment: Conduct one or more hypnotic inductions and/or various non-intrusive physiological and behavioral self-report measures.
2. I have heard a clear explanation and understand the nature and purpose of the procedure or treatment; possible appropriate alternative procedures that would be advantageous to me; and the attendant discomforts or risks involved and the possibility of complications which might arise. I have heard a clear explanation and understand the benefits to be expected. I understand that the procedure or treatment to be performed is investigational and that I may withdraw my consent for my status. With my understanding of this, having received this information and satisfactory answers to the questions I have asked, I voluntarily consent to the procedure or treatment designated in Paragraph 1 above.
DATE:
SIGNED: SIGNED: (Subject)
SIGNED: SIGNED: (Person Responsible)

NOTE: If the subject is not competent, the person responsible shall be the legally appointed guardian or legally authorized representative.

APPENDIX D

Direct Induction Script

DIRECT INDUCTION TEXT

Informally have subject get in a comfortable position with legs not crossed, hands apart, and feet on the floor. Allow a moment to settle down.

(* FOR CONFUSION INDUCTIONS ONLY ===> THIS INTRODUCTION:)
 (I am going to talk to you as you sit there, but I)
 (will also play a tape recorder at the same time.)
 (The tape is a recording of me doing another)
 (induction and you may listen to me, listen to the)
 (tape, or ignore both and let your conscious mind)
 (wander to where it wants to go. You don't have to)
 (listen at all. *)

* * START HERE FOR DIRECT INDUCTION:

First I want you to look at a fixed spot. Choose one on the wall or ceiling and keep staring at it. As you keep staring at it the first sensation that you will learn how to control is that of HEAVINESS. Your lids are getting VERY, VERY HEAVY. Getting HEAVIER and HEAVIER. Your eyes are beginning to blink. (wait for subject's eyes to blink). Your eyes just blinked, that is a good sign that you are going deeper and deeper relaxed. And now at the count of 3 if you REALLY wish to gain skill with hypnosis you will gently control the closing of your lids. At this point you will notice that you want to close your lids because they are getting very, very tired. Promptly, precisely and exactly at the count of 3 you will close your lids, not because you have to but because you really want to. Don't close your lids too rapidly, but close them gently at the count of 3. One, your eyes are closing, two, lids are closing TIGHTER and TIGHTER together, three, lids closed (If eyes don't close, say "Let your eyes close now."). And I really want you to feel that TIGHTNESS... good, this is still another sensation that you are gaining control over.

Now let your eyeballs roll up into the back of your head.... now let the eyeballs roll back down into their normal position. And as they return to their normal position you will notice that your lids are STUCK even TIGHTER and TIGHTER together.

Now I'd like to have you imagine that your entire body from your head to your toes is becoming very, very relaxed. However, your body will not relax just because you tell it to do so. Rather, it will only relax if you pair this suggestion with the memory which once produced the desired response. Perhaps it would be nice if you would imagine yourself taking a soothing warm bath. You are relaxing DEEPER and DEEPER. And the more vividly that you can SEE ALL the familar sights of your own bathroom, the deeper relaxed you will go. And the more vividly that you can see yourself

in your own bathtub, the deeper relaxed you will go. And the more vividly that you feel the imaginary warm water up to your armpits, the deeper relaxed you will go. You are doing fine, just fine. Your breathing is getting slower, deeper, more regular... slower, deeper and more regular.

Now if you REALLY wish to go deeper, and gain more mastery over yourself so that YOU can gain OTHER skills that you wish to enjoy, you will first learn how to raise your arm in a controlled fashion. Listen very carefully for the following instructions. Carry these out to the best of your ability. The better you control the raising of your arm the better you will be able to control other areas of your life. You may raise either your left arm or your right arm, whichever arm you choose. But raise it in the following fashion. Here are the instructions for the raising of your Listen carefully for the instructions. At the count of three, raise either your left arm or your right about 2 or 3 inches at a time and then pause 20 or 30 seconds. During this pause perhaps you might be willing to suggest that as your arm lifts higher and higher, with each cogwheel-like movement it will get lighter and lighter-another sensation that you are controlling. And the lighter your arm gets as it rises, the deeper relaxed you will go. You will raise your arm at the count of 3, not because you have to but because you REALLY WANT too! Now do not raise it too rapidly... 1... 2... 3, slowly the arm is lifting. lifting, lifting, lifting, and as it lifts higher and higher with each movement notice how your arm is getting lighter and lighter. And as the arm gets lighter and lighter notice how your state of relaxation is getting deeper and deeper. You are doing fine.

Your breathing is getting slower, deeper, more regular. (At this point the arm is allowed to slowly rise. Occasionally, say such things as: "Lighter and lighter." And when arm lifts, "That's right," and "Higher and higher").

As your arm is now approaching a straight, vertical, perpendicular position you will notice that you can develop still another sensation, that of STIFFNESS. Your arm is now lifting higher and higher to where your fingers, hand, forearm, and arm are all stretched straight toward the ceiling. Paradoxically, you will notice that the STIFFER your arm gets (lightly stroke the arm as you mention each part of the arm) from the fingers to the hand, to the wrist, to the elbow to the shoulder, the DEEPER RELAXED you will go. Higher and stiffer. Your arm is now stiff, very rigid, like a bar of steel from the fingertips down to the elbow to the shoulder. Notice the stiffness of your outstretched arm. You are doing fine.

Now, if you wish to control other sensations and gain still more mastery over your life, listen very carefully to the following suggestions. At the count of 3 you will

slowly, ever so slowly, about an inch or two at a time, allow your arm to fall to you side. And with each 2 inches or so that it falls, your arm will beome as limp as a wet noodle. It will become limper and limper as it slowly drops to your side. Is it not surprising how many sensations that you are gaining control over? Also, is it not remarkable how many sensations are built into your body? 1... 2... 3. Now don't let the arm drop too rapidly. Allow it to drop VERY, VERY SLOWLY. And with each motion that your arm moves downward, perhaps, you might be willing to suggest to yourself that when your arm returns to you side or touches any part of your body, that will be a cue or signal for every MUSCLE and every FIBER in you body to develop complete relaxation. Now as your arm is about to reach your side or touch the chair perhaps you could allow that to be a cue for every muscle in you body to relax completely.

Now you are in a very deep state of relaxation and I am going to give a suggestion for terminating it. (The tape recorder, if utilized, should be turned down at this point.) As I count from I to 5, I want you to become more awake. When I say the number 5, you will open your eyes feeling wonderfully refreshed, alert, and wide-awake. I, waking up slowly... 2, becoming more aware of the environment... 3, feeling the circulation in your hands and feet, arms and legs... 4, almost awake, feeling refreshed... and 5, eyes open, wide awake and alert.

Do you have any comments about your experience? (Allow a moment for comments and then give subject the Field to complete).

Modified from: Kroger, W. & Fezler, W. <u>Hypnosis and Behavior Modification: Imagery Conditioning</u>. Philadelphia: Lippincott, 1976.

APPENDIX E

Indirect Induction Script

Confusion Tape (Text)

It is GOOD to ENJOY life. To go about your business everyday. To visit the store to buy the things you need. You may get into a car or a pickup truck and start toward the store, CONTROLLING the vechicle as you can CONTROL your LIFE. Understanding how to drive the car or truck... UNDERSTANDING how to live your life in CONTROL. Relaxing as you drive down the familiar streets. RELAXING, thats right, very relaxed... and in CONTROL of where you're going.

Your favorite STORE is a place that you know very well. You may STORE GOOD things that you can use to be in control and comfortable with who YOU are. Like a female sheep, a EWE who knows the feeling of being HAPPY and IN CONTROL. You are comfortable, driving, as you see a familiar sign. A sign of relaxing...relaxing...that's right.

YOU'RE DOING FINE as you drive to the store. Relaxing and comfortable, floating along. Like a white, fluffy cloud. Like a cloud floats...drifting along, knowing that where it is going is GOOD. NOT WORRYINg about where it's been. Where the cloud has come from does not matter. It's where the cloud is going that counts. The cloud FEELS COMFORTABLE, RELAXED, floating along knowing that where it's going is where it ought to be. Floating along... slowly floating, relaxing, floating thru the sky... soft, fluffy cloud, floating along... relaxed, relaxed, that's right, the cloud is relaxed as it floats and drifts. Drifts thru the blue, blue sky... drifts over the world. Quietly removed from all the sounds of the world. Looking down, looking down at the greenness, at the serenity, at the lovelyness of the world.

The world is nice, the world is good. LIVING in the world IS NICE. It's GOOD to be who YOU are. It's good to be comfortable, to know that whatever you need to do you can do. To know that YOU CAN be in CONTROL... that YOU CAN make decisions. That you CAN DO the right thing. That you can do what you need to do. As you control your life enjoying, relaxing, enjoying the life as you float along, comfortable, happy, full of energy. Relaxed energy. Energy to do the things that you want to do. And the knowledge that you can do what you want to do. That you have the ability to do the things you wish. That you have the responsibility to know what things you need to do. It's so comfortable, so relaxing... relaxing... DEEPER and DEEPER RELAXED.

That's right. Deeply relaxed and happy. Like floating along on a raft in a lake or pool. Hearing the sounds of the water lapping against the side of the raft. Peaceful, relaxed, comfortable, so relaxed... relaxed... relaxed... so relaxed. DEEPER and DEEPER relaxed. You're doing fine.

Floating along on the raft with the gentle motion of the water. Seeing the birds flying in the sky. The birds flying with their lovely colors. The blue, blue sky above. With the clouds floating along. The white fluffy clouds against the blue background. Floating along knowing that they are happy and relaxed. The clouds know where they are going.

It's GOOD to ENJOY LIFE. To go about your business each day. To do the things that you know you can do. GOOD to be YOU. Relax... that's right. So relaxed. DEEPER Relaxed. Drifting along on the raft. and DEEPER relaxed. Seeing the trees along the shoreline. Seeing the colors of the trees. The various shades of green contrasted with the blue, blue shades of the sky. And the white fluffy clouds drifting, drifting along slowly. Floating along comfortably... so relaxed... relaxed... that's right. Feeling your body relaxing. Feel the GOOD FEELINGS of being IN CONTROL of your life... of being able to make the decisions that are appropriate. Of knowing the deep inner strenght that you have, that allows you to be confident as you live your life. You are comfortable, you, like that ewe who is comfortable grazing in the beautiful meadow. The ewe who really knows the feeling of being happy and in control. Enjoying the fields with the green grass, the green, green grass that tastes so good. Relaxing, relaxed and comfortable, and in control. The ewe knows that she is in control... just as you are relaxed and comfortable,, knowing that YOU are IN CONTROL. That you are able to do the things that you need to do. Make the decisions you need to make. Enjoying the INNER strenght of KNOWING that you can do what you must do... that YOU CAN control your life as you relax. Relax, that's right.

And the farmer plants the seed carefully. Caring for it with water and food. And the seed sprouts and begins to grow. Comming up slowly through the earth. Feeling the warm sun as it gains strength and height. It becomes the young plant as it grows it's leaves. Growing stronger and taller. As it is cared for it starts to bud. The buds grow into blooms and it is right. With the proper attention the blooms of the adult plant throw their seeds into the world and the cycle continues. The SEEDS planted BECOME that which they were INTENDED TO become when planted. As IDEAS blossom into GOOD things from the SEEDS planted in your mind. And life IS GOOD. Life is like a river.

The river flows DOWN stream. Sometimes the banks are wide and the river flows slowly... other times the banks are narrow and the river flows fast. As the river bends and turns on it's journey down to the sea it is comfortable that it knows the way. Knows when to turn and when to run straight. Always aware and in control. The houses go by... the people watch the river and enjoy its presence. The sun shines down and it is warm.

BIBLIOGRAPHY

- Abrams, 5. The use of hypnosis with psychotics. American Journal of Psychotherapy, 1964, 18, 79-87.
- Alman, B.M. & Carney, R.E. Consequences of direct and indirect suggestions on success of posthypnotic behavior. American Journal of Clinical Hypnosis, 1980, 23, 112-118.
- Anderson, J. A. D., Basker, M. A., & Dalton, R. Migraine and hypnotherapy. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1975, 13, 48-58.
- Angelos, J.A. A Comparison of the Effect of Direct and Indirect Methods of Hypnotic Induction On the Perception of Pain. Doctoral dissertation.

 California School of Professional Psychology, San Diego, California, 1978.
- Barber, J. Rapid induction analgesia: A clinical report.

 American Journal of Clinical Hypnosis, 1977, 19,
 138-147.
- Barber, J. Hypnosis and the unhypnotizable. American Journal of Clinical Hypnosis, 1980, 23, 4-9.
- Barber, T. X. Physiological effects of "hypnosis". Psychological Bulletin, 1961, 58, 390-419.
- Barber, T. X. An empiricaly-based formation of hypnotism.

 American Journal of Clinical Hypnosis, 1969, 12,

 100-130.
- Basker, M. A., Anderson, J. A., & Dalton, R. Migraine and hypnotherapy. In: Frankel and Zamnsky, Hypnosis At Its Bicentennial. New York: Plenum Press, 1978.
- Bentler, P. M. & Hilgard, E. R. A comparison of group and individual induction of hypnosis with self-scoring and observer-scoring. International Journal of Clinical and Experimental Hypnosis, 1963, 11, 49-54.
- Bentler, P. M. & Roberts, M. R. Hypnotiic susceptibility assessed in large groups. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1963, 11, 93-97.

- Bernstein, M. R. Significant values of hypnoanesthesia:

 Three clinical examples. <u>American Journal of Clinical Hypnosis</u>, 1965, 7, 259-270.
- Bowers, M. K. Theoretical considerations in the use of hypnosis in treatment of schizophrenia. <u>International</u>

 Journal of Clinical and Experimental Hypnosis, 1961,
 9, 39-44.
- Bowers, P. The classic suggestion effect: Relationships with scales of hypnotizability, effortless experiencing and imagery vividness. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1982, 30, 270-279.
- Cangello, V. W. Hypnosis for the patient with cancer.

 <u>American Journal of Clinical Hypnosis</u>, 1962, 4, 215-226.
- Cedercreutz, C., Lahteenmaki, R., & Tulikoura, J. Hypnotic treatment of headache and vertigo in skull injured patients. International Journal of Clinical and Experimental Hypnosis, 1976, 24, 195-201.
- Cedercreutz, C. Hypnotic treatment of 100 cases of migraine. In F. H. Frankel & H. S. Zamansky (Eds.), <u>Hypnosis At Its Bicentennial</u>. New York: Plenum Press, 1978.
- Chaves, J. F. & Barber, T. X. Hypnotic procedures and surgery: A critical analysis with applications to 'acupuncture analegesia'. American Journal of Clinical Hypnosis, 1976, 18, 217-236.
- Chertok, L. <u>Sense and Nonsense In Psychotherapy: The</u>

 <u>Challenge of Hypnosis</u>. New York: Pergamon Press, 1981.
- Clark, R. N. A training method for childbirth utilizing hypnosis. American Journal of Obstetrics and Gynecology, 1956, 72, 1302-1306.
- Clawson, T. A. & Swade, R. H. The hypnotic control of blood flow and pain: The cure of warts and the potential for the use of hypnosis in the treatment of cancer.

 American Journal of Clinical Hypnosis, 1975, 17, 160-169.
- Collison, D. A. Which asthmatic patients should be treated by hypnotherapy. Medical Journal of Australia, 1975, 1, 776-781.
- Cowings, P. Observed difference in learning ability of heart rate self regulation as a function of hypnotic susceptibility. Theories of Psychosomatic Medicine, 1977, 4, 221-226.

- Crasilneck, H. B. & Hall, J. A. <u>Clinical Hypnosis</u>:

 <u>Principles and Applications</u>. New York: Grune and Stratton, 1975.
- Deabler, H. L., Fidel, E. & Dillenkoffer, R. L. The use of relaxation and hypnosis in lowering high blood pressure.

 American Journal of Clinical Hypnosis, 1973, 16, 75-79.
- Devine, D. A. <u>Hypnosis and Covert Modeling In the Treatment of Obesity</u> (Doctoral dissertation, University of Montana, 1977). Dissertation Abstracts International, 1978, 38, 3389B. (University Microflims No. 77-28, 775).
- Diamond, M. J. Hypnotizability is modifiable: An alternative approach. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1980, 27, 333-340.
- Edwards, W. H. <u>Direct Versus Indirect Hypnosis for the</u>

 <u>Relief Of Chronic Pain In Spinal Cord Injured Patients</u>
 (Doctoral dissertation, United States International
 University, 1979). Ann Arbor: University Microfilms
 International, 1980.
- Engstrom, D. R. Hypnotic susceptibility, EEG-alpha, and self-regulation. In G. E. Schwartz & D. Shapiro (Eds.)

 Consciousness and Self-regulation: Advances In Research.

 New York: Plenum, 1976.
- Erickson, M.H. Deep hypnosis and it's induction. In L.M. LeCron (Ed.) Experimental Hypnosis: A Symposium of Articles On Research. New York: Macmillan Co., 1952.
- Erickson, M. H. The use of symptoms as an integral part of therapy. American Journal of Clinical Hypnosis, 1965, 8, 57-65.
- Erickson, M. H. An introduction to the study and application of hypnosis for pain control. In J. Lassner (ed.)

 Hypnosis and Psychosomatic Medicine. New York:

 Springer-Verlag, 1967.
- Erickson, M. H. A field investigation by hypnosis of sound loci importance in human behavior. American Journal of Clinical Hypnosis, 1973, 16, 92-109.
- Erickson, M. H. Hypnotic investigation of psychodynamic processes. In E. Rossi (Ed.) The Collected Papers of Milton H. Erickson On Hypnosis Vol. III. New York: Irvington Publishers, 1980.

- Erickson, M. H., & Rossi, E. <u>Hypnotic Realities</u>: <u>The Induction of Clinical Hypnosis and Forms of Indirect Suggestion</u>. New York: Irivington, 1976.
- Erickson, M. H. & Rossi, E. L. <u>Hypnotherapy</u>: An <u>Exploratory</u>

 <u>Casebook</u>. New York: Irvington, 1979.
- Erickson, M. H. & Rossi, E. L. <u>Experiencing Hypnosis</u>.

 New York: Irvington, 1981.
- Evans, M. & Paul, G. Effects of hypnotically suggested analgesia on physiological and subjective responses to cold stress. <u>Journal of Consulting and Clinical Psychology</u>, 1970, 35, 362-371.
- Ewin, D. M. Condyloma acumination: Successful treatment of four cases by hypnosis. American Journal of Clinical Hypnosis, 1974, 17, 73-78.
- Faria, J. C. di, Abbe. <u>De la cause du sommeil lucide; ou etude sur la nature de l'homme</u> (2nd ed.). D.G. Dalgado (Ed.). Paris: Henri Jouve, 1906 (originally published, 1819).
- Field, P.B. An inventory scale of hypnotic depth.

 <u>International Journal of Clinical and Expermental</u>

 <u>Hypnosis</u>, 1965, <u>13</u>, 238-249.
- Finer, B. Hypnotherapy in pain of advanced cancer. In

 Advances In Pain Research and Therapy, Vol. 2. Bonica,

 J. J. & Ventafridda, V. New York: Raven Press, 1979.
- Frankel, F. H. Hypnosis: Trance As a Coping Mechanism.

 New York: Plenum Medical Book Co., 1976.
- Friedman, H. & Taub, H. A. The use of hypnosis and biofeedback procedures for essential hypertension.

 International Journal of Clinical and Experimental Hypnosis, 1977, 25, 335-347.
- Gill, M. M. & Brenman, M. <u>Hypnosis</u> and <u>Related States</u>. New York: International Universities Press, 1961.
- Graham, G. N. Hypnotic treatment for migraine.

 <u>International Journal of Clinical and Experimental</u>

 <u>Hypnosis</u>, 1975, 23, 165-170.
- Greene, R. Combining rational-emotive and hypnotic Techniques: Treating depression. Psychotherapy: Theory, Research, and Practice. 1973, 10, 71-73.

- Greenleaf, E. The red house: Hypnotherapy of hysterical blindness. <u>American Journal of Clinical Hypnosis</u>, 1971, 13, 155-161.
- Gueguen, J. Childbirth under hypnosis (methods and results)
 Gynecology and Obstetrics, 1962, 61, 92-96.
- Haley, J. Uncommon Therapy. New York: Norton, 1973.
- Hall J. A. & Crasilneck, H. B. Development of a hypnotic technique for treating chronic cigarette smoking.

 International Journal of Clinical and Experimental Hypnosis, 1970, 18, 283-289.
- Hilgard, E. R. Hypnotic Susceptibility. New York: Harcourt, Brace, & World, 1965.
- Hilgard, E. R. Toward a neodissociation theory: Multiple cognative controls in human functioning. <u>Perspectives</u> in <u>Biological Medicine</u>, 1974, <u>12</u>, 301-316.
- Hilgard, E. R. <u>Divided Consciousness</u>: <u>Multiple Controls</u>

 <u>In Human Thought and Action</u>. New York: Wiley & Sons,
 1977.
- Hilgard, E. R. The Stanford hypnotic susceptibility scales as related to other measures of hypnotic responsiveness.

 American Journal of Clinical Hypnosis, 1978, 21, 68-83.
- Hilgard, E. R. Divided consciousnes in hypnosis: The implcaions of the hidden observer. In E. From & R. Shor (Eds.) <u>Hypnosis</u>: <u>Developments in research and New Perspectives</u>. New York: Aldin Publishing Co., 1979.
- Hilgard, E. R. The eye roll sign and other scores of the Hypnotic Induction Profile (HIP) as related to the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C): A critical discussion of a study by Frischholz and others. American Journal of Clinical Hypnosis, 1981, 24, 89-97.
- Hilgard, E. R., Crawford, H. J., & Wert, A. The Stanford Hypnotic Arm Levitation and Test (SHALT): A six-minute hypnotic induction and measurment scale. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1979, 27, 111-124.
- Hilgard, E. R. & Hilgard, J. R. Hypnosis In the Relief of Pain. Los Altos, Calif.: Kaufmann, 1975.

- Hilgard, J. R. <u>Personality and Hypnosis: A Study of Imaginative Involvement</u>. Chicago: University of Chicago Press, 1970.
- Holroyd, J. Hypnosis treatment for smoking: An evaluative review. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1980, 28, 341-357.
- Johnson, R. F. Q. & Barber, T. X. Hypnosis, suggestions, and warts: An experimental investigation implicating the importance of "believed-in efficacy." American Journal of Clinical Hypnosis, 1978, 20, 165-174.
- Karlin, R. A. Hypnotherapy and attention. <u>Journal of Abnormal Psychology</u>, 1979, <u>88</u>, 92-95.
- Katz, N. W. Hypnosis and the addictions: A critical review. Addictive Behaviors, 1980, 5, 41-47.
- Koster, S. Hypnosis in children as a method of curing enuresis and related conditions. British Journal of Medical Hypnosis, 1954, 51, 32-37.
- Kraft, W. E. & Rodolfa, E. The use of hypnosis among psychologists. American Journal of Clinical Hypnosis, 1982, 24, 249-258.
- Kroger, W. S. <u>Clinical</u> and <u>Experimental Hypnosis</u>.
 Springfield, Ill.: Charles C. Thomas, 1963.
- Kroger, W. S. & Fezler, W. D. <u>Hypnosis and Behavior</u>

 <u>Modification</u>: <u>Imagery Conditioning</u>. <u>Philadelphia</u>:

 <u>Lippincott</u>, 1976.
- Lazarus, A. A. "Hypnosis" as a facilitator in behavior therapy. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1973, 31, 25-31.
- Levit, H. Marital crisis intervention: Hypnosis in impotence/frigidity cases. American Journal of Clinical Hypnosis, 1971, 14, 56-60.
- London, P. Behavior Control. New York: Harper & Row, 1969.
- McConkey, K. M., Sheehan, P. W. & Laws, H. G. Structural analysis of the Harvard Group Scale of Hypnotic Susceptibility, Form A. International Journal of Clinical and Experimental Hypnosis, 1980, 28, 164-175.
- Melzack, R. & Perry, C. Self regulation of pain: the use of alphafeedback and hypnotic training for the control of chronic pain. Experimental Neurology, 1975, 46, 452-69.

- Morgan, A. H. & Hilgard, J. R. The Stanford Hypnotic Clinical Scale for Adults. American Journal of Clinical Hypnosis, 1979, 21, 263-269.
- Morgan, A. H., Johnson, D. L., & Hilgard, E. R. The stability of hypnotiic susceptibility: A longitudinal study. International Journal of Clinical and Experimental Hypnosis, 1974, 22, 249-259.
- Mott, T. & Roberts, J. Obesity and hypnosis: A review of the literature. American Journal of Clinical Hypnosis, 1979, 22, 3-7.
- Munn, C. Ericksonian approaches in general practice. In

 J. Zieg, Eriksonian Approaches To Hypnosis and

 Psychotherpy. New York: Bruner/Mazel Publishers, 1982.
- Nace, E. P., Worwick, A. M., Delley, R. L., & Evans, F. J. Hypnotizability and outcome in brief psychotherapy.

 Journal of Clinical Psychiatry, 1982, 43, 129-133.
- Nuland, W. & Field, P. B. Smoking and hypnosis: A systematic clinical approach. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1970, <u>18</u>, 290-306.
- Orne, M. T. Hypnosis, motivation, and compliance. American Journal of Psychiatry, 1966, 122, 721-726.
- Perry, C. & Mullen, G. The effects of hypnotic susceptibility on reducing smoking behavior treated by hypnotic technique. <u>Journal of Clinical Psychology</u>, 1975, <u>31</u>, 498-505.
- Perry, C. Is hypnotizability modifiable? International <u>Journal of Clinical and Experimental Hypnosis</u>, 1977, 25, 125-146.
- Perry, C., Gelfand, R., & Marcovitch, R. The relevance of hypnotic susceptibility in the clinical context.

 Journal of Abnormal Psychology, 1979, 88, 592-603.
- Reyher, J. & Wilson, J. The induction of hypnosis: Indirect vs. direct methods and the role of anxiety. American Journal of Clinical Hypnosis, 1973, 15, 229-233.
- Sanders, S. Mutual group hypnosis and smoking. American Journal of Clinical Hypnosis, 1977, 20, 131-135.
- Sarbin, T. R. Contributions to role taking theory. 1. hypnotic behavior. Psychological Review, 1950, 57, 255-270.

- Schenck, J. M. Psychogenic impotence with a hypnotherapy case illustration. <u>Psychosomatics</u>, 1970, <u>11</u>, 352-54.
- Shor, R E. A phenomenological method for the measurement of variables important to an understanding of the nature of hypnosis. In E. Fromn & R. Shor (Eds.), Hypnosis:

 Developments in Research and New Perspectives. New York: Adline Publishing Co., 1979.
- Shor, R. E. & Orne, E. C. <u>The Harvard Group Scale of</u>

 <u>Hypnotic Susceptibility</u>, Form A. Palo Alto, Calif.:

 Consulting Psychologists Press, 1962.
- Shor, R.E., Orne, M.T., & O'Connell, D.N. Psychological correlates of plateau hypnotizability in a sppecial volunteer sample. <u>Journal Personal Social Psychology</u>, 1966, 3, 80-95.
- Simon, M. J. & Salzberg, H. C. Electromyographic feedback and taped relaxation instructions to modify hypnotic susceptibility and amnesia. American Journal of Clinical Hypnosis, 1981, 24, 14-21.
- Sinclair-Gieben, A. H. C. & Chalmers, D. Evaluation of treatment of warts by hypnosis. <u>Lancet</u>, October 3, 1959, 480-482.
- Spiegal, H. A single-treatment method to stop smoking using auxiliary self hypnosis. International Journal of Clinical and Experimental Hypnosis, 1970, 18, 238-250.
- Spiegal, H. & Bridger, A. A. <u>Manual for Hypnotic Induction</u>

 <u>Profile</u>. New York: Soni Medica, 1970.
- Spiegel, H. The hypnotic Induction Profile (HIP): A review of its development. In W. E. Edmonston, Jr. (Ed.), Conceptual and Investigative Approaches to Hypnosis and Hypnotic Phenomena. Annals of the New York Academy of Sciences, 1977, 296, 129-142.
- Spiegel, H. & Speigel, D. <u>Trance and Treatment</u>: <u>Clinical</u>
 <u>Uses of Hypnosis</u>. New York: <u>Basic Books</u>, 1978.
- Stanton, H. E. Fee-paying and weight loss: Evidence for an interesting reaction. American Journal of Clinical Hypnosis, 1976, 19, 47-49.
- Surman, O. S., Gottlieb, S. H., Hackett, T. P., & Silverberg, E. L. Hypnosis in the treatment of warts. Archives of General Psychiatry, 1973, 28, 237-241.

- Tart, C. T. Self-report scales of hypnotic depth.

 International Journal of Clinical and Experimental
 Hypnosis, 1970, 18, 105-125.
- Tart, C. T. Quick and convenient assessment of hypnotic Depth: Self-report scales. American Journal of Clinical Hypnosis, 1978, 21, 186-207.
- Tellegen, A. On measures and conceptions of hypnosis

 American Journal of Clinical Hypnosis, 1978, 21,
 219-237.
- Tellegen, A. & Atkinson, G. Openness to absorbing and selfaltering experiences ("absorption"), a trait related to hypnotic susceptibility. <u>Journal of Abnormal</u> <u>Psychology</u>, 1974, 83, 268-277.
- Wadden, T. A. & Anderton, C. H. The clinical use of hypnosis. <u>Psychological Bulletin</u>, 1982, 91, 215-243.
- Wadden, T. A. & de la Torre, C. Relaxation therapy as an adjunct treatment for essential hypertension. <u>Journal of Family Practice</u>, 1980, <u>11</u>, 901-908.
- Wadden, T. A. & Flaxman, J. Hypnosis and weight loss: A preliminary study. <u>International Journal of Clinical and Experimental Hypnosis</u>, 1981, 29, 162-173.
- Wadden, T. A. & Penrod, J. H. Hypnosis in the treatment of alcoholism: A review. American Journal of Clinical Hypnosis, 1981, 24, 41-47.
- Wagstaff, G. F. <u>Hypnosis</u>, <u>Compliance</u> and <u>Belief</u>. New York: St. Martins Press, 1981.
- Weitzenhoffer, A. M. <u>Hypnotism</u>: An <u>Objective Study in Suggestibility</u>. New York: Wiley, 1953.
- Weitzenhoffer, A. M. Hypnotic Susceptibility Revisited.

 <u>American Journal of Clinical Hypnosis</u>, 1980, 22, 47-54.
- Weizenhofer, A. M. & Hilgard, E. R. Stanford Hypnotic Susceptibility Scale, Forms A and B. Stanford University Press, 1959.
- Wick, E., Sigman, R., & Kline, M. Hypnotherapy and therapeutic education in the treatment of obesity: Differential treatment factors. Psychiatric Quarterly, 1971, 45, 234-254.

- Zane, M. D. The hypnotic situation and changes in ulcer pain. American Journal of Clinical Hypnosis, 1966, 14, 292-304.
- Zeig, J. Ericksonian Approaches to Hypnosis and Psychotherapy. New York: Brunner/Mazel, 1982.