AN EXPERIMENTAL COMPARISON OF DIRECT AND INDIRECT APPROACHES TO HYPNOSIS USING THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C.

by

ROSEMARY VERNON-WILKINSON

B.A., University of Victoria, 1978
M.Sc., University of Victoria, 1981

A DISSERTATION SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

in the Department of Psychology

ACCEPTED
TY [redacted] UDIES
May 18, 1987 DEAN

We accept this dissertation
as conforming to the required standard

[redacted]

F. J. Spellacy, Ph.D. O. Spreen, Ph.D.

[redacted]

L. Rosenblood, Ph.D. R. Hagedorn, Ph.D.

[redacted]

D. Knowles, Ph.D. P. Bakan, Ph.D.

UNIVERSITY OF VICTORIA

July, 1986

Supervisor: Professor F. J. Spellacy

ABSTRACT

Two experiments were conducted to test the hypothesis that subjects of low hypnotizability would respond better to hypnosis using indirect suggestion than hypnosis using direct suggestion.

Subjects' scores on two hypnotizability scales were compared: one representing the direct approach to hypnotic suggestion; the other representing the indirect approach to hypnotic suggestion.

The Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer & Hilgard, 1962) was used as the the direct-suggestion approach (termed the Stanford C scale). An indirect-suggestion version of the scale was constructed by the writer for use as the indirect-suggestion approach (termed the Victoria C scale). Subjects were given both scales, in counterbalanced order. After each scale, subjects were questioned regarding relative automaticity or compliance of responses. A preference questionaire was given after testing to examine phenomenological differences between the two scales using different approaches.

After testing, subjects were divided into three groups

based on their Stanford C scale scores: a high hypnotizability group (scoring 9-12); a medium group (scoring 5-8); and a low group (scoring 0-4). They were also divided into two groups similarly: a higher hypnotizability group (7-12) and a lower hypnotizability group (0-6).

Results indicated that the subjects of low hypnotizability gained higher scores using the indirect suggestion approach to hypnosis (the Victoria C scale), than the direct suggestion approach to hypnosis (the Stanford C scale), but only when the Victoria C scale was taken after the Stanford C scale. Subjects of high hypnotizability gained higher scores using the Stanford C scale, particularly when taken after the Victoria C scale.

Results were interpreted to suggest that for these measurement scale test items, indirect suggestion approaches to hypnosis were more effective than direct suggestion for subjects of lower hypnotizability.

These findings apply only to this type of standardized measurement scale, and are not applicable to clinical hypnosis, in the form of hypnotherapy.

These indirect-suggestion approaches may be used in a

measurement scale of hypnotizability, particularly in clinical research. Such a scale would be acceptable to clinicians for clinical research, since the hypnotic techniques are similar to those used in clinical practice. The use of an indirect-suggestion measurement scale may be a more valid measure of hypnotizability when an experimental treatment using indirect approaches to hypnosis is used. However, for laboratory research using direct-suggestion hypnosis, subjects should be tested with a scale using direct suggestion.

The results of the preference questionnaire indicated that most subjects rated the indirect version more favorably than the direct version overall. Even subjects who scored equally on each scale rated the indirect hypnosis version as more relaxing, 'further into hypnosis'; suggested effects more vivid; responses less compliant and more hypnotic in quality; the approach to use for therapy; and the approach which seemed generally more effective. This can have important implications. At present, the Stanford scales are scored purely on behavioral criteria; phenomenologial experiance is not considered. And yet it is the subjective experience which distinguishes hypnotic experience fron non-hypnotic experience. The

incorporation of experiential criteria into the scoring system for measurement scales is recommended. The scoring of the Stanford C scale is made on a behavioral response, and not the subject's perceived experience. Whether these behavioral responses are an adequate measure for an experience distinguished by its phenomenological experience is a question for further examination.

Examiners:

F. J. Spellacy, Ph.D. O. Spreen, Ph.D.

L. Rosenblood, Ph.D. R. Hagedorn, Ph.D.

D. Knowles, Ph.D. P. Bakan, Ph.D.

Supervisor: Professor F. J. Spellacy

ABSTRACT

Two experiments were conducted to test the hypothesis that subjects of low hypnotizability would respond better to hypnosis using indirect suggestion than hypnosis using direct suggestion.

Subjects' scores on two hypnotizability scales were compared: one representing the direct approach to hypnotic suggestion; the other representing the indirect approach to hypnotic suggestion.

The Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer & Hilgard, 1962) was used as the the direct-suggestion approach (termed the Stanford C scale). An indirect-suggestion version of the scale was constructed by the writer for use as the indirect-suggestion approach (termed the Victoria C scale). Subjects were given both scales, in counterbalanced order. After each scale, subjects were questioned regarding relative automaticity or compliance of responses. A preference questionaire was given after testing to examine phenomenological differences between the two scales using different approaches.

After testing, subjects were divided into three groups

based on their Stanford C scale scores: a high hypnotizability group (scoring 9-12); a medium group (scoring 5-8); and a low group (scoring 0-4). They were also divided into two groups similarly: a higher hypnotizability group (7-12) and a lower hypnotizability group (0-6).

Results indicated that the subjects of low hypnotizability gained higher scores using the indirect suggestion approach to hypnosis (the Victoria C scale), than the direct suggestion approach to hypnosis (the Stanford C scale), but only when the Victoria C scale was taken after the Stanford C scale. Subjects of high hypnotizability gained higher scores using the Stanford C scale, particularly when taken after the Victoria C scale.

Results were interpreted to suggest that for these measurement scale test items, indirect suggestion approaches to hypnosis were more effective than direct suggestion for subjects of lower hypnotizability.

These findings apply only to this type of standardized measurement scale, and are not applicable to clinical hypnosis, in the form of hypnotherapy.

These indirect-suggestion approaches may be used in a

measurement scale of hypnotizability, particularly in clinical research. Such a scale would be acceptable to clinicians for clinical research, since the hypnotic techniques are similar to those used in clinical practice. The use of an indirect-suggestion measurement scale may be a more valid measure of hypnotizability when an experimental treatment using indirect approaches to hypnosis is used. However, for laboratory research using direct-suggestion hypnosis, subjects should be tested with a scale using direct suggestion.

The results of the preference questionnaire indicated that most subjects rated the indirect version more favorably than the direct version overall. Even subjects who scored equally on each scale rated the indirect hypnosis version as more relaxing, 'further into hypnosis'; suggested effects more vivid; responses less compliant and more hypnotic in quality; the approach to use for therapy; and the approach which seemed generally more effective. This can have important implications. At present, the Stanford scales are scored purely on behavioral criteria; phenomenologial experiance is not considered. And yet it is the subjective experience which distinguishes hypnotic experience fron non-hypnotic experience. The

incorporation of experiential criteria into the scoring system for measurement scales is recommended. The scoring of the Stanford C scale is made on a behavioral response, and not the subject's perceived experience. Whether these behavioral responses are an adequate measure for an experience distinguished by its phenomenological experience is a question for further examination.

Examiners:

[redacted]

F. J. Spelliacy, Ph.D.

O. Spreen, Ph.D.

[redacted]

L. Rosenblood, Ph.D.

R. Hagedorn, Ph.D.

[redacted]

D. Knowles, Ph.D.

P. Bakan, Ph.D.

TABLE OF CONTENTS

Appendix

LIST OF FIGURES

LIST OF TABLES

ACKNOWLEDGEMENTS

The contribution of many colleagues and advisors is aknowledged with gratitude:

Frank Spellacy, Ph.D., for encouragement with this topic of research, validation of the importance of research in hypnosis and hypnotizability, and for keeping me along a more rigorous scientific path than I would have been following otherwise.

Mary Weber, Ph.D., and Mark Jackman, M.A., for help with compiling the indirect-suggestion protocols.

Michael Jay Diamond, Ph.D., for his review and recommendations regarding the indirect-suggestion protocols.

Lorne Rosenblood, Ph.D., for assistance with methods.

Pat Konkin, for assistance with analysis of the data.

Ben Wilkinson, M.B., F.R.C.S.(C), for proof reading and helpful appraisal of the manuscript from the point of view of the non-psychologist.

INTRODUCTION

Hypnotizability may be defined as the relative ability to use a hypnotic induction to produce behavioral, perceptual and cognitive changes.

A measurement scale of hypnotizability for research use aims to measure a subject's performance in the hypnotic domain without benefit of practice effects, and to predict a subject's capacity to use hypnosis for an experimental procedure. These research scales of hypnotizability are designed for laboratory or clinical research. They are not designed for clinical use in an exclusively treatment oriented setting. Scales of hypnotizability test a subject's capacity to respond to a standardized hypnotic induction, by testing the subject with samples from the content domain of hypnosis. Since there is no independent measure of the depth of hypnosis as such, these samples merely measure the subject's behavioral response. No assumptions are made about the extent of hypnosis after the introductory hypnotic induction is read out. The tests simply measure each subject's behavioral response. Since the stylistic variables and measurement criteria are held constant, the inter-subject differences can be examined.

The amount and quality of laboratory research in hypnosis has increased in the last few decades, partly

clinical practice.

Thus clinicians have reservations against hypnotizability scales both on grounds of construct validity, and the generation of negative attitudes towards hypnosis.

As a result of this bias against measurement scales, clinical researchers make insufficient use of measurement scales. Thus much research reported is little more than anecdotal reports of treatment strategies - not taken seriously by those attempting to evaluate treatment programs. Without measurement of hypnotizability, the hypnotic variables of treatment are difficult to separate from non-hypnotic variables.

A further area of controversy concerning measurement scales is that of behavioral versus experiential scoring criteria. In most hypnotizability scales, certain behavioral criteria are used for scoring; phenomenological experience is not assessed. No checking is made for compliance responses. Thus it is possible for a subject to respond to the demand characteristics rather than the hypnotic factor of the suggestions. Investigation of experienced depth of hypnosis yields a respectable correlation with behavioral scores. For example, the Harvard Group Scale of Hypnotic Susceptibility showed

correlation coefficients ranging between .85-.88 between the usual behavioral score, and the subject's subjective experience of depth (Perry & Lawrence, 1980).
When subjects rate the automaticity or effort required to pass a test item, considerable differences result (Bowers, 1982). Weitzenhoffer wrote that subjective rating of the involuntariness of effects should be included in scoring of scale test items (1980). Hilgard stated that the essential difference between genuine and simulating hypnotic subjects is the subjective experience. Despite these comments from the authors of the Stanford scales, the measurement of hypnotizability has remained firmly objective. We may conclude that an objective behavioral criterion for scoring may not measure hypnotic experience as effectively as a subjective criterion.

Not all clinicians hold this bias against measurement scales, and prominent researchers in clinical areas use the scales, either research or clinical scales, and believe that they contribute favorably to the clinical situation in addition to being essential in research (Frankel, 1982; Spiegel, 1978; J.R. Hilgard, 1981). However, Spiegel has developed a scale designed for clinical use which relies heavily on subjective experience for scoring (Spiegel & Bridger, 1970). Evidently, there are variables which can affect the scoring which are not taken into consideration

in most hypnotizability scales.

The experimental approaches to hypnosis differ from clinical hypnosis along certain dimensions. These are firstly, the use of direct suggestion rather than indirect suggestion; secondly the nonpermissive approach rather than the permissive approach; thirdly, the authoritarian rather than egalitarian relationship style; and fourthly, differences in the use of imagery. Another important variable is that of the standardized protocol approach versus the individualized approach. Examples of these dimensions will be given below; a more detailed discussion is given in the chapter "Direct and Indirect Suggestions: Definition and Description".

Direct and Indirect Suggestion

Direct and Indirect suggestions differ according to the linguistic structure used in the spoken presentation of a suggestion.

When using direct suggestion, the hypnotist states to the subject that an intended effect is happening, will happen, or has happened. Examples of direct suggestion using the present, future or past tense are as follows: "Your hand is getting heavy". "Your hand will get heavy". "Your hand is heavy". These statements are

used by the subject in a manner which is unclear, but which result in some cases in manifestation of the desired effect. In the older traditional approaches, the use of present or past tense was common, and is found in the hypnotizability scales. For example, in the first test item the Stanford Hypnotic Susceptibility Scale, Form C, the suggestion of arm heaviness is reversed: "Your hand and arm are now as they were, not feeling tired or strained" (Weitzenhoffer & Hilgard, 1962, p. 17-18). In the hypnotic induction of the same scale: "Your eyelids are heavy. Very heavy. Getting heavier and heavier, heavier and heavier. They are pushing down, down, down....your eyes are blinking, blinking...closing, closing." (Weitzenhoffer & Hilgard, 1962, p. 10).

Direct suggestion is believed by many clinicians to work effectively under certain conditions: for subjects of high hypnotizability; for simple problems; acute pain; and when there is a strong belief that hypnosis will be effective. Clinicians also find that they can be used when long standing rapport and trust have been established with a client or patient. Presently, direct suggestions are usually made in the present or future tense, more often the latter.

Indirect suggestions aim to bypass the frequent

resistance to achieving a requested hypnotic effect. Resistance may take the form of a competing conscious thought which opposes the intended effect. Some examples of this type of thought may be as follows: "I can't do that"; "The hypnotist is trying to control me so I won't do that"; "There is no reason why that effect should happen"; "I want to please the hypnotist so I'll pretend I'm achieving the effect". In the indirect approach to suggestion, an idea is presented in a manner which makes it easier to accept. This may be attempted by embedding the idea within ideas unlikely to be resisted. The use of metaphor or analogy is common. Suggested effects using imagery are based on probable past experiences which have resulted in similar effects. Suggested effects may be made contingent upon a predictable event or an easy hypnotic task. A suggestion may be given which is intended to be resisted, thus binding resistance for subsequent suggestions. Because of the predictability with which direct suggestions elicit resistance for the majority of patients or subjects, ideas which are intended to be resisted may be deliberately given in this style: "Your leg won't get more comfortable yet ....and most probably not for a while, though I could be wrong." The hypnotist does not presume any special knowledge about the patient, and thus intended effects are also not given as if they have already happened, or are happening in the

present, unless there is definite evidence that this is the case. Thus a patient may be offered a choice of experiences to aim for: "I don't know if you will feel more comfortable right away, or not until later" (Erickson, Rossi & Rossi, 1976; Erickson & Rossi, 1979).

In the most extreme form of indirect suggestion, the patient is not informed that hypnosis will be used; no formal induction of hypnosis is used, and the patient directed to achieve various effects without being aware that they are intended. While this approach is useful in some clinical contexts, it is obviously inappropriate in a research setting, when informed consent, and a standardized protocol are required.

Permissiveness

In the traditional approach to hypnosis, the subject is told what to experience. "You are getting sleepy and drowsy". "Your body is becoming heavy and tired". The permissive approach used in the last few decades permits the subject to recognize a variety of experiences and make use of them as valid indications of an altered state: "You may find a comfortable heaviness, or a light floating feeling". Responses to suggestion which are atypical are incorporated into the induction: "If you

would rather keep your eyes open, do that." The hypnotist follows what the subject offers, and does not demand compliance with a particular response. When a hypnotic state is being used for a particular outcome, the specific responses are used as foundations for the suggested idea: "As you swivel your chair back and forth like that, discover if it lessens the sensation in your back or increases it."

The origins of the permissive style can be seen early in the twentieth century, but did not become incorporated into the measurement scales. However, the permissive style became used increasingly by clinicians: "The skillful operator directs the patient's mind to the sensations he is actually experiencing, and utilizes these as the starting-point from which he suggests others which he wishes him to feel." (Bramwell, 1903, p. 71).

The term "naturalistic" is found in the literature, and refers specifically to the approach of making use of the responses and experiences of the subject or patient for hypnotic induction and implementation (Erickson, 1958).

The use of permissive approaches is difficult to incorporate into a measurement scale of hypnotizability, in which subjects are scored according to one specific

behavior change. However, incorporation of some permissiveness in the hypnotic induction is possible. The test items themselves are more of a problem, as the subject is required to effect a change exactly as suggested, and within a time limit.

Authoritarian versus Egalitarian Relationship style

The older, traditional hypnotic techniques made much use of an authoritarian approach toward the subject or patient. The hypnotist would command compliance and make it evident that he or she has knowledge of what the subject will experience and do, and could control these responses. Traces of this style occur in the Stanford Hypnotic Susceptibility Scale, Form C: "You will not wake up until I tell you to..." (p. 10). "No matter what you do, you will remain hypnotized until I tell you otherwise" (p. 11). "You can become hypnotized if you are willing to do what I tell you to, and if you concentrate on the target and what I say" (p. 7).

Modern approaches are egalitarian in relationship style. There is no presumption of control of the subject by the hypnotist, but, particularly in psychotherapy, an emphasis on the patient gaining more control over certain aspects of behavior or experience.

The Use of Imagery, or Sensory Memory

Earlier this century, hypnotic suggestion was a statement that an intended effect had happened, or would happen. Several decades ago, the use of imagery was incorporated after it was realized that imagining or remembering a particular image would predispose towards physiological or behavior change.

At first, hypnotic subjects were told to imagine an event, and then informed that the intended hypnotic phenomenon was occurring.

Early use of imagery often involved asking a subject to suspend reality: "...you have not noticed the fly which has been buzzing about you....which is going round and round about your head..." (Stanford Hypnotic Susceptibility Scale, Form A, Weitzenhoffer & Hilgard, 1959, p. 22).

The use of modern imagery may allow subjects to choose an image congruent with an intended effect, using memory of similar events. "Remember what it's like to fall asleep"; "Think of what it would feel like if you had a heavy weight on your hand, so it's hard to lift up".

The following examples will illustrate differences between direct-approach and indirect-approach use of

imagery, and the difference with each relationship style. Examples from scales of hypnotizability are used whenever possible.

Imagery combined with direct suggestion and authoritarian relationship style.

".....Concentrate on your arm and listen to me...Imagine that the arm is becoming lighter and lighter, ...It's as light as a feather, it's weightless and rising in the air...rising and lifting more and more..." (Barber Suggestibility Scale, Barber & Glass, 1962).

Imagery combined with direct suggestion, but with egalitarian relationship style.

> Picture a garden hose with a strong stream of water pushing against the palm of your right hand, pushing up. ....let yourself feel the strong stream of water.....Tell yourself that the force of the water is very strong and, as you think about it, let your hand begin to rise. (Creative Imagination Scale, Wilson & Barber, 1978).

Indirect suggestion using the egalitarian relationship style, but excluding imagery:

> Can you let those hands rest ever so lightly so that the fingertips just barely touch your thighs?....As they rest ever so light, do you notice how they tend

to lift up a bit all by themselves with each breath you take? .....As that goes on, does one hand or the other or maybe both continue lifting even more? (p. 30, Erickson & Rossi, 1979).

In clinical hypnosis, each theoretical orientation makes use of imagery for more complex purposes than simple perceptual or motor change. Problem solving, performance augmentation, resolution of emotional trauma, may all be addressed with spontaneous or guided imagery.

In summary, in both direct and indirect approaches to hypnosis, imagery may be used, or may be avoided. The relationship style can be varied within direct and indirect approaches. Permissiveness likewise can be varied. The dimension of indirect suggestion can be varied separately keeping relationship style, imagery and permissiveness relatively constant.

General Differences between Clinical and Experimental Approaches to Hypnosis

A distinction will be made between three main areas of the use of hypnosis: laboratory research; clinical research; clinical hypnosis.

Experimental Hypnosis

Hypnosis in laboratory research typically involves a standardized protocol which is administered according to strict guidelines. The necessity for this standardization is in order to control the variables under examination, whether subject variables or operator variables. Whether the laboratory hypnosis is a measurement scale, or an experimental intervention, the induction and suggestions are the same for each subject.

Measurement of hypnotizability is required to identify the difference in results obtained by the experimental treatment according to level of hypnotizability. Measurement of hypnotizability is also required for investigation of correlates of hypnotizability.

Before the use of standardized measurement scales of hypnotizability in the second half of the twentieth century, standardized protocols were not used for an experimental treatment in question. Until the second half of this century, the induction of hypnosis was regarded as a simple technique, with little emphasis on stylistic or operator variables.

Differences in hypnotizability are considered by experimenters to be a function of the trait of hypnotizability, together with certain social psychological

because of measurement of hypnotizability and other methodological improvements. However, clinical research has been hindered by the dislike of many clinicians of measurement scales (Erickson & Rossi, 1980; Sacerdote, 1982).

The scales of hypnotizability are criticized for the following reasons. Firstly, it is feared that when subjects fail test items a failure response set may be encouraged, interfering with effective therapy. Even when measurement of hypnotizability is made after an experimental treatment, the concern is that the awareness of a low score on the patient's part may predispose to the belief that hypnosis is not likely to be effective.

A second area of concern is that measurement scales reflect an older style use of hypnosis, relying on direct suggestion. Modern hypnotherapy relies heavily on indirect approaches. It is thought that measurement scales may measure only response to direct suggestion.

A third concern voiced by clinicians is the low correlation between hypnotic treatment outcome and measured hypnotizability. This may be taken again to reflect the different content domain of experimental and clinical hypnosis. Clinicians believe that measurement scales do not measure the variables necessary for useful hypnosis in

factors. Skill learning on the part of the subject is not considered a major factor. Provided that any initial anxiety has been alleviated, a plateau of hypnotizability is reached, after which further gains are not expected. The role of skill on the part of the hypnotist is minimized, with more emphasis on subject aptitude.

Clinical Research

In clinical research, the experimenter compares the effect of a hypnotic treatment with another treatment, or a placebo or control treatment. Subjects are drawn from clinical populations.

Some investigators use standardized protocols for the hypnotic treatment; others use individualized hypnotic treatment, exactly as if in a clinical setting.

Measurement of hypnotizability may be made before or after treatment.

Clinical Practice

Treatment using hypnosis is individualized: in other words standardized protocols are not used.

In clinical practice, certain assumptions regarding hypnotizability differ from those held in the area of experimental hypnosis. Depth of hypnosis is

considered to be a function of the hypnotist's skill, motivation of the patient, skill learning, and rapport between hypnotist and subject. Hypnotizability as a stable trait is considered to be a less important factor.

For the induction of hypnosis, certain factors are considered necessary in the relationship between subject and hypnotist. Modern approaches to clinical hypnosis aim to establish rapport; to mobilize the subject's attention upon himself, and what the hypnotist is saying; to elicit physical relaxation, and to develop cognitive sets for motor, perceptual or cognitive change. Much of this is achieved by careful observation of the patient and feedback of observed experience. Typically, several of these observations of ongoing experience are made, and followed with a directive.

In the nineteenth century and early twentieth century the essential factors in hypnotic induction were considered to be monotony and repetition of suggestions designed to induce a drowsy state thought to increase suggestibility.

In both historical and modern approaches to hypnosis, certain hypnotic phenomena may be suggested for the patient to attempt. When used in the clinical setting, the aim of these may be to convince the patient that an adequate hypnotic state has been obtained; the therapeutic

suggestions then follow. The suggestion of hypnotic phenomena may also be used for the clinician's benefit, to demonstrate an adequate level of hypnosis for a particular need, such as a painful medical procedure. Moreover, experiencing a hypnotic phenomenon tends to deepen hypnosis according to self reports of hypnotic depth.

Indirect approaches have been used increasingly in clinical hypnosis during the last few decades. Direct-suggestion approaches tend to be used only for specific applications such as the treatment of acute pain.

To summarize, these differences between clinical and experimental hypnosis have led to a widening separation of theoretical assumptions concerning hypnosis and hypnotizability. Measurement scales of hypnotizability are ignored by clinicans since they use an outdated style of hypnosis as far as they are concerned. As far as researchers are concerned the scales need revising to gain phenomenological information.

While indirect suggestion has been the accepted approach in clinical hypnosis for some time, there has been little interest in incorporating the techniques into the hypnotizability scales. Compared with the vast amount of literature on indirect approaches presented to the clinician recently, the empirical examination of these

techniques in the laboratory has been comparatively neglected. It remains to be demonstrated that these techniques are at least as reliable in the research setting before their incorporation in the scales is warranted.

If a measurement scale were considered useful by clinicians a convergence of theory and research could occur. In addition to comparing the relative effectiveness of each type of suggestion, it is expected that the research will be a starting point for constructing a scale of hypnotizability incorporating indirect suggestion.

INDIVIDUAL DIFFERENCES IN HYPNOTIZABILITY

Historical and Theoretical Perspectives

The use of procedures which can be interpreted as hypnosis was first recorded in the 4th century B.C. The cult of Asclepios in Greece used treatments for patients involving suggestion, sleep induction, and dream interpretation (Bramwell, 1903; MacHovec, 1979). Physicians would send their patients to temples of healing, in which elaborate ceremony, chanting, prayer and physical treatment were used. Prayer focussed on the presenting problem. Sleep was induced by ritual, and the patients expected to have healing dreams. The content of these dreams was considered to give information about the patient's disorder and recommended treatment. Priest-physicians interpreted the dreams and made recommendations to the patient accordingly. Hippocrates practiced as an Asclepian priest-physician. However, differences in the capacity for responsiveness to these forms of treatment has not been recorded.

Early recognition of intrapsychic factors influencing the progress of disease are seen in the writings of Paracelsus. Paracelsus held the belief of the early sixteenth century that magnetic forces of the universe could be channelled by iron magnets to affect disease.

However, he respected the influence of psychological factors:

> The spirit is the master, the imagination is the instrument, the body is the plastic material.....It is not the curse or the blessing that works, but the idea. The imagination produces the effect.
>
> (Goldsmith, 1934, p. 23).

"Magnetic healing" was made fashionable by Mesmer, who initially used magnets, changed to magnetized rods, and later dispensed with physical tools, claiming that he himself transmitted the magnetic influence. This use of magnets was even retained by Charcot, despite contradictory evidence by his contemporary, Bernheim (Hull, 1933).

The notion that belief and will power alone could change physiological functioning is probably credited to the Marquis de Puységur in the late eighteenth century. His was the first proposal to challenge the notion held thoughout the late medieval ages that magnetic influences affected psychological and physiological states. However, for Puysegur, the will power and belief rested entirely in the magnetizer - the attitude of the patient was irrelevant (Podmore, 1909).

Theory of Individual Differences in Hypnotizability

History of Theories of Hypnotizability

Trait Theories: Aptitude and Attitude

In 1814 the Abbé Jose Custodio di Faria proposed the first psychological explanation of individual differences in hypnotizability. Faria noted that subject variables were more important in achieving hypnotic effects than hypnotist variables, and considered this tendency of some subjects to be an inherent talent: thus Faria initiated the notion of individual differences in hypnotizabiliy. He observed that the essential factor appeared to be the capacity to concentrate. Faria estimated the proportion of the population able to produce the highest hypnotic responses as one in five to six, based on his sample population of about 5,000. At that time the behavior considered to be the evidence of greatest hypnotic responsiveness was spontaneous posthypnotic amnesia, referred to as somnambulism (forgetting events occurring in the hypnotic state without this being suggested). Faria emphasized the ability of the subject rather than the skill of the hypnotist stating: "We cannot induce concentration in individuals whenever we desire; rather we find people who are inherently susceptible" (1819, p.34).

Thus, after the use of equivalent practices in ancient

Greece, the first use of hypnosis as it is practiced today can be credited to Faria in the early nineteenth century. His model of hypnosis and hypnotizability held many parallels to those of today. However, at the time he practiced, his ideas ran the risk of being ignored or denounced. If a physical process could not be identified in any treatment, it was considered to be fraudulent. The term imagination had negative connotations, being associated with what was nonexistent.

Faria termed the process concentration; this was performed by a concentrationist. The state induced was termed lucid sleep. Faria determined that an inherent ability was a necessary prerequisite for optimal use of this state - on the part of the subject, not the operator. The role of the operator as having special powers to the extent of being a magician was dispelled entirely.

Faria's techniques for hypnotic induction might consist of simply commanding "sleep!" to the subject, seated and with his eyes closed. Later, he would use eye fixation techniques, one of which required the subject to fix his gaze on Faria's open hand, which he then gradually brought closer to the subject's face until the eyes closed. This is the first recorded use of eye fixation techniques, the technique adapted for use in the Stanford Hypnotic

Susceptibility Scale, Form A and Form C.

Response to ideas or suggestions given in the hypnotic state ("lucid sleep") was seen to be a function of the ability to concentrate, to perceive what was expected, and then to produce the effect. Faria considered that acting upon suggestions did not necessarily rely upon externally presented ideas, and that in some circumstances autosuggestion could take place. Attitudes and beliefs, he reasoned, could act as suggestions, with enough power to affect physiological processes. Faria noted the placebo effect, and took this to demonstrate the influence of an idea upon internal physiology (Sheehan & Perry, 1976).

While Faria emphasized individual differences in hypnotizability, he held a physical rather than psychological explanation for this ability. Individual differences, he considered, were produced by thinness of the blood, thinner blood predisposing toward lucid sleep. Women were more susceptible than men. In a particular subject, if lucid sleep did not occur, blood letting would permit successful lucid sleep a day later. He also noted that trained subjects were more susceptible to lucid sleep; subjects who fell into nocturnal sleep more easily, and impressionable individuals were inherently more susceptible. However, in the light of his observations of

the psychological aspects of hypnosis, one can speculate that this particular explanation was an effort to make his model of hypnosis acceptable to his physiologically oriented peers.

The essential factors of Faria's model of hypnotizability were firstly, aptitude or ability; secondly, attitude; and thirdly, practice effects.

Bernheim (1886), a contemporary of Charcot, and also a physician in France, made many contributions to clinical and experimental hypnosis, making careful observations and forming theories which laid the groundwork for later behavioral theories of hypnotic behavior. Like Faria, he noted that subject variables were of greater importance than hypnotist variables in achieving hypnotic behaviors. He stated that the basic factor in hypnotic response was the capacity to transform an idea into an action - ideomotor dynamism. He mentioned what seemed to be an inherent talent, but did not form a theory of its aquisition. Training effects were noted to improve a subject's capacity to experience hypnotic phenomena. In addition, Bernheim also observed the contribution of the subject's attitude:

> It is often impossible to influence people who people who make it a point of honor to show

> that they cannot be hypnotized, that they have minds better balanced than others, and that they are not susceptible to suggestion, because such persons do not know how to put themselves into the psychical state necessary to realize the suggestion. They refuse to accept it, consciously or unconsciously; in fact they oppose a kind of counter-suggestion. (1886, p.443).

Bernheim discussed the particular rapport that occurs between hypnotist and subject; he observed the rapport to be a phenomenon of the state itself rather than the function of personality characteristics.

It is evident that Bernheim delineated the three factors of aptitude, attitude, and skill, as had Faria. However, he added the scientific method to the skills of clinical observation used by Faria. He refuted Charcot's insistence upon the magnetic explanation of hypnosis with elegant experiments, demonstrating demand characteristics and suggestion effects.

The Psychopathology Theory of Hypnotizability

Charcot's theory of hypnotizability rested upon two assumptions. Firstly, that hypnosis could only be induced in hysterical subjects. Secondly, by inference, the state

of hypnosis was a pathological state. Hypnotic phenomena were purely a function of neurological changes, influenced by magnetic forces, and independent of imaginative activity, suggestion, skill, talent or relationship factors. Magnets were used to stimulate nervous system effects such as catalepsy. In the case of a hysterical catalepsy, by drawing the magnet from that area to a different part of the body, Charcot demonstrated that the catalepsy would move in response. He termed this phenomenon "transference" (Hull, 1933, p. 14). Bernheim demonstrated that this effect demonstrated by Charcot was simply a demand characteristic or suggestion effect.

Janet likewise perceived the capacity to experience hypnosis as a manifestation of hysterical dissociative states, and therefore a pathological state. The psychologically healthy individual would not experience the necessary dissociation required to demonstrate hypnotic phenomena (1889).

This theory is of interest in the history of hypnosis only: there are no current theories proposing a psychopathology theory of hypnotizability.

Current Theories of Individual Differences in Hypnotizability

Social Psychological Theory

Sarbin (1950) proposed a role-taking model of hypnotic behavior. Differences in the capacity to undertake the hypnotic role were considered to be a trait, dependent upon imaginative involvement. As a trait, it is thus distinguished from attitude or motivation to perform the hypnotic role. Sarbin perceived this role-taking ability as analogous to theatrical acting ability. An actor would have a varying degree of ability along a continuum. At one end of this continuum, he would be able to lose self-awareness and identify with the role; or at the other end of the continuum, retain self-awareness and act in a merely technical manner.

Likewise, hypnotic talent depended upon role-taking behavior, acting "as if" the presented idea were actually occurring. The capacity existed to respond to physically absent imaginary stimuli as if they were actually present. This could be improved with practice, motivation, and reinforcement of the hypnotist, but the basic talent was the most important factor. Similarly, acting ability was the most important factor in acting, without which the most favorable attitudes would not make a highly talented actor.

Developmental Interactive Theory of Hypnotizability

This theory was proposed by E. R. Hilgard (1965). The capacity for maximum experience of hypnosis is inborn. This capacity is maintained by the child's involvement with imaginative activities which permit a detachment or dissociation from the normal reality orientation. Parental and other environmental influences are necessary for maintaining this ability. In unfavorable circumstances, the capacity will not be fully developed, and lost by the critical period for acquisition. Cognitive-Behavioral Theory

T. X. Barber proposed a radically different theory of hypnotizability (1958). While there are some similarities to Sarbin's theory, there is one fundamental difference. For Barber, the essential factor in different degrees of response to hypnosis is the subject's attitude. The degree to which an individual is willing to imagine and think along awith suggestions determines the degree of response. No trait of hypnosis is proposed, merely the motivated attitude and imaginative involvement. Barber and his associates have studied the techniques that subjects use when passing a hypnotic suggestion. Typically, subjects would actively imagine an event congruent with the suggested idea, if no imagery were presented with the suggestion. Success in passing the

item was associated with this independent use of non-suggested imagery. If imagery was suggested in a test item, subjects sometimes disregarded it and used one of their own that seemed more effective (Spanos, 1971; Spanos & Barber, 1972; Spanos & Ham, 1973).

The essential difference between this theory and that of Sarbin's, is that of aptitude and attitude. For Sarbin, the aptitude to lose oneself in the imagined role is critical; for Barber, the issue of capacity to imagine is disregarded - the attitude is all important.

Heritability Theory

The robustness of hypnotizability as a trait led to interest in genetic models. Could the trait be a function of genetic transmission, and not purely environmental influences?

Two studies found higher correlation between the hypnotizability of monozygotic than dizygotic twins, and non-twin siblings, suggesting this possibility (Morgan, E.Hilgard, & Davert, 1970; Morgan, 1973). However, the presence of environmental factors cannot be ruled out, since typically identical twins may be treated more similarly than non-identical twins. Since twins not raised by their natural parents are no longer separated,

but reared together, further comparisons cannot be made.

THE HISTORY OF MEASUREMENT OF HYPNOTIZABILITY

Between the late nineteenth century and the first quarter of the twentieth century, hypnotizability was informally estimated by a subject's capacity to produce or experience hypnotic phenomena -- samples from the domain of hypnosis arranged on a continuum of difficulty or likelihood of being experienced. The assumption was made that if these test items from the domain of hypnosis could be elicited, that individual could use the same underlying psychological mechanisms for therapy. The term depth was used in such a way that a given hypnotic behavior implied a certain depth of hypnosis.

Liébault (1866) was one of the first practitioners of hypnosis to make a systematic description of the order of difficulty of hypnotic phenomena. The degrees of implied hypnotic depth were based on observations of the subject made by the hypnotist. The first degree was characterized by drowsiness, and accompanied by eyelid catalepsy. In the second degree, suggested catalepsy occurred; physical relaxation occurred, and subjects remained unaware of their surroundings. Increased responsiveness to suggestions was noted. The third degree was defined by absence of "tactile sensibility" (spontaneous skin anesthesia). Involuntary movements would occur when suggested, such as arm levitation or rotation. The fourth degree was

characterized by loss of awareness of the surroundings, and insensibility to all conversation or instructions except those of the hypnotist. Both the fifth and sixth degrees were those termed the somnamulistic state. In the fifth degree, light somnambulism was indicated by vague, confused memories of events occurring in the hypnotic state. Subjects could hallucinate suggested phenomena. In the sixth degree, deep somnambulism was described, with spontaneous amnesia which could not be reversed in the waking state - although these memories could be revived with subsequent hypnotic induction (Liébault, 1886).

In 1892, a survey by Schrenck-Notzing resulted in his "First International Statistics of Susceptibility to Hypnosis" (Bramwell, 1903, p.57). Fifteen practitioners of hypnosis were asked to classify the patients they had worked with according to criteria of susceptibility from the unhypnotizable ("refractory"), to the somnambulistic, and various depths of "sleep" in between.

These normative data reported above are reasonably consistent with those given by hypnotic measurement scales today.

It was not until 1930 that a systematic approach was offered to the measurement of hypnotizability (White,

1930). For the first time responses to hypnotic suggestion were scored, and used as a measure of hypnotizability, or hypnotic susceptibility. No formal protocol was used.

Davis and Husband (1931) constructed a more detailed scale, but again without a standardized protocol. Samples from the classic domain of hypnosis were used, testing suggested motor movements; motor challenges; suggested amnesia; perceptual alterations such as positive and negative sensory hallucinations; dreams and age regression. The induction into hypnosis was not standardized, and neither was the wording of the test items. An inference regarding depth of hypnosis was made according to the difficulty of items achieved. Normative data were compiled from the sample of 55 subjects.

Barry, MacKinnon and Murray (1931) also constructed a scale concurrently; also without a formal protocol for the wording of the hypnotic induction and test items. Normative data were given for the sample of 73 subjects.

Friedlander and Sarbin (1938) constructed the first scale scored according to predetermined behavioral responses rather than subjective depth estimates. A formal protocol for administration was composed, both for the hypnotic induction, and for the test items. Items

from the classic domain of hypnosis were again used, and again compiled rationally rather than empirically, but emphasizing those items which could be scored behaviorally. Items were Guttman scaled, so that subjects were administered the test items in order of increasing difficulty. Responses were dichotomously scored, with a final score indicating the most difficult item passed. Depth of hypnosis was inferred from this total score. Thus, simple waking suggestions were followed by more difficult items under hypnosis, beginning with ideomotor items (moving in response to a suggested idea), followed by motor challenge items (inability to move on command), then dreams and age regression, and finally perceptual and cognitive distortions (sensory hallucinations and amnesia). Normative data were presented for the sample of 109 subjects.

In 1941 Katkov constructed a Stages of Depth scale (Platonov, 1959). This scale represented the Russian school of hypnosis, based on Pavlov's theory of hypnosis -- cortical inhibition. The scale was not used in Europe or North America. It was designed to measure hypnotizability; an inference of hypnotic depth was made from the observed behaviors. No normative data were published in English.

Eysenck and Furneaux constructed a scale similar to that of Friedlander and Sarbin. This scale was used for correlative research with personality and psychopathology variables (1945); normative data were given for the 60 subjects tested.

The Stanford Scales were based on the same or similar samples used in the Friedlander and Sarbin scale. The first of these was the Stanford Hypnotic Susceptibility Scale, Form A and Form B (Weitzenhoffer and Hilgard, 1959). This is abbreviated to SHSS:A and SHSS:B. The scale correlated .95 with the Friedlander and Sarbin scale. Essentially though, the Stanford scales were a revision of the earlier scales, which explains the very high correlation. The correlation of the SHSS:A and SHSS:B averages .83. Test-retest reliability of the SHSS:A over several years has been reported as .6 (Morgan, Johnson & Hilgard, 1974). The original norms of SHSS:A and SHSS:B were based on 124 undergraduates.

A variation of the SHSS:A was constructed for group administration and self-scoring of responses: the Harvard Group Scale of Hypnotic Susceptibility (Shor & E.C. Orne, 1962). This is abbreviated to HGSHS:A. Correlations with the SHSS:A are between .83 to .89 (Bentler & Hilgard, 1963). This scale is widely used as a group screening method, after which further testing is often administered

individually. For large-scale group research it is often used as the only measure of hypnotizability.

The early Stanford scales and the Harvard scale show quite high correlations with each other. However, since each scale is merely a variation of the other, this is not surprising. The hypnotic induction is the same for each; many of the test items are identical. A markedly different type of scale might say more about the construct validity of the sampling domain. And such is the case with a controversial scale designed for clinical use, the Hypnotic Induction Profile (Spiegel & Bridger, 1970).

Originally, correlations of the Hypnotic Induction Profile with the Stanford and Harvard scales were only low to moderate. However, a recent comparison of SHSS:C scores and the Hypnotic Induction Profile with revised scoring has revealed a correlation of .63, which compares very favorably with the correlation of the Stanford Hypnotic Susceptibility Scale, Form C, with the other Stanford and Harvard scales (Frischolz, Tryon, Vellios, Fisher, Maruffi & Spiegel, 1980). What is remarkable however, is the difference in the scale. In the Hypnotic Induction Profile (abbreviated to HIP), the hypnotic induction is minimal, and is interspersed with the test items. Only one test suggestion requiring a response is

used, but scoring is based on speed and ease of response, phenomenological experience, and unsuggested hypnotic experience. As a clinical scale, the reason for constructing this scale was not for research use, but rather to predict an all-or-non capacity for usable hypnosis in therapy; to describe certain response styles reflecting personality; and to predict the outcome of psychotherapy in general.

T.X. Barber and Glass (1962) constructed a scale of suggestibility, which, like the Stanford Hypnotic Susceptibility Scale, Form C, could be administered with or without a hypnotic induction. Normative data were given for results without using the induction. Barber's theory of hypnotic behavior does not include the notion of hypnosis as a particular state, and therefore subjects' scores on the scale are not construed as hypnotizability scores. When used with the hypnotic induction, this scale correlated between .62 and .78 with the SHSS:A (Ruch, Morgan & Hilgard, 1974).

Wilson and T.X. Barber (1978) constructed the Creative Imagination Scale. This was designed to provide a scale more permissive than earlier scales (including T.X. Barber's own Suggestibility Scale, 1962), which Barber considered too authoritarian. The emphasis in the scale is on the subject's imaginative abilities to effect a

change. The test items are more sensory than motor or cognitive, and scored largely by phenomenological experience. While this scale differs from earlier direct suggestion scales, the approach is still non-permissive. Subjects are provided with sensory imagery to use, and required to direct their thinking and responses accordingly. The style of the hypnotic suggestion is direct, rather than indirect. The relationship style however, is egalitarian and not authoritarian. A major emphasis in this scale is on the subject's own effort and responsibility in achieving the phenomena. As such, the scale could be useful as a training procedure in a clinical setting. As a research tool, it represents a rather restricted style of hypnosis, and is not extensively used.

The Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer & Hilgard, 1962) was constructed soon after form A and B, as need arose for a scale with more difficult cognitive items. In hypnosis research it is regarded as the single most informative scale available for practical use. This scale will be discussed fully in the chapter "The Stanford Hypnotic Susceptibility Scale, Form C: Structural and psychometric properties".

An even more difficult and detailed scale for single subject research was constructed, the Stanford Profile

Scales, 1 and 2 (Weizenhoffer & Hilgard, 1963). These scales were designed for subjects with previously demonstrated high hypnotic ability, to provide a profile of various talents within the hypnotic domain, so that subjects could be identified for research in a particular cognitive area. Six subscales are isolated: cognitive distortion; positive hallucination; negative hallucination; dreams and regression; amnesia and posthypnotic compulsions; and non-volitional motor responses. These scales appear to be little used in the field, perhaps because of their undue length.

The Stanford Hypnotic Clinical Scale for Adults (Morgan & J.R. Hilgard, 1978) was constructed to provide measurement of hypnotizability for clinical use, especially for patients requiring shorter testing with fewer motor items because of physical difficulties and illness. However, the items and presentation of the tests is very similar to the other Stanford scales, and thus the scale has also become increasingly used in research settings to provide a shorter scale to fit the experimenter's needs. This five-item scale correlated .72 with the SHSS:C in a healthy student sample.

The Stanford Hypnotic Arm Levitation Induction and Test (SHALIT) (Hilgard, Crawford, & Wert, 1979) was constructed to provide a brief individual screening of hypnotizability

for either clinical or experimental purposes. As with the Hypnotic Induction Profile, one test suggestion of hand levitation is given, and then scoring is based on various behavioral and experiential criteria. The correlations of this scale with the Stanford Hypnotic Susceptibility Scale, Form C ranged from .4 to .52 for a sample of 27 subjects (Hilgard, Crawford, & Wert, 1979).

THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C

STRUCTURAL AND PSYCHOMETRIC PROPERTIES

The Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer & Hilgard, 1962) was constructed by the authors of the Stanford Hypnotic Susceptibility Scale, Forms A and B in order to provide more test items requiring cognitive alterations. These items are the most difficult, testing negative and positive hallucinatory capacity in addition to the usual test items. As such, the scale is more difficult, with lower mean scores for samples compared with earlier scales. As a result, this scale is more able to delineate groups of highly hypnotizable subjects, and subgroups within that classification.

The Stanford Hypnotic Susceptibility Scale, Form C (abbreviated to the Stanford C Scale) consists of 12 test items administered after an optional hypnotic induction. The first test item requires a response which mimics a hypnotic response by producing a normal physiological change, and is not a true hypnotic response (Tellegen, 1978). Succeeding items are administered in order of increasing difficulty, with the exception of the posthypnotic amnesia item which is given out of order at the end of the scale.

If the test is terminated after three consecutive failures, a subject sample will correlate .94 with the complete scale (Weitzenhoffer & Hilgard, 1962).

As with the Stanford Hypnotic Susceptibility Scale, Forms A and B (abbreviated to SHSS:A and SHSS:B) the distribution is slightly bimodal, the modes of the Stanford C Scale being 2 and 10, while those of SHSS:A and B are 4 and 11, indicating the increased difficulty of the Stanford C Scale.

The percentage of each test item passed by the normative sample can be seen in Table 11.

Point biserial correlations of each item with the total scale (minus the compared item) ranged from .87 for negative visual hallucination to .49 for an ideomotor item. When the items of Stanford C Scale which differ from SHSS:A & B are compared with the SHSS:A or HGSHS:A, (the Harvard Group Scale of Hypnotic Susceptibility, Form A) tetrachoric correlations are around .62 (Evans & Schmeidler, 1966).

The Kuder-Richardson reliability coefficient for the Stanford C Scale has been estimated at .85. This compares

favorably with the different samples of the HGSHS:A which ranged from .76 to .84 (Lawrence & Perry, 1982).

Factor Structure of the Stanford C Scale

Hilgard's factor analysis (Hilgard, 1965) for a sample of 307 subjects indicated three factors.

The first factor was taken seen to represent ideomotor inhibition. The amnesia item loaded most highly on this factor; with negative visual hallucination, arm rigidity and arm immobilization following. Anosmia also loaded, although not as heavily.

The second factor was interpreted as a difficulty factor. Two motor items loaded most highly on this factor (passed by 92% and 88% of subjects respectively). These are the two easiest items on the scale. Two other items loaded sufficiently to be included in this factor: the dream item, and the age regression item.

The third factor appeared to be a positive hallucination factor. The hallucinated voice, mosquito hallucination, and taste hallucination loaded in that order.

Experiments using variations of the Stanford C Scale protocol

The protocol for the hypnotic induction was regarded as optional by the authors, so that different inductions could be used, or no induction at all according to research needs. However, normative data are based on samples using the induction provided.

One study compared the regular induction into hypnosis with substitution of suggestions of alertness, attentiveness and activity for the suggestions of sleep and drowsiness. Subjects were required to ride an exercise bicycle thoughout the entire procedure. Behavioral scores were comparable, despite considerable differences in phenomenological experience (Banyai & Hilgard, 1976).

Two versions of the Stanford C Scale have been adapted for group administration and self-scoring just as the SGSHS:A is an adaptation of the SHSS:A. Neither has yet been published. (Crawford, undated ms; Sanders & Schubot, 1969). The induction into hypnosis in Crawford"s version has been changed to given instructions for relaxation instead of sleep and drowsiness.

One study was reported in which the author made a taperecording of the Stanford C Scale for administration.

This was not intended for use in other studies, and complex scoring criteria were added to gain information regarding subjective experience. (Tart, 1970).

An alternate form of the Stanford C Scale was constructed for repeated measures use in one particular study (Hilgard & Tart, 1966). This is now unavailable.

The Relationship of the Stanford C Scale with other Measures of Hypnotizability

The Stanford C Scale was found to correlate .72 with the SHSS:A; each new item on Stanford C Scale correlated .62 with the SHSS:A (Hilgard, 1962). The Stanford Hypnotic Arm Levitation Scale correlated .52 with the Stanford C Scale (Hilgard, Crawford & Wert, 1979); and the Hypnotic Induction Profile with revised scoring and data analysis .63 (Frischolz et al, 1980). The Stanford C Scale correlated with the Stanford Hypnotic Clinical Scale for Adults .72 (Morgan & J.R. Hilgard, 1979).

DIRECT AND INDIRECT SUGGESTIONS

DEFINITION AND DESCRIPTION

The use of the term suggestion here refers to a hypnotic suggestion, which may be either a directive, or an informative statement.

A direct suggestion is constructed as a simple statement which is easy to comprehend. If compound sentences are used, they may be either of the following: independent suggestions linked together; or contingent suggestions, in which the desired effect is suggested to be achieved following a statement or behavior of the hypnotist. If imagery is used, there is a direct cause and effect statement regarding the influence of the thought upon motor, sensory or cognitive change.

An indirect suggestion is constructed as a complex statement. Compound sentences may be used in two main forms: either a direct suggestion is combined with rationalizing statements; or the suggestion is presented ambiguously, so that its meaning is unclear. Contingent statements are based on behavior or experience of the subject. If imagery is used, any motor, sensory or cognitive change arises from implication without being requested directly.

Suggestions do not fall dichotomously into these categories. On a continuum, a suggestion may be very direct, very indirect, or at some point in between. The types of indirect suggestions have been identified and described by those using indirect approaches for clinical use (Erickson, Rossi & Rossi, 1976; Erickson & Rossi, 1979; Rossi, 1980). The degrees of directness-indirectness presented here are the writer's attempt at classification.

The scales of hypnotizability cited will be abbreviated as follows: the Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer & Hilgard, 1962) as the Stanford C Scale; the Stanford Hypnotic Susceptibility Scale, Forms A and B (Weitzenhoffer & Hilgard, 1959) as SHSS:A and SHSS:B; the Stanford Profile Scales of Hypnotic Susceptibility, Forms 1 and 2 (Weitzenhoffer & Hilgard, 1967) as SPS:1 and SPS:2.

Direct Suggestions, Type 1

1. The most direct type of hypnotic suggestion is simply a statement of intended effect or behavior. For example: "Now the hand and arm feel heavy, as if the weight were pressing down..." (Stanford C Scale, p. 17); "You are relaxed" (Stanford C Scale, p. 14); "your hand is rising, lifting, lifting up in the air...That's right,

it is lifting, up...up..." (SPS:1, p. 6).

2. The subject may be asked to suspend reality. For example, in suggesting a hallucination the subject may be told that the hallucinated object is actually present: "You may not have noticed a mosquito that has been buzzing, singing..." (Stanford C Scale p. 19). "Now I am going to let the element get really hot...too hot for anyone to hold...it's getting much warmer now...heating up...getting hot...hot... (SPS:1, p. 45).

Direct Suqestion, Type 2

A contingency statement based on the hypnotist's behavior may be added: "Your hand is rising, lifting, lifting up in the air...that's right (regardless of response), it is lifting, up...up... I am going to count to twenty, and this will help your hand to rise..." (SPS:1, p. 6). "Soon I shall begin to count from one to twenty. As I count you will feel yourself going down farther and farther into a deep restful sleep" (Stanford C Scale, p.10).

Direct Suggestion, Type 3

A direct suggestion for motor, cognitive or behavior change can be modified with time permissiveness. This makes the suggestion less direct: "Your headache can now

leave as soon as your system is ready for it to leave" (Erickson & Rossi, 1979, p. 24). "In a few moments you will be unable to smell anything" (Stanford C Scale, p. 26). "Sooner or later your hand is going to lift" (Erickson & Rossi, 1979, p.24)

These types of statements have been defined as indirect suggestions by Rossi (Erickson & Rossi,1979), who refers to them as truisms using time. However, the suggestion is constructed directly ("your hand is going to lift") with only time permissiveness to allow the subject some leeway in response. They are not appreciably different from the contingency suggestions based on hypnotist behaviors.

Direct Suggestion, Type 4

Direct Associative Focussing

A compound sentence is used which begins with the subject thinking of the intended effect, and is followed by the direct suggestion. This construction is based upon the principle that thinking, remembering or imagining an event brings about related events - ideosensory and ideomotor dynamisms. These principles were first identified by Bernheim (1886). These suggestions can be classified as direct suggestion as the subject is instructed to think and imagine a specific event. The

contingency aspect, although a subject behavior, is however, requested by the hypnotist, and not a naturally occuring event occurring from the subject. This type of suggestion could be classified as being slightly indirect on the grounds that the subject is performing the prerequisite thinking. For example, "As you think of relaxing, your muscles will relax" (Stanford C Scale, p. 8). "As you imagine your arm becoming stiff, you will feel it become stiff" (Stanford C Scale, p. 21).

Indirect Suggestion, Type 1

In this class of suggestion, a direct suggestion is embedded within a compound sentence including statements which rationalize the suggestion. These are the least indirect of the indirect suggestions.

Contingencies

The performance of the suggested effect is made contingent on ongoing or inevitable subject behavior or experience. The description of ongoing behavior may be referred to as developing a "yes set" (Erickson & Rossi, 1979); and "understanding and following" (Erickson & Rossi, 1979). For example, "you are sitting very still in your chair, and your eyes are closed, and you are aware of the sounds around, and relax all the way down" (Gilligan & Carter, personal communication, 1984). "As you continue

sitting there, you will find yourself becoming more relaxed and comfortable" (Erickson & Rossi, 1979, p. 33). "As your hand lowers, you will find yourself going back in time to the source of that problem." (Erickson & Rossi, 1979, p. 33). "The more relaxed, the more comfortable". "Each time you breathe in, your hand gets lighter".

The suggestion can be phrased more permissively within the same structure; the use of "can" rather than "will" denotes that the hypnotist does not have control over the subject's behavior and experience. "As you mentally review the source of that problem your unconscious can develop some tentative ways of dealing with it." (Erickson & Rossi, 1979, p. 33). "You can notice sitting very still in your chair, and you can notice how your breathing has slowed down, and you can notice how the relaxed feeling begins." "Every time you breathe in, notice how your hand can feel lighter." "And notice, too, how when you exhale, you can just feel that relaxation beginning to sink in..." (J. Barber, 1977, p. 143).

The contingency statements can be placed after the suggestion, in which they may operate by acting as reinforcers to the suggested effect being accomplished. For example, "Your eyes will get tired and close all by themselves as you continue looking at that spot." "You will find yourself becoming more relaxed and comfortable as

you continue sitting there with your eyes closed" (Erickson, Rossi & Rossi, 1976 p. 117).

The Implied Directive.

The addition of a time-binding statement for behavioral response as a marker for unconscious processing turns this type of suggestion into an implied directive (Erickson & Rossi, 1976). For example, "As soon as your unconscious knows it can again return to this state comfortably and easily to do constructive work, you will find yourself awakening feeling refreshed and alert. (Erickson & Rossi, 1980, p. 465). "As soon as your unconscious has reached the source of that problem, your finger can lift" (Erickson & Rossi, 1979, p. 41).

The Apposition of Opposites.

The direct suggestion is opposed by a seeming contradiction. For example, "As that fist gets tighter and tense, the rest of your body relaxes" (Erickson & Rossi, 1979, p. 34). "As your jaw becomes more and more numb and insensitive, notice how your left hand becomes more and more sensitive' (Erickson & Rossi, 1979, p. 34). "When you next open your eyes you will have an unusually clear memory of all that, but without the feelings you had then". "You can forget to remember or remember to forget" Erickson, Rossi & Rossi, 1976 p. 202).

Indirect Suggestion, Type 2.

In this class, the complexity of syntax renders the suggestion ambiguous or difficult to understand. The aim is to make use of any resistance, and distract conscious attention from the suggestion.

Questions

As in the Socratic method of questioning, the speaker gives a series of pointed questions designed to guide the subject into choosing the appropriate answer. For example:

> And what will be the effective means of losing weight? Will it be because you simply forget to eat and have little patience with heavy meals because they prevent you from doing more interesting things? Will certain foods that put on weight no longer appeal to you for whatever reasons? Will you discover the enjoyment of new foods and new ways of preparing them and eating so that you'll be surprised that you did lose weight because you really didn't miss anything? (Erickson & Rossi, 1979,p. 31).

Binds

A bind is a choice between alternatives, when alternatives can be a conscious, voluntary response.

Time Binds:

"Will you be ready to get over that habit this week or the next?" (Erickson, Rossi, & Rossi, 1976, p. 65)

Double Binds:

Double binds are said to occur when choices cannot be made on a conscious, voluntary level. They were first identified as a type of verbal communication by Bateson, Jackson, Haley, & Weakland (1956). The application of double binds for use in hypnosis was first outlined by Haley (1963). The Conscious-Unconsious double bind is one example:

> If your unconscious wants you to enter trance, your right hand will lift all by itself. Otherwise your left hand will lift. Since you've been sitting quietly and there is yet no hand response, you can wonder if your unconscious would prefer not to make any effort at all as you go into trance. It may be more comfortable not to have to move or talk or even bother trying to keep your eyes open. (Erickson & Rossi, 1979, p. 45).

The use of time permissiveness in the example above differs from that used in direct suggestion: in direct suggestion, the behavior or effect is accomplished by the stated time; in indirect suggestion, either the time to be

taken is open ended, or the effect is only requested to begin.

The double-Dissociation Double Bind:

> You can as a person awaken, but you do not need to awaken as a body. You can awaken when your body awakens but without a recognition of your body. You can write that material without ever knowing what it is. Then you can go back and discover you know what it is without knowing that you have written it. (Erickson & Rossi, 1979, p. 47).

Negatives, Doubts and Paradox

The use of negatives and paradox is intended to bind resistance by permitting the subject to resist the direct first clause of the suggestion. For example: "You don't need to go into hypnosis until you are really ready". "You won't do it until your unconscious is ready". "You won't go deeply into hypnosis yet". "And you can do that, can you not?" "The analgesia won't start yet". "The unimportance of keeping your eyes open". "Your hand won't be numb before I've counted to five". "Don't go deeply into hypnosis".

The expression of doubts engages rapport with the subject's own possible doubts. For example: "I'm quite sure that it will seem to you that I have really done

nothing, that nothing has happened at all. You may feel a bit more relaxed, in a moment, but I doubt that you'll notice any other changes" (J. Barber, 1977, p. 42). A fuller example applied to pain control:

> Or maybe you can remember what it was like when the nerve block stopped the pain. That was really a great experience, and though it might happen again, I really doubt that it could happen today. In fact...it is unlikely that it is the result of anything we've done for you here today...who knows how much comfort you can have? I don't. I'm sure you can have some relief. Who couldn't. But just how much is really as unclear to me as it is to you. (J. Barber, 1982, p. 56-57).

Apposition of Opposites

"As you tighten that fist, the rest of your body can relax more in contrast". "As your hand feels light and lifts, your eyelids will feel heavy and close". "You can forget to remember or remember to forget".

Limiting the range of response

In this type of indirect suggestion, a choice of responses is presented to the subject, but this permissiveness occurrs within a narrow range of response.

For example: "Now you can notice just where that arm is feeling something and where it is not. Just where it may tingle or be numb or not feel anything at all". "Your arm will feel entirely comfortable, at ease, or it may lose all feeling, or it may develop a wooden feeling, a feeling of not being your arm". (Erickson & Rossi, 1976, p. 98)

Open Ended Suggestions

This technique is designed to accept any response or lack of response as a valid hypnotic response. (The following example designed to promote hand levitation was not given by E. Rossi as an example of open ended suggestions, but instead covering all classes of response).

> Soon you will find the weight problem being dealt with by eating more or less of the right foods you can enjoy. You may first gain weight or lose it or remain the same for a while as you learn the really important things about yourself. (Erickson & Rossi, 1979, p. 27)

Indirect Suggestion, Type 3

This category is more indirect than Indirect 1 in the sense of being more obscure; the suggestion is presented in such a manner that it is not evident that it is a suggestion. In clinical practice the aim is to bypass resistance to therapy. One important assumption of

clinical practice is that the client or patient is believed to accept relevant suggestions at an unconscious level (or preattentive level) which are ego syntonic (or adaptive). As such, the subject is motivated to enact suggestions. However, in laboratory situations, such motivational elements are missing, and some of these techniques may be less applicable.

Implication

The use of suggestion by implication aims to set off certain associations and trains of thought within the subject or patient. Many of these may be triggered by subtleties of tone and emphasis. However, in terms of linguistic construction, they are indirect references to the desired effect. Some of these may use truisms from the realm of ordinary experience. For example: "I don't know how your behavior will change." (Erickson, Rossi, & Rossi, 1976, p. 61). "Your right hand is going to move up toward your face; you might like to think your left hand isn't going to move". In this compound sentence, the first statement is a direct suggestion, the second an indirect suggestion using implication. Erickson reported that subjects typically move the right hand quickly and voluntarily, and the left hand moves in a hesitant more autonomous manner demonstrating the involuntary response to

the hypnotic suggestion (Erickson & Rossi, 1981, Vol. 1 p 498).

Implication using Indirect Ideodynanamic Focussing

These suggestions use truisms from the realm of ordinary experience and behavior designed to remind the subject of these processes and thus evoke related experiences. For example: (to promote cooling in burns): "Most people enjoy the refreshing coolness of a light breeze" Erickson & Rossi, 1979, p. 23). To facilitate ideomotor signaling: "Everyone has had the experience of nodding their head 'yes' or shaking it 'no' even without realizing it" (Erickson & Rossi, 1979, p. 23). "When we are tired, our eyes begin to blink slowly and sometimes close without our quite realizing it" (Erickson & Rossi, 1979, p. 23).

Interspersal Technique

Ordinary speech about something not necessarily relevant to the patient is interspersed with suggestions for a desired effect in such a manner that they are undetected when listening to the logical sequence; voice intonation emphasizes the suggestions slightly with the intention of their being picked up unconsciously. The following example is from an exerpt of a transcript of Erickson using the technique for a patient with terminal pain (Rossi, 1980, Vol. 4, p. 270). Hypnotic suggestions

are underlined here for emphasis.

> Each day it grows and grows and grows, it's so comfortable, Joe, to watch a plant grow and not see its growth, not feel it, but just know that all is getting better for that tomato plant that is adding yet another leaf and still another and a branch, and it is growing comfortably in all directions.

Metaphor

A metaphorical statement can be used to represent the intended effect without any allusion to the subject. deepening the state of hypnosis without that intention being evident. A typical example is the staircase countdown used in the indirect version of the Stanford C Scale. Consciously, the words "further down the staircase" and "deeper down the staircase" imply that the subject will imagine simply going further and deeper down a staircase. However, subjects report a sense of being more deeply in hypnosis as a result of this task, and so it may be the case that subjects use this as a metaphor for going further and deeper into hypnosis: "And down another step...and further down...6...and even further...7...until ...8...just drifting down your staircase...9...another step...deeper..." (Victoria C Scale).

Metaphor can be used to present a suggestion, for

example, for amnesia for the content of a hypnotic session: "And as you awaken from hypnosis, as if from a sleep when you wake up and find those dreams fade".

When used in psychotherapy metaphor can be used for therapeutic suggestions in which the therapist gives a statement analagous to the desired results. Metaphorical stories are sometimes used.

Approaches to Hypnosis: The Direct Approach and the Indirect Approach

The Indirect Approach

The classification of suggestions above deals with the specific construction of sentences used in hypnosis. However, the general approach to hypnosis can be described as indirect or direct.

Factors of the Direct Approach

1 Direct suggestion.

2 Repetition of suggestion.

3 Use of specific induction techniques for hypnotic induction.

4 The use of standardized protocols for research.

5 Authoritarian relationship style.

Factors of the Indirect Approach

1 Indirect suggestion.

2 Non-repetition of suggestion (Erickson & Rossi, 1979).

3 The naturalistic approach (or utilization approach). This refers to the acceptance and acknowledgement of the subject's behavior and experience, resulting in rapport with the hypnotist, and an inner focus of attention on the part of the subject. This leads easily to the altered state of consciousness.

4 Egalitarian relationship style (see Introduction).

Within each approach, the contrasting style of suggestions is can be used in addition to the basic approach.

The use of Direct Suggestion within the Indirect Approach

Rossi has outlined the conditions in which direct suggestion can be used successfully within the indirect approach to hypnosis:

- creating frames of reference as an internal environment or belief system that can accept the direct suggestion.

- patient's reliance on unconscious processes to automatically mediate the suggestion and new learning that is needed.

- therapist's partially evoking and thereby

> facilitating the utilization of such unconscious processes by illustrating them in ways that are personally meaningful in the patient's actual life experience. (Erickson & Rossi, 1979, p. 119).

The use of direct suggestion within the indirect approach shows distinct differences when compared with the direct approach. The following uses are only a sampling of those described in the literature.

When indirect approaches and suggestions have been employed successfully for the induction and implementation of hypnosis for a patient, a direct suggestion can be used if the therapist judges that the patient will be likely to respond to it. "You can enjoy having your heart beat strongly and gently. You can learn the feelings of breathing, the feelings of breathing that you have in Phoenix." This example was for phantom limb pain. (Erickson & Rossi, 1979, p. 116). "You will realize hypnosis was employed, you will not remember going into a trance. It isn't necessary to remember going into a trance (Erickson, Rossi & Rossi, 1976, p. 94).

A direct approach to hypnotic induction can be used, but followed by indirect implementation:

> Now suppose you lean back and uncross your legs. Look at that spot there. Don't talk. Don't move.

> There is nothing really important to do, except go into a trance...you may close your eyes <u>now</u> and go deeper and deeper into the trance. You do not have to try hard to do anything. You just let it happen. And you think back; there are a goodly number of times this afternoon when you stopped hearing the ringing. It is hard to remember things that don't occur. (Erickson, in Erickson & Rossi, 1979, p. 117-118).

This example of hypnosis for tinnitus showed direct suggestions for the induction of hypnosis followed by the beginning of indirect suggestion for alleviation of tinnitus.

<u>The Use of Indirect Suggestion within the Direct Approach to Hypnosis</u>

Examples of indirect suggestions can be found in protocols which are examples of the direct approach. However, these indirect suggestions are unlikely to operate as indirect suggestions, as the additional use of direct suggestions will make the suggestion consciously obvious:

In the following example, the first part of the sentence uses indirect suggestion, shown in ordinary print. The direct part of the suggestion is underlined.

Perhaps, as I have been talking, you have noticed a feeling of warmth, or perhaps a tingling feeling in your hand, or your arm, or in both...perhaps you have noticed a feeling of tension. Perhaps you have noticed something I have not mentioned...neither you nor I know for sure just what sensations you may experience, but you can find out if you just let yourself have these experiences.... Most people soon experience a feeling of heaviness in their hand and arm when held out in this way, a feeling which tends to increase with time and tends to pull the arm down...perhaps you have already noticed such a growing feeling of heaviness...this downward pull...in any case you will soon feel it and your hand and arm will soon begin to move down as the heaviness and pull grow. (If arm has not started to move, or is moving slowly:): Your hand and arm are moving down, getting heavier and heavier...that's right, it is going down...down...down...I am going to count to twenty, and this will help your hand to go down... (Stanford Profile Scale Form 2, p. 41-42)

In the following example, directives are combined with direct and indirect suggestion. The directives are given in parentheses. The direct suggestions are underlined.

It is easier to relax now that your eyes are closed. (You will keep them closed until I tell you to open them or until I tell you to wake up) ...you feel pleasantly drowsy and sleepy as you continue to listen to my voice. (Just keep your thoughts on what I am saying.) You are going to get much more drowsy and sleepy. Soon you will be deep asleep but you will have no trouble hearing me. You will not wake up until I tell you to... (Stanford C Scale p. 10).

DIRECT AND INDIRECT APPROACHES TO HYPNOSIS: REVIEW OF RESEARCH

Research illustrating differences between direct and indirect approaches to the induction and implementation of hypnosis will be described. It should be noted that all hypnotizability measures cited used the direct approach to hypnosis. Hypnotizability and its correlates with hypnotic analgesia will be used as examples, since the original studies of indirect approaches examined hypnotic pain control, using either clinical or experimental pain.

Hypnotizability and Hypnotic Analgesia using Direct-Suggestion Approaches to Hypnosis

Most experimental research using direct-suggestion approaches to hypnosis has supported the trait theory of hypnotizability. Research has repeatedly confirmed the relationship between measured hypnotizability and a criterion such as pain control - both for clinical and experimental pain. Hypnotizability in these experiments was usually assessed before the experimental treatment; the use of hypnosis for the experimental treatment was typically direct in style, and often using a standardized protocol. For example, in several studies of hypnotic analgesia for experimental pain, Hilgard has reported the correlation between hypnotizability and hypnotic analgesia

to be consistently around .5 (1967). This correlation reflects the greater effectiveness of hypnotic analgesia for subjects of high hypnotizability. Evans and Paul (1970) also confirmed this correlation of .5 for hypnotizability and hypnotic analgesia in experimentally induced pain, as did Hilgard and Morgan in 1975. When controlling for placebo effects, McGlashan, Evans and Orne (1969) demonstrated that subjects of low ability produced no analgesic effect beyond that of the placebo effect, which contrasted with the markedly greater analgesia of the high ability subjects.

Studies of clinical pain tended to show the same type of relationship between hypnotic ability and pain relief; however, the results are less easy to assess because of the absence or inadequacy of controls, and the use of different hypnotizabiliity scales. However, one carefully controlled and measured study of hypnotic analgesia for dental procedures confirmed this tendency for greater hypnotic analgesia in the highly hypnotizable subjects than others (Gottfredson, 1973). In this study the correlation between pain (not analgesia) and Stanford C scale score was -.39, with nine of the twelve high-ability subjects, and five of the thirteen medium and low ability subjects able to undergo various dental procedures without chemical analgesia, a total 56% success rate. This study

appears to be representative of the results found in well designed clinical studies, although anecdotal studies without adequate pain measurement report higher results.

Hypnotizability and Hypnotic Analgesia using Indirect Suggestion

Individualized Hypnotic Intervention using the Indirect Suggestion Approach.

Recent studies using modern approaches to hypnosis have challenged the earlier relationship between an experimental criterion and hypnotizability. In describing the techniques used, these studies have emphasized the use of indirect rather than direct suggestion, but it is clear that relationship style and permissiveness have been incorporated into the approach. Using indirect suggestion within naturalistic individualized approaches, (i.e. not following a standardized protocol), the effect of hypnotic analgesia is markedly increased. However, what is more interesting is that subjects of low hypnotizability were able to gain total analgesia, albeit not as easily as those of high hypnotizability.

Based on Erickson's work with indirect techniques for hypnotic analgesia (1964), Mayer, Price, J. Barber and Rafii (1976) tested the effectiveness of indirect hypnotic analgesia for electrical dental stimulation. For this

study, Barber constructed a technique based on indirect approaches. While each induction was individualized and naturalistic, a general format was followed, emphasizing the generation of post-hypnotic responses for analgesia. The analgesia itself was not induced until after the patient was aroused when the dental testing was to begin. Then the dentist would give the post-hypnotic cues. At any sign of discomfort, the dentist would reintroduce post-hypnotic cues until complete analgesia was obtained. The procedure was termed "Rapid Induction Analgesia", the term "rapid" originally referring to the speed with which analgesia would be induced in the dental stimulation session. All 27 subjects were able to gain total analgesia, although some subjects required several cues. Hypnotizability was not measured, but there was no reason to suppose that an unusually high proportion of highly hypnotizable subjects would have been recruited.

J. Barber replicated the study with 17 subjects, and measured hypnotizability afterwards. All 17 gained complete analgesia using the same techniques, but since there was no variability in analgesia scores, no correlation with hypnotizability could be revealed. The subjects appeared to represent a variety of hypnotic ability, from low to high (1976).

The two examples above both used experimental dental pain. Applying the same techniques to clinical dental pain, J. Barber treated 100 unselected dental patients at various dental clinics. The Rapid Induction Analgesia technique was used, again, with each patient receiving an individualized induction based on naturalistic techniques. The analgesia itself was induced by post-hypnotic cuing by each dentist before treatment began. This process continued if a patient reported any discomfort. 99 patients were able to undergo all dental procedures without local anesthesia. Hypnotizability was not measured, but again would not have correlated with analgesia since the same ceiling effect occurred. However, since patients were not told that hypnosis would be involved in the pre-dental session, there was no reason to expect a sample biased in distribution of hypnotizability (1977).

J. Barber and Mayer tested 14 subjects with experimental dental pain, aiming to see if the hypnotic analgesia reversed after the administration of naloxone, an opiate antagonist. Again, all subjects were able to undergo the maximum pain stimulation using the same hypnotic techniques. Naloxone did not reverse the analgesia. Hypnotizability was not measured, however, all subjects who applied from the university population to take part in the research were accepted, and so presumably did

not represent only the high hypnotizability group (1977).

Fricton and Roth (1985) compared indirect and direct techniques for experimental dental pain. Each treatment session was given in an individualized manner, for both indirect and direct approaches. However, care was taken than the same areas of suggestion were followed for each subject, and for each approach. Direct hypnotic techniques were effective only for those of high hypnotizability, whereas indirect techniques were effective were the total range of hypnotizability. When using indirect techniques, subjects of low ability were as able as those with higher ability to gain analgesia.

The research reported until now has dealt only with dental pain, both clinical and dental. Using indirect approaches, and again, individualized, naturalistic techniques, J. Barber compared the use of hypnotic analgesia for patients with chronic pain of various types. Hypnotizability was measured <u>after</u> the hypnotic treatment. He reported a high degree of success again, which did not correlate with hypnotizability. Subjects of low hypnotizability were able to gain satisfactory pain relief (1978).

All the previous studies have used naturalistic, individualized hypnotic inductions - and all but one have

involved J. Barber. Others attempting to replicate these studies have changed the hypnotic procedure, and used J. Barber's example of Rapid Induction Analgesia as a standardized protocol - sometimes using taperecording.

Standardized Protocol Administration: Indirect-Suggestion Approach to Hypnosis

Hilgard used J. Barber's Rapid Induction Analgesia technique as a standardized protocol for experimental pain, using cold pressor pain (immersing the hand in ice water), but found that when compared with direct hypnotic techniques, there was still greater effect for subjects of high hypnotizability. In fact, he found results were no better than with direct techniques (1980).

Alman and Carney (1980) made the first systematic study to compare direct and indirect approaches with an outcome other than analgesia. They compared the effect of indirect and indirect approaches on post-hypnotic behavior. Both approaches to hypnosis were given as tape-recorded protocols. Hypnotizability was measured first, with the HGSHS:A. Hypnotizability correlated more highly with post-hypnotic behavior for the direct-hypnosis group than for the indirect-hypnosis group: .3 for the indirect group, and .7 for the direct group.

Other studies have failed to demonstrate increased effectiveness of indirect approaches over direct approaches. Knight (1982) aimed to replicate J. Barber's (1977) study of indirect approaches to hypnotic analgesia, using clinical dental patients, but using a protocol based on J. Barber's example of a Rapid Induction Analgesia technique. 45% of patients were able to undergo treatment without chemical analgesia, which contrasted with Barber's reported 99%. This figure is lower than Gottfredson's results using direct techniques, in which a total of 14 subjects out of the sample of 22 did not require chemical analgesia (9 of the 12 highly hypnotizable, and 5 of the 13 low and medium hypnotizability subjects).

Returning to clinical dental pain, Gillett and Coe (1984) aimed to test J. Barber's Rapid Induction Analgesia technique, but using a standardized protocol. Half the subjects were measured for hypnotizability (HGSHS:A) before hypnotic intervention, and half afterwards. 52% of the patients were able to avoid local anesthetic - no better than that obtained with direct techniques. However, no significant correlation of analgesia with hypnotizability was noted. 44% of the highly hypnotizable, and 37% of those with low hypnotizability did not require local anesthetic.

J. Barber's Rapid Induction Analgesia technique was compared with traditional hypnosis, suggestion without hypnosis, progressive relaxation, and a control treatment for cold pressor pain. Protocols were given using standardized instructions, tape-recorded, for all conditions. Measurement of hypnotizability was performed with the HGSHS:A before treatment. Results indicated that traditional hypnosis was far more effective than other conditions, and in fact was the only effective treatment condition. The traditional relationship of hypnotic analgesia and hypnotizability was observed, with the subjects of high hypnotizability gaining significantly more analgesia than subjects of low hypnotizability (Van Gorp, Meyer & Dunbar, 1985).

Measurement Scale Comparisons of Indirect and Direct Suggestions

Recently, measurement scales other than the Stanford C scale have been administered with protocols emphasizing permissive approaches or indirect suggestions.

Permissive and authoritarian approaches were compared with a Dutch version of the Harvard Group Scale of Hypnotic Susceptibility, Form A. This scale was used as the authoritarian approach, and compared with a permissive

modification. No significant difference was found between the two conditions (Spinhoven, Baak, Vermeulen, & Van Dyck, 1984).

The Stanford Hypnotic Clinical Scale for Adults (Morgan & J. R. Hilgard, 1978) was administered to subjects comparing the regular version using direct suggestions, with a protocol emphasizing indirect suggestions. Direct suggestion hypnosis was generally more effective, except for females at the second time of testing. At that time, indirect and direct suggestions were equally effective. While a three-way interaction was evident for technique by order by sex, no simple main effects were found for the technique of direct versus indirect suggestions (Matthews, Bennett, Bean & Gallagher, 1985).

Other Comparisons of Direct and Indirect Suggestions

Clinicians frequently make anecdotal reports of the increase in effectiveness of indirect suggestions compared with direct suggestions for subjects of medium or low hypnotizability. Subjects of high hypnotizability have not been the subject of interest as they can use virtually any type of induction. However, McConkey (1984) studied subjects of very high hypnotizability who were able to hallucinate under direct-style hypnosis. These subjects were then given both an indirect and a direct suggestion

for further hallucinatory experience. Only about half of the subjects were able to make use of the indirect suggestion successfully. However, one can criticize the study on the grounds that the indirect suggestion used in this study may not be representative of the indirect approach. The suggestion was given by means of an assumption slipped into a direct suggestion.

What emerges from these studies can be summarized as follows:

1 Subjects of high hypnotizability can usually use either direct or indirect suggestion sucessfully, and also both individualized approaches or standardized inductions.

2 Subjects of low hypnotizability as measured by a hypnotizability scale can be more successful using indirect suggestion for a criterion measure such as analgesia than when using direct suggestion. The degree of difference varies widely.

3 When the indirect suggestion technique is used, the use of individualized, "naturalistic" hypnotic inductions has yielded greater effects than the use of standardized protocols for subjects of lower hypnotizability (Mayer et al 1976; Barber, 1976; Barber & Mayer, 1977). When the standardized protocol approach is used for indirect suggestion, no greater advantage is found over direct

suggestion, no greater advantage is found over direct techniques.

Trends in Hypnotic Approaches

A recent survey of members of the American Society of Clinical Hypnosis published in the American Journal of Clinical Hypnosis revealed the following information. When respondants were asked to state the theorist whose views most closely paralled their own, M. H. Erickson was mentioned most often. In fact he was identified ten times as often as the next theorist in ranked order.

When asked to state which theorist was "most influential in shaping current thinking about hypnosis", Erickson was again identified, more than three times as often as the next rated theorist, E. Hilgard. (Kraft, Rodolfa & Reilley, 1985).

This particular society has a strong clinical orientation. Had the members of the International Society of Clinical and Experimental Hypnosis been surveyed, results might have been different; however such a survey has not yet been done.

Erickson originated the theory and practice of indirect-suggestion approaches to hypnosis and as such this identification as the prominent theorist underscores the

belief that clinical hypnosis is biased in favor of indirect approaches. Erickson was strongly opposed to the use of standardized protocols in hypnosis, and in measurement scales which necessarily use them. Since those engaged in correlative work in hypnosis research require them, the incorporation of these modern approaches of indirect techniques may make the measurement of hypnosis more acceptable to those in clinical research.

CONSTRUCTION OF THE INDIRECT SUGGESTION VERSION OF THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C NAMED THE VICTORIA C SCALE

The following criteria were used for the construction of the indirect suggestion scale: the Victoria C Scale.

1. The indirect suggestion version was designed to be as close in length as possible to the Stanford C Scale.

2. A standardized protocol was used. The amount of flexibility within the indirect suggestion version was designed to be the same as in the Stanford C Scale.

3. The beginning of the hypnotic induction was made formally in both scales, so that the subject was informed when the test would begin. This requirement did not permit the informal inductions sometimes used in clinical hypnosis, in which the subject may not be informed when hypnosis is beginning. Information about the start of the test is appropriate in the research setting.

4. The presence or absence of imagery was matched for each test suggestion as far as possible.

5. It was considered appropriate for the indirect version of the Stanford C Scale to make use of the normal directives required in any psychological testing situation. Subjects expect to be told what to do at times, and so the

examiner can be clear and direct when giving instructions. The indirect suggestions need only apply to the hypnotic suggestions, and not all instructions regarding the testing.

6. The pass/fail criteria of the indirect version were matched to those of the direct version. This requirement was made for measurement accuracy, and to control the degree of permissiveness between the scales. To equate the indirect version with the direct version, subjects were required to achieve exactly the same hypnotic phenomena. One variation was allowed: subjects were permitted either a positive hallucination for ammonia, or anosmia. This positive hallucination is used in the Stanford Profile Scales as equivalent to anosmia.

7. In the indirect suggestion version, subjects were required to achieve the suggested hypnotic phemonemon within the time limit given in the Stanford C Scale.

8. An attempt to match the degree of authoritarian or egalitarian relationship style was made. This was not altogether easy. Some subjects still found the scales differed in this regard. A few statements of a highly authoritarian nature were deleted from the direct version. For example: "No matter what you do, you will remain hypnotized until I tell you otherwise" and "You will

not wake up until I tell you to". Some authoritarian statements were incorporated into the indirect suggestion version. For example: "But don't test your arm yet".

Hypnotic Techniques used in the Victoria C Scale

The strategies of the induction into hypnosis were as follows:

1. Focussing attention; shifting attention from exterior events to subjective internal events.
2. Physical relaxation.
3. Emphasis of subject's control and capacity to change perception and cognition.
4. Emphasis of subject's awareness.
5. Post-hypnotic suggestions for test item response.
6. Post-hypnotic suggestions for deepening hypnotic depth.
7. Deepening technique using staircase countdown.
8. Temporary amnesia for induction.

Two changes were made in the Stanford C Scale, as well as being used in the indirect suggestion version, the Victoria C Scale. Non-noxious substances were substituted for ammonia in the anosmia item. This was according to recommendations from E. Hilgard [1981, personal communication]. If the examiner suspected possible abreaction during the age regression item, an alternative item Memory for Meal from the Stanford Profile Scales was

given instead, using the wording from the SPS:1 protocol for the Stanford C Scale, and an indirect suggestion version for the Victoria C Scale.

General points

The 48 subjects in Experiment 1 were tested with an indirect suggestion version of the Stanford C Scale which used moderate degrees of indirect suggestion: binds, negatives and contingencies. The 48 subjects in Experiment 2 were tested with a protocol using more extreme types of indirect suggestion, with the interspersal technique, metaphor, and indirect associative focussing added to the other types of indirect suggestion.

Although the Victoria C Scale was designed to take the same length of time as the Stanford C Scale, it was reported that it took slightly longer in Experiment 1. The protocol was therefore shortened for Experiment 2, and the two scales took approximately the same length of time.

The suggestions in the first experiment were less indirect than those of the second experiment. The suggestions in the second study used the interspersal technique, indirect associative focussing and metaphor to a greater extent.

METHOD

Introduction

Two experiments were performed, the second largely a replication of the first, with some changes in the protocols. This section will begin with an overall description of the method by which both experiments were conducted. Since there were several hypnothesis for each experiment, each hypothesis will then be outlined separately, together with results and discussion for each separate hypothesis.

Research Design

A cross-over design was used. Each subject was administered both scales of hypnotizability: the Victoria C scale, and the Stanford C scale. Subjects took the two scales in counterbalanced order.

Subjects

Ninety-six subjects were used altogether, forty-eight in each experiment. Equal numbers of males and females were used, aged beteen 18 and 50. Subjects were unpaid volunteers from university and college populations, and various community sources. No subjects from clinical populations were used.

Previous experience with hypnosis was permitted, but not controlled for. Hypnotic-like experiences occur frequently in subjects of higher hypnotizability without a formal hypnotic induction procedure (J.R. Hilgard, 1970; As, 1972). These experiences include yoga; meditation; imagery techniques used in education and psychotherapy; prayer; long distance running; relaxation training used in psychotherapy, drama, and the martial arts. All of these experiences may produce the same subjective experiences of an altered state of consciousness as hypnosis, especially for the highly hypnotizable. Moreover, hypnotic-type techniques are used in some of these disciplines. Therefore, an accurate report of previous experience in hypnosis would be difficult.

Research Assistants

In the first experiment, the writer measured 19 subjects, the remaining 27 were measured by a research assistant. In the second experiment two research assistants were used; one assistant had collected data for the first experiment in addition.

The reasons for the use of research assistants to perform the majority of the testing were as follows. Firstly, they were used in order to control for

experimenter bias. Research assistants were not given information about the hypothesis of the study. However, it was likely that they would guess part of the hypothesis fairly accurately. Indirect approaches to hypnosis have been widely regarded as more effective in the discipline, but scales of hypnotizability have remained direct in approach. To attempt to control for this accurate guessing, the writer stated that she expected some subjects to gain higher scores on the indirect scale, and others to gain higher scores on the direct scale. The writer did not state directly, but implied that this different performance would correlate with the other measures being taken.

Secondly, research assistants were used in order to control for level of expertise. If the examiner is more expert at one type of hypnosis than another, results in favor of that type will reflect this expertise, and not the characteristics of the scale itself. When revising a scale to be used by researchers in other universities, it is necessary to demonstrate that the scale will yield equivalent results when given by different experimenters. Otherwise, results in any direction can be interpreted easily as reflecting differences in the examiner's expertise between the different approaches.

The research assistants had not had prior experience

in hypnotizing subjects, either clinically or for experimental purposes. However, one took a graduate class in hypnosis at the same time as testing; techniques used in the class represented both approaches. Level of expertise for each of the two types of hypnosis was thus reasonably well controlled for: neither assistant was more expert at one type of hypnosis.

Qualifications of Research Assistants

Research assistants were required to have had some training in counselling, and at least a small amount of counselling experience with a clinical population. This requirement was to ensure good interpersonal skills and rapport in the testing situation; to be able to handle the occasional abreaction that may occur in the age regression item; and to detect and eliminate prepsychotic volunteer subjects.

Training of research Assistants

The research assistants were trained in the administration of the test procedures as follows:

1. Description of the nature of hypnosis.
2. Discussion of hypnotizability.
3. Each assistant performed both scales as a subject would, administered by the writer. Experiences were then

discussed.

4. The assistants were taught how to describe the nature of hypnosis and testing procedures to subjects. (see Appendix: Description of hypnosis to Subjects, and Guide for administration of Stanford Scales.)

5. A verbal description of the procedure for administering the scales was given.

6. Examples of various styles of administration of hypnosis were given by tape recording.

7. Each research assistant practiced the administration of the scales by rehersing them in private. Research assistants were required to tape record one of these practice sessions, and then use this recording to perform each scale on themselves.

8. The research assistant administered the entire test procedure to the writer, as if to a subject. This was then discussed, and further recommendations and training given as required.

9. According to the requirement of the Committee for research on human subjects, each assistant was examined by Dr. F. Spellacy.

10. The first subject to be tested by the assistant was supervised by the writer through a one-way mirror.

Tests

Hypnotizability Scales

1. Stanford Hypnotic Susceptibility Scale: form C (Weitzenhoffer & Hilgard, 1965). This is the scale referred to as the Stanford C scale. This scale of hypnotizability begins with a hypnotic induction, using an eye-fixation technique. Subsequently, 12 test items are presented to the subject in increasing order of difficulty; these test items represent the content domain of hypnosis, and examine the subject's capacity to experience hypnotic phenomena. Certain phrases in the wording of the hypnotic induction and test items were deleted. These were items which were considered extremely authoritarian, and eliminated to equate this variable between the Stanford C scale and the Victoria C scale. For example, "No matter what happens you will remain in hypnosis until I tell you otherwise".

The test items were the same as the original test, except for the use of non-noxious agents instead of ammonia in the anosmia item. Hilgard had regretted specifying ammonia in the construction of the scale, and after a few years began using coffee, and recommended other researchers do the same (Hilgard, 1981, personal communication). Others working with the scale have substituted peppermint

(Crawford, 1984, personal communication).

An alternative item was available for substitution for the age regression item if the examiner suspected that the subject might abreact. The "Memory for Meal" item from the Stanford Profile Scales was used instead if that was the case. An indirect-suggestion version was constructed for use in the Victoria C scale. In the Stanford Profile Scales, this item is considered to be of the same difficulty as the age regression item, and therefore to retain the psychometric properties of the scale.

Pass/fail criteria for each test item were the same as in the Stanford C scale, except for additional scoring procedures available separately. These included checking for compliance responses. Two sets of scores therefore emerged, one according to the criteria usually used for the test, and a second set of scores to be used for later research. This second scoring system required that subjects be asked after testing if an effect seemed natural, or if it was performed because the administrator expected the particular response. This necessity has emerged from Item 3 (mosquito hallucination) in which subjects are told to brush off an imagined mosquito, and are then scored on whether or not the movement is made.

A reversal score was obtained for item number 12

(post hypnotic amnesia). After awakening the subject from hypnosis, subjects were asked what they remembered about the scale. The test item was scored if the subject failed to remember more than three items. Subjects were then told that they would remember everything, and questioned further. Any further information was disregarded. This was the scoring system used for these experiments. In addition, a separate score was obtained in the following manner. Only if subjects recalled three or more items after release of amnesia (in addition to any items already recalled) would a score be valid. This was to prevent contamination of hypnotic amnesia (defined by its reversibility) by ordinary forgetting. These data were not used in the present experiments, but available for subsequent research.

2. The indirect-suggestion version of the above scale, termed the Victoria C scale. Scoring used the same criteria as the Stanford C scale, with the exception of the anosmia item, in which a positive hallucination of ammonia was permitted as scorable, in addition to anosmia. This system followed that used in the Stanford Profile Scale, Form 1. Positive and negative hallucinations for smell are considered to be of equal difficulty, and are presented in each of the Stanford Profile Scales as equivalent.

Checking for compliance responses was made in the same

manner as with the Stanford C scale.

A reversal score for the amnesia item was obtained, and used similarly as with the Stanford C scale.

Research assistants tape recorded one subject's hypnotic induction from each scale of hypnotizability. These were then available to inspection to assess the adequacy of style of administration of each induction.

Other Tests

1. A questionnaire comparing the subjective experiences on the two scales was administered. Questions were read out and scored by the examiner. This questionnaire can be seen in the Appendix.

2. The five-point joining test, given at the end of the test session. This is a timed test in which subjects are required to join five dots together with a pencil in as many different ways as possible in two minutes (Regard, 1981). The chief purpose of including this task was to ensure normal alertness of the subject before leaving the laboratory.

Procedure

Subjects were informed that two styles of hypnosis

were being compared, and that their comments about their experiences with each would be asked for. The hypotheses of the study were not stated.

Subjects were tested individually. All tests were given within the same session.

The examiner explained the nature of hypnosis, using the given guidelines (see Appendix). The contents of the scales were explained, with the types of item specified (see example in Appendix). Since an age regression item was used, the examiner checked with the subject that the two school grades (five and two) used in this item were suitable, being relatively good years for the subject. If they were not, better years were selected. This precaution was to prevent the occasional abreaction which can occur if an emotionally traumatic event occurred during one of these years. If the age regression item was still considered unsuitable, the Memory for Meal item from the Stanford Profile Scales was substituted.

Subjects were then given the consent form to sign. Each subject was informed that even though the form had been signed, he or she was still entirely free to discontinue the testing at any time if desired, and this included while in hypnosis.

The first scale was then given, alternate subjects receiving either the Stanford C scale or the Victoria C scale first. Then the alternate version was administered immediately afterwards, with a short interval for walking etc. No discussion was made at that time. Following the administration of both scales, the questioning regarding compliance responses was made.

The questionnaire was given, with the examiner reading out the questions out loud, and recording the subject's responses. The five-point joining test was given.

HYPOTHESES, RESULTS AND DISCUSSION:

Experiment 1

Introduction

This experiment was originally conducted as a pilot study. Subsequently the study was termed Experiment 1. 48 subjects were tested in this experiment. In order to simplify the description of each hypothesis and results, each hypothesis will be described separately with the following results. The same subjects have been used throughout, and each subject was measured only once with the entire test battery.

The Stanford Hypnotic Susceptibility Scale, Form C will be abbreviated to the Stanford C scale. The indirect suggestion modification of that scale will be termed the Victoria C scale.

Hypothesis 1

Subjects of lower hypnotizability were expected to gain higher scores on the indirect-suggestion version of the indirect suggestion scale (the Victoria C scale) than on the direct-suggestion version (the Stanford C scale). Scores of subjects of higher hypnotizability were not expected to vary between one scale and the other.

Method

48 subjects were each given two hypnotizability scales, in counterbalanced order. The two scales were the Stanford Hypnotic Susceptibility Scale, Form C (termed the Stanford C scale), and an indirect suggestion version of the same scale constructed by the writer (termed the Victoria C scale).

Results

Each subject yields two total scores, one from each scale, the Stanford C scale and the Victoria C scale. The range of possible scores is 0-12 for each, with 12 being the maximum score obtainable, and 0 denoting that the subject failed all test items.

After scores for each scale were obtained, subjects were divided into two hypnotizability groups based on Stanford C scale scores (regardless of the order in which the Stanford C scale was taken). The higher hypnotizability group consisted of subjects scoring 7-12 on the Stanford C scale. The lower hypnotizability group consisted of subjects scoring 0-6.

This hypothesis that subjects in the lower hypnotizability group would gain higher scores on the indirect suggestion version, the Victoria C scale, than on

the Stanford C scale was examined as follows. Mean scores for each group were calculated for each method: Stanford C scale and Victoria C scale. These are shown in Table 1.0. Mean scores for the lower hypnotizability group were 4.3 for the Stanford C scale, and 4.92 for the Victoria C scale. Mean scores for the higher hypnotizability group were 8.19 for Stanford C scale, and 8.25 for the Victoria C scale.

Subjects' scores were treated with repeated measures analysis of variance using the SPSS^{x} Manova program (SPSS, 1986). The Manova summary table is shown in Table 2. A 2 x 2 x 2 design was used. There were two between factors: hypnotizability, and order of testing (whether the subject took the Stanford C scale first or second); and one within factor, method: (Stanford C scale or Victoria C scale). In order to test the hypothesis that subjects of lower hypnotizability would show higher scores on the Victoria C scale, the interaction between level of hypnotizability and method was examined. No relationship was detected ($F = 1.03$, $df = 1,45$; $p < 0.31$). A trend towards a three-way interaction between level of hypnotizability, method and order was observed ($F = 0.16$, $df = 1,45$; $p < 0.068$), but did not reach significance.

Discussion

The hypothesis that subjects of lower hypnotizability would gain higher scores on the indirect-suggestion version of the scale was not supported. In some respects, results were similar to those obtained by Matthews et al (1985) in their work with the Stanford Hypnotic Clinical Scale. However, those authors did not address the issue of hypnotizability. For subjects generally, slightly lower scores were obtained for the indirect hypnosis version in most conditions. Mean indirect hypnosis scores for each group were never greater than direct hypnosis scores.

In clinical practice, indirect suggestion has been considered to be more effective than direct suggestion for those of lower hypnotizability (Erickson, 1958; Erickson, Rossi & Rossi, 1976; Erickson & Rossi, 1980). Recent experiments of hypnotic analgesia have given weight to these clinical observations (J. Barber, 1976, 1977, 1978; J. Barber & Mayer, 1977; Alman, 1979). The writer then considered that a more indirect version of Victoria C scale might be more effective for lower hypnotizability subjects, resulting in increased scores. Therefore a new protocol for the Victoria C scale was constructed using the more extreme varieties of indirect suggestion. These are described in the Chapter "Direct and indirect suggestion:

definition and description". A second experiment was later performed using this revised protocol.

Hypothesis 2

An order effect was predicted for Experiment 1. Subjects were expected to gain higher scores when taking the Victoria C scale second, having taken the Stanford C scale first. This effect was expected to be noted mainly for subjects of lower hypnotizability. Subjects of higher hypnotizability were expected to show only very slight increase in scores when taking the Victoria C scale second.

Subjects taking the scales in the reverse order (Victoria C scale first; Stanford C scale second) were not expected to show an order effect for the following reasons. The indirect-suggestion test items were expected to be easier for subjects (of lower hypnotizability) to pass. When subsequently taking the Stanford C scale, subjects might use the same cognitive mechanisms to achieve the test item, and not make use of the wording of the direct suggestion. A second reason is that subjects having passed a particular test item in the first scale, would expect to be able to pass it in the second scale. This expectation effect would confound the second scale taken.

Method

48 subjects were each given two hypnotizability scales, in counterbalanced order. The two scales were the Stanford Hypnotic Susceptibility Scale, Form C (termed Stanford C scale), and an indirect suggestion version of the same scale constructed by the writer (the Victoria C scale).

In Order 1, subjects were given the Stanford C scale first, and Victoria C scale second. In Order 2, subjects were given Victoria C scale first, and Stanford C scale second.

Results

Firstly, mean scores were examined according to order, regardless of method or level of hypnotizability. Mean scores for either scale taken first were 5.99; for either scale taken second, 6.82.

Secondly, mean scores were examined for each scale according to order, regardless of level of hypnotizability. (Figure 1). The mean score for the Stanford C scale was 6.3 when taken first; 6.2 when taken second. The mean score for the Victoria C scale when taken first was 5.6; 7.4 when taken second.

Thirdly, level of hypnotizability was examined in addition to method and order. Figure 2 shows these mean scores. To test the prediction that subjects of lower hypnotizability would show a stronger order effect when taking the Victoria C scale second (order 1), the data were treated with a 2 x 2 x 2 repeated measures analysis of variance using the SPSS^{x} program, using a 2 between and 1 within design: level of hypnotizability; order; and method. The comparison of particular interest was the three-way interaction which tested the hypothesis that subjects of lower hypnotizability would show greater increase in Victoria C scale scores when performing this scale second, after the Stanford C scale. A trend for this effect was detected ($F = .16$, $df = 1,45$; $p < 0.069$), but did not reach significance. An order by method interaction was revealed ($F = 8.36$, $df = 1,45$; $p < 0.006$). A main effect for order was also detected ($F = 4.54$, $df = 1,45$; $p < 0.039$). The Manova summary table is shown in Table 2.

Discussion

The mean scores according to hypnotizability level, method and order can be seen again in Figure 2. It can be observed that subjects of lower hypnotizability show the highest scores when taking the Victoria C scale.

The hypothesis that subjects of lower hypnotizability would show increased scores on the Victoria C scale was not completely supported. The test of this hypothesis by comparison of the interaction between hypnotizability level, method (direct or indirect) and order detected only a trend ($F = .16$, $df = 1,45$; $p < 0.069$). Thus, while the overall test of the order effect revealed a significant order effect ($F = 4.54$, $df = 1,45$; $p < 0.039$); and test of the order and method interaction showed this interaction ($F = 8.35$, $df = 1,45$; $p < 0.006$), the difference between means was not accounted for substantially by subjects of lower hypnotizability.

The protocol of the Victoria C scale was revised to make the suggestions more indirect. It was predicted that this revision might improve the scores of subjects of lower hypnotizability.

Experiment 2

Introduction

The protocol for the Victoria C scale was revised to make the approach to hypnosis and specific suggestions more indirect than the protocol for Experiment 1. In addition, the protocol was shortened to make it the same in length as the Stanford C scale. Otherwise the procedures were the same.

Hypothesis 3

Subjects of lower hypnotizability were expected to show greater increase in scores on Victoria C scale than Stanford C scale, regardless of order.

Method

A further 48 subjects were each given two hypnotizability scales, in counterbalanced order. The two scales were the Stanford Hypnotic Susceptibility Scale, Form C (termed the Stanford C scale), and an indirect suggestion version of the same scale constructed by the writer (termed the Victoria C scale).

Results

Mean scores for subjects of lower and higher hypnotizability were compared for each hypnosis method, the Stanford C scale and the Victoria C scale (Table 3.0). The lower hypnotizability group showed higher mean scores on the Victoria C scale, (5.34) compared with Stanford C scale (4.56), averaged across order, (Table 3). To test the hypothesis that subjects of lower hypnotizability would show higher scores on the indirect hypnosis version of the scale than on the direct hypnosis version, the following analyses were performed. The data were treated with a 3 x

2 x 2 repeated measures analysis of variance, using the SPSS^{x} Manova program. Two between group measures were used (level of hypnotizability, and order of presentation of scales); and one within group repeated measure (method of hypnosis: Stanford C scale and Victoria C scale). Table 4 gives the Manova summary table.

The hypothesis that low hypnotizability subjects would show generally increased scores with indirect hypnosis was tested with a comparison of level of hypnotizability with method. A significant effect was detected ($F = 6.7$, $df = 1,44$; $p < 0.01$).

A trend for a method by order interaction was found ($F = 3.67$, $df\ 1,44$; $p < 0.06$), but this was not significant.

Discussion

The hypothesis that subjects of lower hypnotizability would gain higher scores on the indirect-suggestion version of the scale than on the direct-suggestion version was confirmed. When one compares the scores between the Victoria C scale and the Stanford C scale for the two experiments, the differences can be seen. In Experiment 1, the lower hypnotizability group gained a mean score of 4.3 on the direct version, and 4.92 on the indirect version: in Experiment 2, 4.56 for the direct version, and 5.34 for the indirect version.

Hypothesis 4

In addition to showing increased scores on the indirect version of the hypnotizability scale, subjects of lower hypnotizability were predicted to show an order effect. This increase in scores would be particularly noticable when taking the indirect version of the scale second, after the direct version had been performed first.

An order effect in the opposite direction was not expected. It was considered that subjects taking the Stanford C scale second would use the same cognitive mechanisms for passing specific test items as in the Victoria C scale, and thus would not show any decrease in scores on the Stanford C scale when taken second.

Method

48 subjects were each given two hypnotizability scales, in counterbalanced order. The two scales were the Stanford Hypnotic Susceptibility Scale, Form C (termed the Stanford C scale), and an indirect suggestion version of the same scale constructed by the writer (termed the Victoria C scale).

In Order 1, subjects were given the Stanford C scale first, and the Victoria C scale second. In Order 2,

subjects were given the Victoria C scale first, and the Stanford C scale second.

Results

In order to test the hypothesis that subjects of lower hypnotizability would show increased scores on the Victoria C scale when performed after the Stanford C scale, the following analyses were performed. Mean scores were calculated for each level of hypnotizability, according to method, and order. (Figure 3.0). Repeated measures analysis of variance, using a 2 x 2 x 2 design, with two between group measures (level of hypnotizability, and order) were used, and one within group repeated measure (method: direct or indirect hypnosis). The specific test of the hypothesis was the comparison of hypnotizability with method and order. (The Manova summary table is shown in Table 4.0). This test failed to detect a difference ($F = .86$, $df = 1,44$; $p < 0.35$). A trend for an order by method interaction was found ($F = 3.67$, $df = 1,44$; $p < 0.06$).

Discussion

The hypothesis that the increase in scores using indirect hypnosis for the lower hypnotizability group would occur particularly after taking the direct version was not confirmed. The increase in scores with indirect

hypnosis occurred regardless of order.

Hypothesis 5

Since there was relatively little difference between the results of Experiment 1 and Experiment 2, it was expected that the data set of each experiment would be sufficiently similar to allow them to be combined for analysis. Despite differences between the two indirect-suggestion protocols, results were expected to be essentially similar.

To confirm this hypothesis, one would expect to find no significant differences between groups according to experiment, level of hypnotizability, method, or order. In addition to the lack of signifiant main effects, there should be no significant interaction effects between any of these variables.

Method

The data from each experiment were treated with a 2 x 2 x 2 x 2 analysis of variance using the SPSS^{x} Manova program. There were three between groups factors: experiment (the comparison between Experiments 1 and 2); hypnotizability level, and order of taking each scale. The between groups factor, method (direct or indirect hypnosis) was the repeated measure. Each factor was

compared to detect any main effects. Tests for interaction effects were made.

Results

To see if there were any significant differences between the two experiments, a comparison of mean scores to detect any main effect was made (Table 5).

Testing of each part of the hypothesis was made using analysis of variance. (The Manova summary table can be seen in table 6.0).

Firstly, a comparison of the between groups differences was made between the two experiments. No significant difference was found ($F = 0.03$, $df = 1,89$; $p < 0.84$). A test of order differences between the two experiments was made by comparing the experiment by order interaction. No significant difference was found ($F = 0.97$, $df, 1,89$; $p < 0.32$). A test of differences according to level of hypnotizability was made. No significant difference was found ($F = 0.60$, $df = 1,89$; $p < 0.43$). A significant difference with this comparison would have meant that the distribution of hypnotizability was different between the two experiments. A comparison of experiment by order was made to detect any difference between groups according to order. No significant

difference was found ($F = 0.97$, $df = 1,89$; $p < 0.32$). Comparison between the two experiments according to hypnotizability level and order was made to detect any interaction. No significant interaction was found ($F = 2.67$, $df = 1,89$; $p < 0.10$).

Secondly, the within groups variance between the two experiments was compared. To detect any difference according to method of hypnosis, comparison of experiment and method was made. No significant difference was found (F 0.03, $df = 1,89$; $p < 0.85$). A test of the interaction between experiment, hypnotizability level and method detected no significant difference ($F = 0.69$, $df = 1,89$; $p < 0.40$). A test of the interaction between experiment, method of hypnosis, and order was made. This again revealed no significant difference ($F = 1.11$, $df = 1,89$; $p < 0.29$). A test of the interaction between experiment, hypnotizability level, order, and method of hypnosis failed to detect any significant difference ($F = 0.07$, $df = 1,89$; $p < 0.79$).

Discussion

The hypothesis that the data from two experiments would be sufficiently similar to allow pooling for further analysis was supported. Tests of each main effect and each interaction effect failed to detect any significant

difference between the two experiments for method of hypnosis, order in which each scale was taken, or level of hypnotizability.

Despite the differences in protocol, which used different techniques of indirect suggestion, results were remarkably similar.

Hypothesis 6

It was expected that the results of testing from each of the three examiners would be similar. Although the writer (RW) had tested 19 subjects in Experiment 1, the results were not expected to be sufficiently different from those of the two other examiners to warrant those data being excluded from the experiment. A test of each examiner's test results using analysis of variance would detect any significant difference. If experimenter bias resulted in increased scores on the indirect hypnosis version of the scale (Victoria C scale), a significant difference would emerge with comparison of mean scores using analysis of variance. If a significant difference were found for the results of the writer, these scores would need to be eliminated from the experiment.

Method

To test the hypothesis that no significant difference between examiners, mean scores were computed from the subjects tested by each examiner (Table 7). These were treated with a 3 by 2 repeated measures analysis of variance, with three levels of the first factor (examiner) and two levels of the repeated measures factor (method of hypnosis: direct or indirect).

Results

The comparison of mean scores obtained by each examiner for each hypnotizability scale were compared. Analysis of variance was used to compare the overall difference between examiners. No significant difference was found ($F = 0.73$, $df = 2,94$; $p < 0.48$). In order to detect any relationship between a particular examiner and method of hypnosis, a test of this comparison was made. No signicant difference between means was found ($F = 2.4$, $df = 2,94$; $p < 0.09$).

Discussion

The hypothesis that there would be no significant difference between the results obtained by each examiner was confirmed. As a result, the data obtained by the writer was included in the total analysis of the data.

Hypothesis 7

If subjects were divided into three levels of hypnotizability: high, medium and low hypnotizability, the following patterns of mean scores were expected for the direct and indirect methods of hypnosis. The low hypnotizability group was expected to show the most difference in overall mean scores between direct and indirect hypnosis. They were predicted to show higher scores using the indirect version of the scale. The high hypnotizability group would show slightly lower scores using the Victoria C scale.

Method

96 subjects were each given the Stanford Hypnotic Susceptibility Scale, Form C (termed the Stanford C scale), and an indirect-suggestion version of the scale constructed by the writer (termed the Victoria C scale). Order of presentation of each scale was counterbalanced for alternate subjects.

After testing, subjects were divided into three hypnotizability groups based on their scores on the Stanford C scale (regardless of the order in which this scale was taken). The high hypnotizability group

consisted of subjects scoring 9-12 on the 12-point scale. The medium hypnotizability group consisted of subjects scoring 5-8. The low hypnotizability group consisted of subjects scoring 0-4.

Results

Mean scores were calculated for each hypnotizability group for each method of hypnosis. (Table 8 shows these means; they can also be seen in Figure 4 according to order). The low hypnotizability group showed the most increase in scores from the Stanford C scale to the Victoria C scale, a mean of 3.4 for direct hypnosis compared with 4.2 for indirect hypnosis. The medium hypnotizability group showed a slight increase: 6.5 for direct hypnosis compared with 6.8 for indirect hypnosis. The high hypnotizability group gained mean scores of 9.87 for direct hypnosis, and 8.81 for indirect hypnosis.

These data were treated with repeated measures analysis of variance using the SPSS^{x} Manova program, (Table 9). A 3 x 2 x 2 design was used, with three levels of the first factor, level of hypnotizability; two levels of the second factor, order (direct first and indirect second; indirect first, direct second); and 2 levels of the repeated measures within groups factor (method: direct versus indirect hypnosis).

The hypothesis that the subjects of low hypnotizability would show higher Victoria C scale scores than Stanford C scale scores, and the high hypnotizability group lower Victoria C scale scores than Stanford C scale scores, was tested with the comparison of the interaction between hypnotizability and method of hypnosis. A significant difference was detected ($F = 5.15$, $df = 2,91$; $p < 0.008$), confirming the hypothesis. In addition, a significant order by method interaction was found ($F = 12.7$, $1,94$; $p < 0.001$).

Discussion

The hypothesis that subjects of low hypnotizability would show higher scores using indirect hypnosis; and that subjects of low hypnotizability would show higher scores using direct hypnosis was confirmed. The test of the interaction of level of hypnotizability and method of hypnosis was significant.

Dividing subjects into three levels of hypnotizability distinguishes the patterns of response to each type of hypnosis more clearly than the division into two levels.

Hypothesis 8

It was predicted that subjects would rate the indirect hypnosis version of the scale, the Victoria C scale more favorably than the direct hypnosis version, the Stanford C scale.

Method

After completing both hypnotizability scales, subjects were given a questionaire regarding preference for each method of hypnosis according to certain dimensions. This preference questionaire can be seen in the appendix. The examiner read out each question to the subject, so that answers could be clarified. Questions included degree of relaxation; distractibility; perceived effectiveness for therapy; depth of hypnosis; sponteneity of hypnotic effects; manner of the hypnotist; and overall preference. Subjects were not required to make a choice: they could state no preference for a particular dimension.

Results

Each subject yielded a total preference score for each approach to hypnosis: direct and indirect. These were then totalled for all subjects, and mean scores for each approach computed.

The mean preference scores for indirect hypnosis was

5.10; for direct hypnosis, 2.69.

The hypothesis that subjects would rate the indirect version significantly more favorably than the direct version was tested with repeated measures analysis of variance using two levels of the repeated measure within groups factor: direct or indirect hypnosis. The test of this effect showed a significant difference ($F = 16.2$, $df = 1,92$; $p < 0.0001$). The Manova summary table can be seen in Table 10.

Discussion

The hypothesis that subjects would prefer the indirect version of the hypnotizability scale was confirmed. Testing the difference between mean scores with analysis of variance revealed a highly significant difference. The subjective experience of each scale is apparantly substantially different. Regardless of their behavioral scores on each scale, subjects found the experienced phenomena more vivid, requiring less effort, and more "hypnotic" in quality. They found the indirect version less authoritarian and more enjoyable. Very few subjects stated that they would prefer to use the direct version of hypnosis as the approach for therapy. These subjective experiences are worthy of consideration, since the chief factor which distinguishes between subjects of

high and low hypnotizability is not so much the observed behaviors, but rather the different introspective experiences of the subjects.

Other Results

Gender

Gender differences were compared. Mean scores were obtained for each gender according to experiment, method of hypnosis and order. No significant sex differences were detected with analysis of variance testing the main effect of gender ($F = .51$, $df = 1,89$; $p < 0.47$).

Test Items within each Hypnotizability Scale

Each of the twelve test items in each hypnotizability scale was compared. Table 11 gives the percentage of test items passed by subjects for each scale. Checking for compliance responses revealed that two items were particularly susceptible to compliance responses (e.g. performing the suggested behavior because it seems essential for the test to continue).

Table 11 shows the correlations of each test item with the total scale.

Comparing the Stanford C scale with the Victoria C

scale, one notes some differences in the percentage of subjects passing each test item. Two items in low medium difficulty range were passed by more subjects on the indirect version than on the direct version. These were item 4 (taste hallucination), and item 5 (arm rigidity). The more difficult items passed by more subjects on the indirect version were item 8 (arm immobilization); and item 10 (hallucinated voice). Test items passed by more subjects on the Stanford C scale were item 3 (mosquito hallucination); item 9 (anosmia); item 11 (negative visual hallucination); and item 12 (amnesia).

Examining these differences between the two scales, one notes that the more difficult cognitive items requiring dissociation were those passed more often on the direct scale. These are also those items passed only by subjects of high hypnotizability. Item 3 elicited a compliance response in a number of subjects on the direct version. 80% of subjects passed this item on Stanford C scale according to normal scoring criteria. If the score for this item were to be cancelled because of compliance, the percentage of passing would be reduced to 63%. Seven per cent of subjects passing item 10 on the Victoria C scale admitted to a compliance response in addition.

The difficult items which were passed more frequently

by subjects on the indirect version than on the direct version were item 8 (arm immobilization), and item 10 (hallucinated voice). A possible explanation is as follows. The suggestions were designed to allow the subject to make use of ordinary sensory memory and cognitive experiences to elicit each phenomenon. Most people talk to themselves out loud privately at least occasionally. And most people have experienced being too lazy to move. These experiences are amenable for use in hypnotic suggestion. But not many people are aware of negatively hallucinating. These negative visual hallucinations require the effortless use of dissociation from ordinary experience characteristic of the highly hypnotizable. Subjects of lower hypnotizability perhaps do not have parallel experiences to facilitate hypnotic dissociation.

Correlation of the Stanford C Scale and the Victoria C Scale.

A Pearson Product Moment Correlation Coefficient was calculated for all subjects' scores on each scale. The correlation was 0.67 ($p < 001$).

General Conclusions

Two different protocols using indirect approaches to

hypnosis have been used as comparisons with the direct approach to hypnosis.

The subjects of low hypnotizability used in these experiments were able to experience more hypnotic phenomena using the indirect approaches. The sample of subjects of high hypnotizability however, responded better to direct suggestion.

In these experiments, the subjects who were defined as low in hypnotizability according to their direct hypnosis scores showed significantly increased scores using indirect hypnosis. As figure 4 shows, this difference does not occur when subjects perform either scale first, but only at the second time of testing. As Shor, Orne and O'Connell (1966) have emphasized, perhaps the first experience in hypnosis is not the most valid indication of that individual's hypnotizability. A second time of testing, (while not reaching plateau hypnotizability) may be a more valid measure. If we then take the second time of testing as the more valid indication of hypnotizability according to each method of hypnosis, it is evident from Figure 4 that subjects of low hypnotizability do considerably better using indirect hypnosis; those of high hypnotizability do better using direct hypnosis.

The interest in indirect approaches to hypnosis has

recently attempted to provide techniques that permit the majority of individuals to make use of hypnosis, not just those of high hypnotic talent. While clinical experience indicates utilitarian advantage, experimental evidence has been lacking except with a few pain studies.

It is essential for these results to be generalized only to laboratory investigation. The use of clinical hypnosis for psychotherapy is quite different. Subjects volunteering for measurement scales are motivated to succeed and experience interesting phenomena. Nothing that they do in the testing situation has any relevance to their ordinary lives. They are not, for example, presenting with a particular problem for which they are seeking therapy, with a history of failure with other forms of therapy.

When comparing effectiveness for indirect versus direct suggestion for these measurement scale items, a modest, but not dramatic improvement occurs. Indirect suggestion has not given the almost magical results reported by J. Barber and his associates for indirect hypnosis in pain control. Perhaps indirect suggestion is not the most critical factor in the induction and use of hypnosis. Another variable, such as the use of naturalistic or individualized approaches may be critical. Or perhaps some of the interactional variables. One may

recall J. Barber's techniques in naturalistic indirect hypnosis. While he emphasized the importance of indirect suggestion, his effectiveness may have been the result of other variables. His dramatic success has not been achieved by others attempting to use a standardized protocol from the Barber's rapid induction analgesia technique.

The results of this experiment emphasize the robustness of hypnotizability, and lend weight to the model of hypnotizability as a trait. While subjects of high hypnotizability did better with the direct approach, they still gained high scores with the indirect approach. Subjects of low hypnotizability certainly gained higher scores with the indirect approach: but no single subject scoring in the low range using direct hypnosis gained more than five points subsequently using indirect hypnosis.

Addressing the experience of hypnosis rather than overt behavioral manifestations, it is interesting that subjects preferred the indirect approach so strongly. Given equal scores on each scale, a typical subject would find the indirect version of hypnosis more effective, more enjoyable, more relaxing, more involving and vivid, more automatic and "hypnotic" in quality; more applicable to therapy, and "further into hypnosis". As E. Hilgard has

stated, the essence of hypnosis is the phenomenological experience, and not the overt behaviors elicited. It makes sense to incorporate some measure of subjective experience into the measurement scales.

Indirect approaches to hypnosis could be incorporated into a measurement scale of hypnotizability. Such a scale would be particularly applicable to clinical research, in which indirect suggestion might be the predominate form of hypnotic approach for the experimental treatment. However, in laboratory research, in which direct suggestion is used, the retention of direct suggestion measurement scales seems appropriate. However, this finding may not reflect the indirect versus direct approaches so much as the manner in which they were employed. An egalitarian version of direct hypnosis might well be received equally well.

Further experimentation and revision of the protocols need to be made in order to offer an indirect version of the Stanford C scale as a reliable research scale. From these results, it would seem appropriate to work further on an indirect suggestion scale for clinical research. If laboratory hypnosis retains the use of direct approaches to hypnosis for an experimental investigation, then use of direct suggestion approaches to hypnosis for measurement scales remains appropriate. These scales, however, could

well be revised to provide a more egalitarian relationship style; to alter the content of the test items; and to incorporate subjective experience into the scoring.

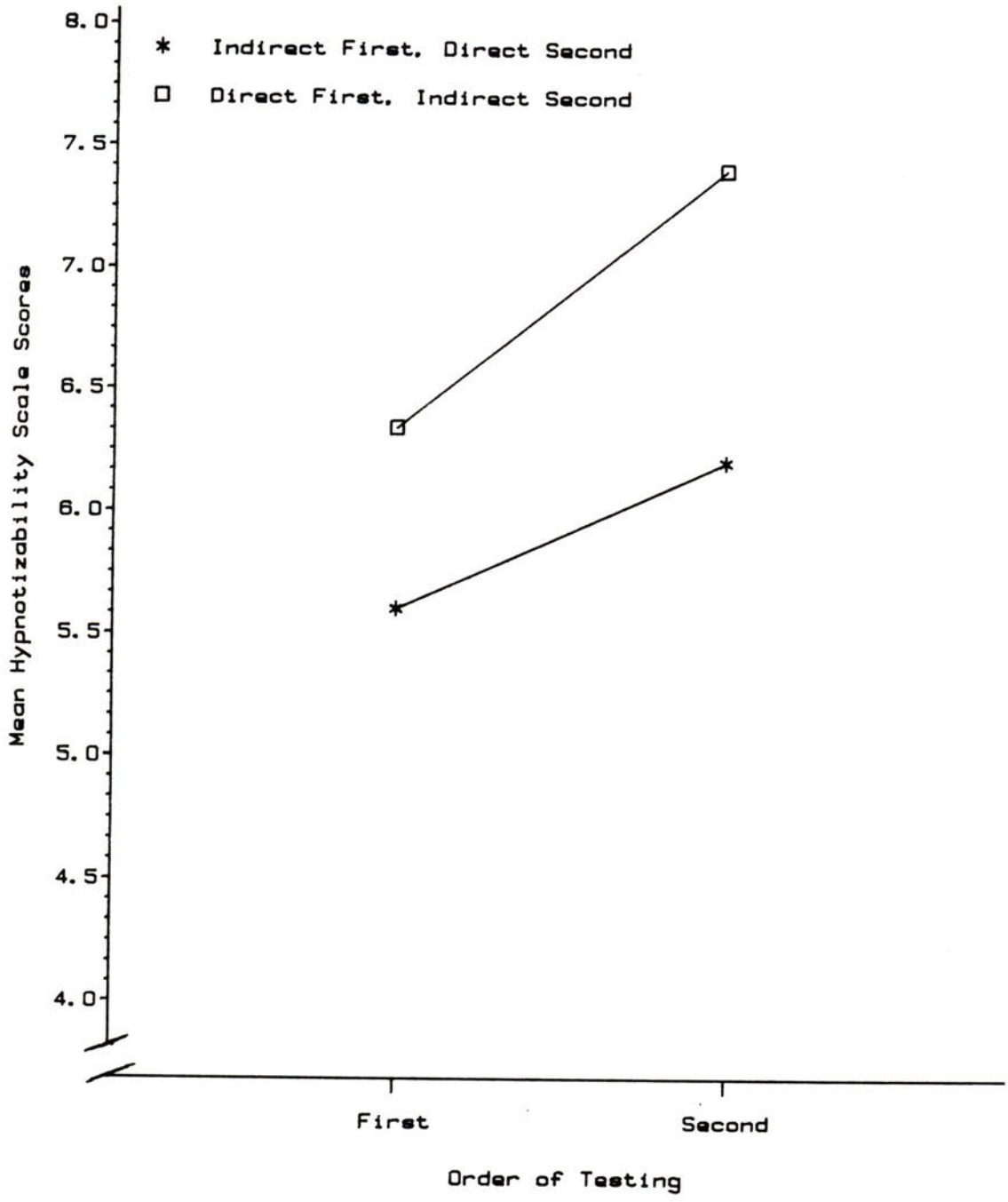

Figure 1. Experiment 1: Mean hypnotizability scale scores according to order in which direct hypnosis (Stanford C Scale) and indirect hypnosis (Victoria C Scale) administrations were used.

Figure 2:

Experiment 1: Mean hypnotizability scale scores for high and low hypnotizable groups according to the order in which direct hypnosis (Stanford C scale) and indirect hypnosis (Victoria C scale) administrations were used.

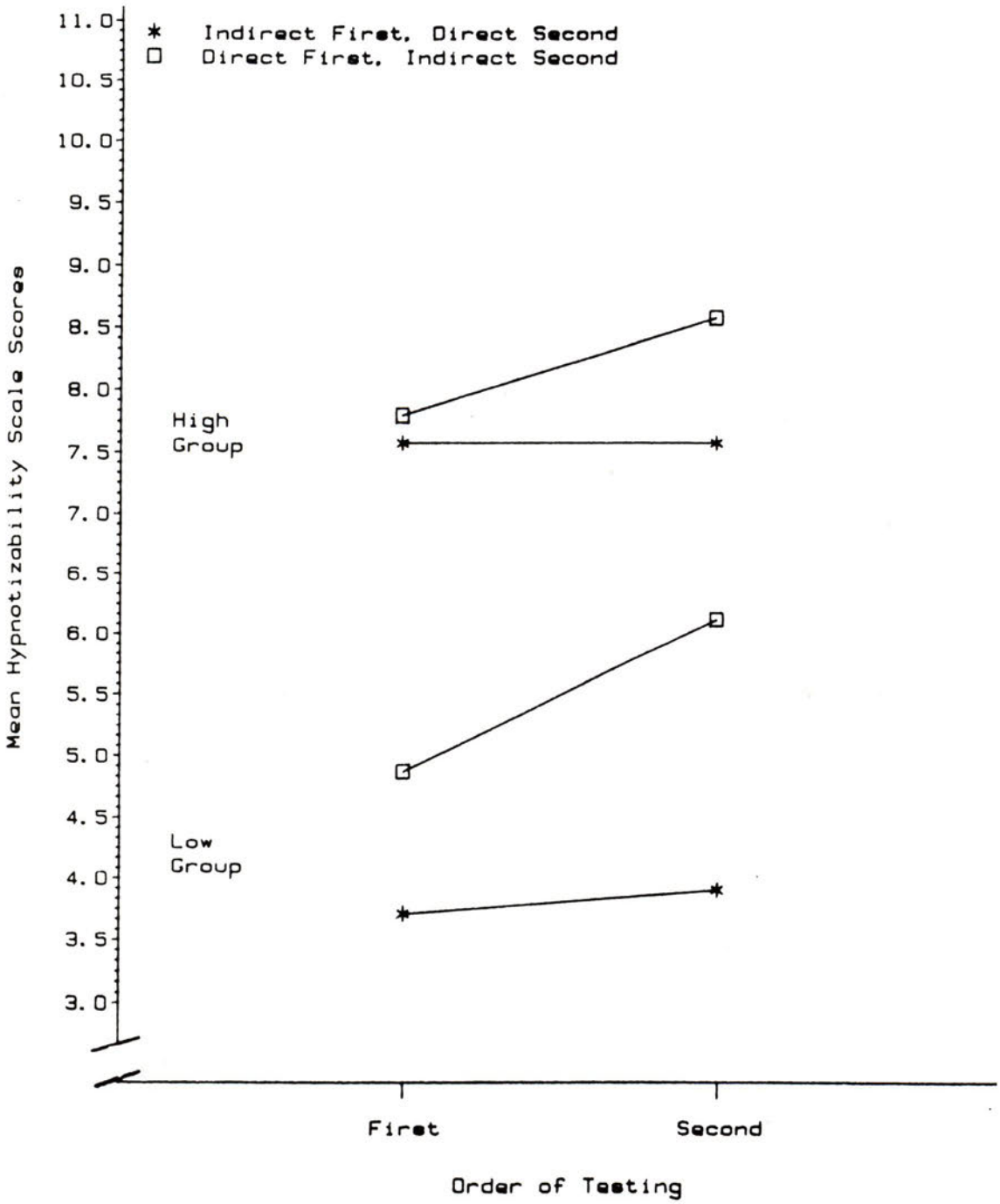

Figure 3:

Experiment 2: Mean hypnotizability scale scores for high and low hypnotizable groups according to the order in which direct hypnosis (Stanford C scale) and indirect hypnosis (Victoria C scale) administrations were used.

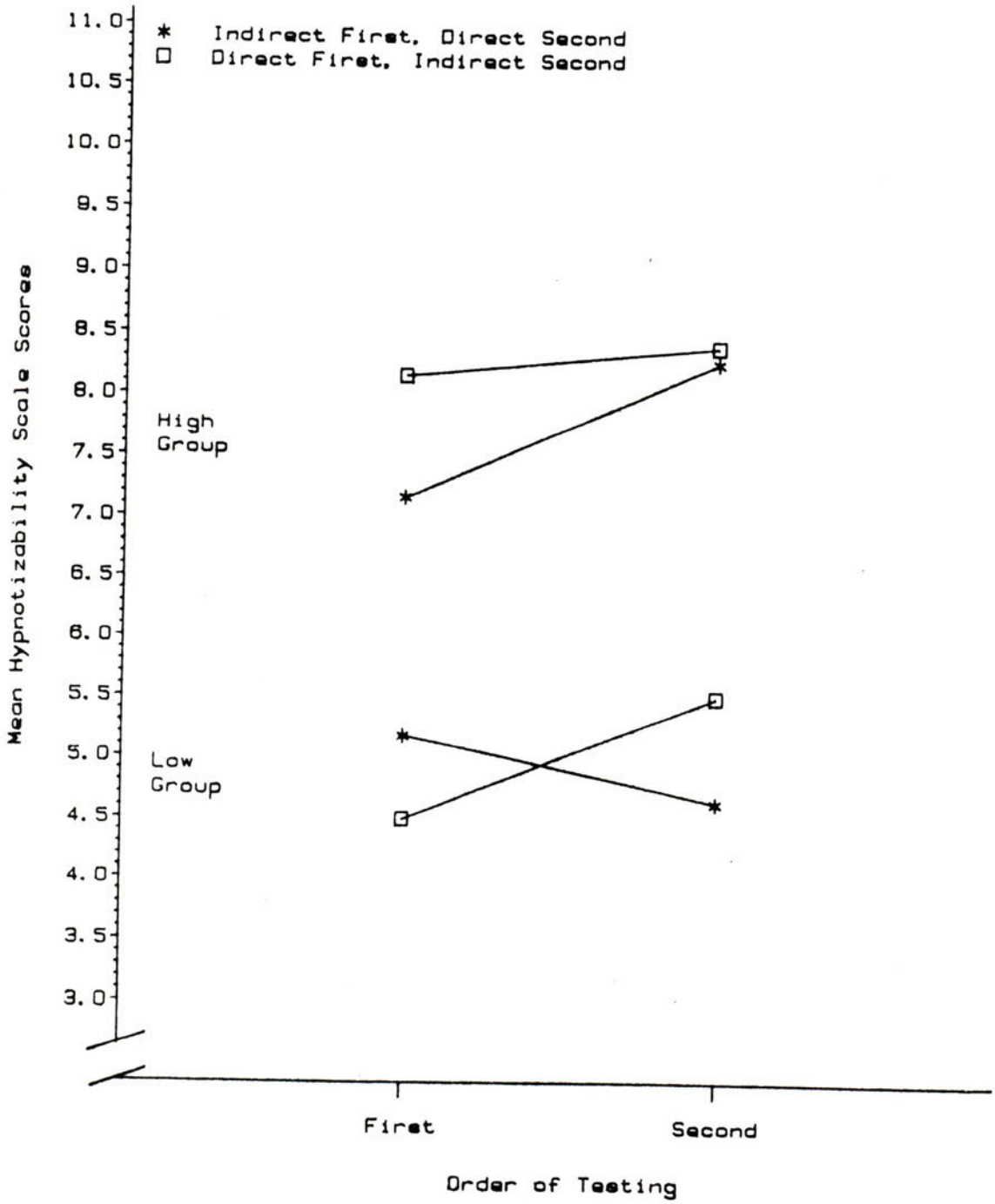

Figure 4:

Experiments 1 and 2 combined: Mean hypnotizability scale scores for high, medium, and low hypnotizable groups according to the order in which direct hypnosis (Stanford C scale) and indirect hypnosis (Victoria C scale) administrations were used.

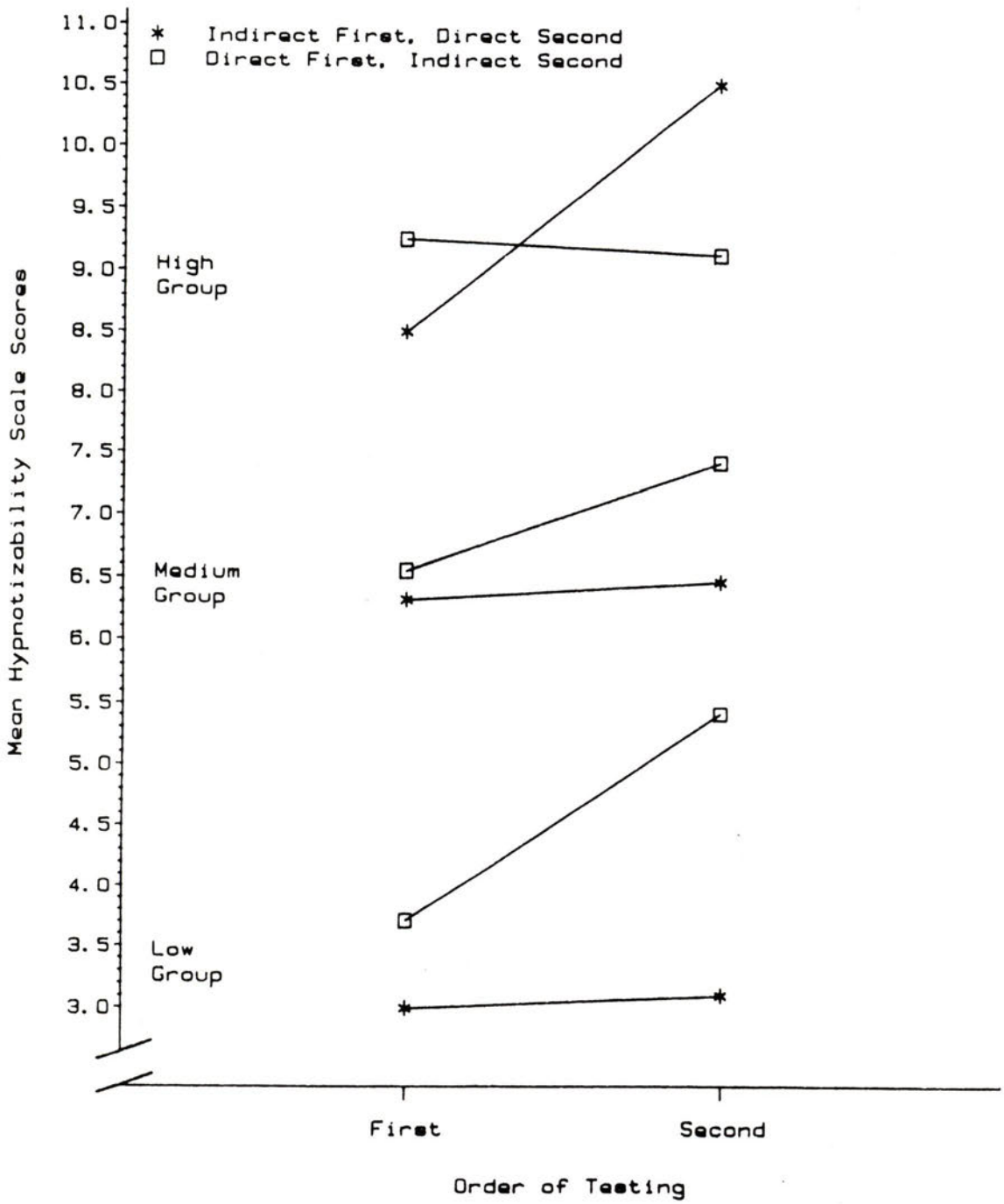

Table 1

Experiment 1: Mean Scores of Subjects according to two Levels of Hypnotizability, and Method of Hypnosis

Method of Hypnosis	Level of Hypnotizability
	High hypnotizability
Direct	8.19
Indirect	8.25
	Low hypnotizability
Direct	4.3
Indirect	4.92

Note. The high hypnotizability group consisted of subjects scoring 7-12 on the Stanford C Scale.

The low hypnotizability group consisted of subjects scoring 0-6 on the Stanford C Scale.

Direct Hypnosis refers to the Stanford Hypnotic Susceptibility Scale, Form C.

Indirect Hypnosis refers to the Victoria C Scale.

Table 2

Experiment 1: Manova Summary Table

SOURCE OF VARIATION	SS	DF	MS	F	P
BETWEEN GROUPS					
Within cells					
error 1	201.3	45	4.4		
level,hyp	292.2	1	292.2	65.3	.000
Order	20.2	1	20.2	4.5	.039
level,hyp by order	13.6	1	13.6	3.04	.088
WITHIN GROUPS					
Within cells					
error 2	88.7	45	1.9		
method	1.3	1	1.3	.7	.40
level,hyp by method	2.0	1	2.0	1.0	.31
order by method	16.4	1	16.4	8.3	.006
level,hyp by order by method	.3	1	.3	.1	.68

Means and Standard Deviations

1. Direct Hypnosis (Stanford C Scale)

Level of Hypnotizability	Order	Mean	S.D.
higher	1 (direct 1st)	7.8	1.5
..	2 (direct 2nd)	8.5	1.9
lower	1	4.8	1.0
..	2	3.9	1.3

2. Indirect Hypnosis (Victoria C Scale)

higher	1 (ind.2nd)	8.7	1.2
..	2 (ind.1st)	7.5	1.6
lower	1	6.1	2.6
..	2	3.7	1.7

Total mean score for Stanford C scale: 6.16 (SD 2.4)
Total mean score for Victoria C Scale: 6.6 (SD 2.6)

Higher hypnotizability: 7-12 on the Stanford C Scale.
Lower hypnotizability: 0-6 on the Stanford C Scale.

Order 1: Stanford C Scale taken first; Victoria C Scale second
Order 2: Stanford C Scale second; Victoria C Scale second

Table 3

Experiment 2: Mean Scores of Subjects according to two Levels of Hypnotizability, and Method of Hypnosis

Method of Hypnosis	Level of Hypnotizability
	High hypnotizability
Direct	8.2
Indirect	7.74
	Low hypnotizability
Direct	4.56
Indirect	5.34

Note. The high hypnotizability group consisted of subjects scoring 7-12 on the Stanford Hypnotic Susceptibility Scale, Form C (Stanford C Scale). The low hypnotizability group consister of subjects scoring 0-6 on the Stanford C Scale. Direct hypnosis refers to the Stanford Hypnotic Susceptibility Scale, Form C.
Indirect hypnosis refers to the Victoria C Scale.

Table 4
Experiment 2: Manova Summary Table

SOURCE OF VARIATION	SS	DF	MS	F	P
BETWEEN GROUPS					
Within cells error 1	188.8	44	4.2		
level,hyp	220.1	1	220.1	51.2	.000
Order	2.5	1	2.5	.5	.44
level,hyp by order	1.3	1	1.3	.3	.58
WITHIN GROUPS					
Within cells error 2	55.9	44	1.2		
method (direct v indirect)	.7	1	.7	.56	.45
level,hyp by method	8.5	1	8.5	6.7	.01
order by method	4.6	1	4.6	3.6	.06
level,hyp by order by method	1.1	1	1.1	.86	.35

Means and Standard Deviations

1. Direct hypnosis (Stanford C Scale)

Level of hypnotizability	Order	Mean	S.D.
higher	1 (direct 1st)	8.1	0.89
..	2 (direct 2nd)	8.2	1.4
lower	1	4.5	1.7
..	2	4.6	1.1

2. Indirect hypnosis (Victoria C Scale)

higher	1 (indirect 2nd)	8.3	2.0
..	2 (indirect 1st)	7.1	1.5
lower	1	5.5	2.3
..	2	5.1	1.7

Note.
Higher hypnotizability group: subjects scoring 7-12 on Stanford C Scale.
Lower hypnotizability group: subjects scoring 0-6 on Stanford C Scale.

Order 1: Stanford C Scale first; Victoria C Scale second.
Order 2: Victoria C Scale taken first; Stanford C Scale secon

Table 5
Comparison of Experiments 1 and 2 according to two Levels of Hypnotizability

		Order	Mean
STANFORD C SCALE			
Higher hypnotizability:			
	Exp.1	order 1	Mean: 7.8
		2	8.6
	Exp.2	1	8.2
		2	8.3
Lower hypnotizability:			
	Exp.1	1	4.8
		2	3.9
	Exp.2	1	4.5
		2	4.6
VICTORIA C SCALE			
Higher hypnotizability			
	Exp. 1	1	8.7
		2	7.6
	Exp. 2	1	8.4
		2	7.2
Lower hypnotizability	Exp. 1	1	6.1
		2	3.7
	Exp. 2	1	5.5
		2	5.2

Note.

Order 1: Stanford C Scale first; Victoria C Scale second.

Order 2: Victoria C Scale first; Stanford C Scale second.

The higher Hypnotizability group consisted of subjects scoring 7-12 on the Stanford C Scale.

The lower hypnotizability group consisted of subjects scoring 0-6 on the Stanford C Scale.

Table 6

Comparison of Experiment 1 and Experiment 2: Manova Summary Table

SOURCE OF VARIATION	SS	DF	MS	F	P
BETWEEN GROUPS					
Within cells error 1	390.2	89	4.3		
level,hyp	510.0	1	510.0	116.3	.000
Order	18.6	1	18.6	4.2	.04
level,hyp by experiment	2.6	1	2.6	.6	.43
level, hyp by order	3.2	1	3.2	.7	.39
experiment by order	4.2	1	4.2	.9	.32
level,hyp by exp by order	11.7	1	11.7	2.6	.10
WITHIN GROUPS					
within cells error 2	144.7	89	1.6		
exp by method	.05	1	.05	.03	.85
level hyp, by exp by method	1.1	1	1.1	.69	.40
exp by order by method	1.8	1	1.8	1.1	.29
exp by level,hyp by order, by method	.11	1	.11	.07	.79

Table 7

Mean Scores of Subjects on the Stanford C Scale and the Victoria C Scale, according to each Examiner

Scale	Examiner		
	R.W.	M.L.	N.B.
Stanford C Scale	5.52	6.7	6.0
Victoria C Scale	6.47	6.6	6.4

Table 8

Mean Scores of Subjects according to three Levels of Hypnotizability; Method; and Order.

1. Regardless of order:

	Stanford C Scale	Victoria C Scale
High Hypnotizability	9.87	8.81
Medium Hypnotizability	6.5	6.86
Low Hypnotizability	3.4	4.2

2. According to Order of administration of each Scale

	Hypnotizability Level	Mean Score
Stanford C Scale		
first	high [9-12]	9.25
second	high	10.5
first	medium [5-8]	6.55
second	medium	6.46
first	low [0-4]	3.71
second	low	3.1
Victoria C Scale		
first	high	8.5
second	high	9.12
first	medium	6.32
second	medium	7.41
first	low	3.0
second	low	5.41

Table 9
Manova Summary Table: Comparison of Three Levels of Hypnotizability; Method of Hypnosis; and Order of Administration of each Scale

SOURCE OF VARIATION	SS	DF	MS	F	P
BETWEEN GROUPS					
Within cells error 1	296.0	91	3.2		
level,hyp	617.0	2	308.5	1954.9	.000
Order	11.1	1	11.1	3.4	.067
level,hyp by order	13.6	2	6.8	2.1	.128
WITHIN GROUPS					
Within cells error 2	141.0	91	1.5		
method	.006	1	.006	.003	.9
level,hyp by method	15.9	2	7.9	5.15	.008
order by method	19.7	1	19.7	12.7	.001
level,hyp by order by method	1.4	2	.7	.4	.63

Means and Standard Deviations

1. Stanford C Scale (Direct Hypnosis)

Hypnotizability level	Order	Mean	SD
High	1 (Direct 1st)	9.2	.70
..	2 (direct 2nd)	10.5	1.1
Medium	1	6.5	1.0
..	2	6.4	1.1
Low	1	3.7	1.2
..	2	3.1	.87
For entire sample		6.3	2.3

2.0 Indirect Hypnosis (Victoria C Scale)

High	1 (Ind 2nd)	9.1	2.1
..	2 (Ind 1st)	8.5	1.4
Medium	1	7.4	2.1
..	2	6.3	1.4
Low	1	5.1	2.5
..	2	3.0	1.1
For entire sample		6.5	2.4

Table 10
Manova Summary Table: Preference Questionnaire

SOURCE OF VARIATION	SS	DF	MS	F	P
Within cells error 1	114.2	92	1.2		
Within cells error 2	1530.2	92	16.6		
Pref, direct v indirect	269.7	1	269.7	16.2	.0001

	Means:	S.D.
Preference for Direct hypnosis:	2.69	2.88
.. Indirect hypnosis:	5.10	3.09

Table 11
Percentage of Separate Test Items passed within each Scale of Hypnotizability.

Experiments 1 and 2 combined	% passing	
	Stanford C Scale	Victoria C Scale
1. Hand lowering	97	99
2. Moving hands apart	89	85
3. Mosquito hallucination	80 (63)	48
4. Taste hallucination	51	69
5. Arm rigidity	60	74
6. Dream	68	64
7. Age regression	74	73
8. Arm immobilization	44	62
9. Anosmia	19	14
10. Hallucinated voice	14	42 (35)
11. Negative visual hallucination	8	1
12. Amnesia	20	14

Note. Adjusted percentages from alternate scoring given in parentheses.

Test Item Distribution of original Stanford sample testing the Stanford C Scale.

Item	% passing
1.	92
2.	88
3.	48
4.	46
5.	45
6.	44
7.	43
8.	36
9.	19
10.	9
11.	9
12.	27

Table 12
Correlation Coefficients of Hypnotizability Scale Test Items

Test Item [direct]	Correlation with: Stanford C Scale	Test Item [Indirect]	Correlation with: Victoria C Scale
1	.23	1	.27
2	.36	1	.36
3	.49	1	.43
4	.56	1	.64
5	.54	1	.66
6	.53	1	.62
7	.48	1	.61
8	.52	1	.59
9	.49	1	.38
10	.46	1	.59
11	.49	1	.45
12	.51	1	.15

Stanford Test item number	Corr. with Stanford Scale	Victoria Test item number	Corr. with Victoria Scale
1	.26	1	.27
2	.36	2	.23
3	.38	3	.32
4	.38	4	.42
5	.23	5	.51
6	.36	6	.42
7	.37	7	.45
8	.40	8	.44
9	.25	9	.24
10	.34	10	.39
11	.23	11	.43
12	.36	12	-.004

Correlations of Stanford C Scale test items with Victoria C Scale test items:

Test item number	Correlation	Test item number	Correlation
1	.7	7	.54
2	.53	8	.52
3	.32	9	.16
4	.46	10	.36
5	.39	11	.39
6	.4	12	-.06

REFERENCES

Alman, B. (1979). Comparing the effectiveness of direct and indirect suggestion. Paper presented at the meeting of the American Society of Clinical Hypnosis, San Francisco, U.S.A.

Alman, B. M, & Carney, R. E. (1980). Consequences of Direct and Indirect Suggestions on Success of Posthypnotic Behavior. American Journal of Clinical Hypnosis, 23, (2), pp. 112-118.

As, A. (1962). Non-hypnotic experiences related to hypnotizability in male and female college students. Scandinavian Journal of Psychology, 3, pp. 47-64.

As, A., O'Hara, J. W., & Munger, M.P. (1962). The measurement of subjective experiences presumably related to hypnotic susceptibility. Scandinavian Journal of Psychology, 3, pp. 47-64.

Banyai, E.I., & Hilgard, E.R. (1976). A comparison of active-alert hypnotic induction with traditional relaxation induction. Journal of Abnormal Psychology, 85, pp. 218-224.

Barber, J. (1976). Effectiveness of hypnotic analgesia in the reduction of experimental dental pain in individuals of both high and low hypnotic susceptibility. Doctoral Dissertation, University of Southern California.

Barber, J. (1977). Rapid induction analgesia: a clinical report. American Journal of Clinical Hypnosis, 19, pp. 138-147.

Barber, J. (1978). Maximizing the effectiveness of hypnosis through indirect suggestion. Paper presented at the meeting of the American Psychological Association. Toronto, Ontario, Canada, August, 1978.

Barber, J. (1982). Incorporating hypnosis in the management of chronic pain. In J. Barber, & C. Adrian, (Eds.), Psychological approaches to the management of pain. (pp 40-59). New York, U.S.A: Brunner/Mazel.

Barber, J., & Mayer, D. (1977). Evaluation of the efficacy and neural mechanism of a hypnotic analgesia procedure in experimental and clinical dental pain. Pain, 4, pp. 41-48.

Barber, T.X. (1958). The concept of "hypnosis." Journal of Psychology, 45, pp. 115-131.

Barber, T.X., & Glass, L.B. (1962). Significant factors in hypnotic behavior. Journal of Abnormal and Social Psychology, 64, pp. 222-228.

Barry, H. Jr., MacKinnon, D.W., & Murray, H.A. Jr. (1931). Studies in personality: A. Hypnotizability as a Personality trait and its typological relations. Human Biology, 3, pp. 1-36.

Bateson, G., Jackson, D. D., Haley, S., & Weakland, S. H. Towards a theory of schizophrenia. Behavioral Science, 1, pp. 251-264.

Bentler, P.M., & Hilgard, E.R. (1963). A comparison of group and individual induction of hypnosis with self-scoring and observer-scoring. International Journal of Clinical and Experimental Hypnosis, 11, pp. 49-54.

Bernheim, H. (1886). De la suggestion et de ses applications a la therapeutique. Paris, France: Doin. English translation: Suggestive Therapeutics, (C.A. Herter, Tans.), 1888. New York, U.S.A: University Books, 1964.

Betts, G.H. (1909). The Distribution and Functions of Mental Imagery. Columbia University, U.S.A., Contributions to Education, No. 26.

Bowers, K.S. (1981). Do the Stanford Scales tap the 'classic suggestion effect'?. International Journal of Clinical and Experimental Hypnosis, 29, pp. 42-53.

Bowers, P. G. (1978). Hypnotizability, creativity, and the role of effortless experiencing. International Journal of Clinical and Experimental Hypnosis, 26, pp. 184-201.

Bowers, P. G. (1982). The classic suggestion effect: relationships with scales of hypnotizability, effortless experiencing, and imagery vividness. International Journal of Clinical and Experimental Hypnosis, 3, pp. 270-279.

Bowers, P. G., & Bowers, K. S. (1979). Hypnosis and creativity: A theoretical and empirical rapprochement. In E. Fromm & R. Shor (Eds.), Hypnosis: Developments in research and new perspectives, (2nd ed.) Hawthorne, New York, U.S.A: Aldine.

Bramwell, J.M. (1903). Hypnotism: Its History, Practice and Theory. London, England: Grant Richards.

Coe, W.C. (1964). The heuristic value of role theory and hypnosis. Unpublished dctoral dissertation, University of California, Berkeley., U.S.A.

Crawford, H.J. A group administration of the SHSS:C. Unpublished manuscript.

Crawford, H.J., Hilgard, J.R., & MacDonald, H. (1982). Transient experiences following hypnotic testing and special termination procedures. International Journal of Clinical and Experimental Hypnosis, 30, pp. 117-126.

Davis, L.W., & Husband, R.W. (1931). A study of hypnotic susceptibility in relation to personality traits. Journal of Abnormal and Social Psychology, 26, pp. 175-182.

Diamond, M.J., & Taft, R. (1975). The role played by ego permissiveness and imagery in hypnotic responsivity. The International Journal of Clinical and Experimental Hypnosis, 23, pp. 130-138.

Erickson, M. H. (1952). Deep hypnosis and its induction. In L. M. LeCron (Ed) Experimental Hypnosis, (pp. 70-114). New York, U.S.A: Macmillan.

Erickson, M. H. (1958). Naturalistic Techniques of Hypnosis. American Journal of Clinical Hypnosis, 1, pp. 3-8.

Erickson, M. H. (1964) The confusion technique in hypnosis. American Journal of Clinical Hypnosis, 6, pp. 183-207.

Erickson, M. H. (1964). A hypnotic technique for resistant patients: The patient, the technique and its rationale and field experiments. American Journal of Clinical Hypnosis, 7, pp. 8-32.

Erickson, M.H., & Rossi, E., & Rossi, S. (1976). Hypnotic Realities. New York: Irvington Publishers.

Rrickson, M.H., & Rossi, E. (1979). Hypnotherapy: An exploratory casebook. New York, U.S.A: Irvington Publishers.

Erickson, M.H., & Rossi, E. L. (1980). The indirect forms of suggestion., In E. L. Rossi (Ed), The collected papers of Milton H. Erickson on hypnosis. Vol. 1. The nature of hypnosis and suggeston. pp. 452-477. New York, U.S.A: Irvington.

Erickson, J., Hershman, S., & Secter, I. (1961). The practical aplication of medical and dental hypnosis. New York, U.S.A: Julian Press.

Evans, F. J. (1970). Simultaneous changes in skin potential and subjective estimates of depth of hypnosis. Paper presented at the meeting of the Eastern Psychological Association, Atlantic City, U.S.A., 1970.

Evans, F. J., & Schmeidler, D. (1966). Relationship between the Harvard Group Scale of hypnotic Susceptibility and the Stanford Susceptibility Scale: Form C. International Journal of Clinical and Experimental Hypnosis, 14, pp. 333-343.

Evans, F. J., & Paul, G. L. (1970). Effects of hypnotically suggested analgesia on physiological and subjective responses to cold stress. Journal of Consulting and Clinical Psychology, 35, pp. 362-371.

Eysenck, H. J. & Furneaux, W. D. (1945). Primary and secondary suggestibility: An experimental and statistical study. Journal of experimental Psychology, 35, pp. 485-503.

Faria, J. C. A., de (1819). De la cause du sommeil lucide ou l'etude de la nature de l'homme. (Ed) D.G. Dalgado, Paris, France: Henri Jouve, 1906.

Field, P.B. (1965). An inventory scale of hypnotic depth. International Journal of Clinical and Experimental Hypnosis, 13, pp. 238-249.

Finke, R.A., & Macdonald, K. (1978). Two personality measures relating hypnotic susceptibility to absorption. International Journal of Clinical and Experimental Hypnosis, 26, pp. 178-183.

Frankel, F. H. (1982). Hypnosis and hypnotizability scales: A reply. International Journal of Clinical and Experimental Hypnosis, 30, (4), pp. 377-392.

Fricton, J. (1981). The effects of direct and indirect hypnotic suggestions for analgesia in high and low susceptible subjects. Paper presented at the Third World Congress of Pain at the International Association for the Study of Pain, Edinburgh, Scotland.

Fricton, J., & Roth, P. (1985). The Effects of Direct and Indirect Hypnotic Suggestions for Analgesia in High and Low Susceptible Subjects. American Journal of Clinical Hypnosis, 27, (4), pp. 226-231.

Friedlander, J. W., & Sarbin, T. R. (1938). The depth of hypnosis. Journal of Abnormal and Social Psychology, 33, pp. 453-475.

Frischolz, E. J., Tryon, W. W., Vellios, A. T., Fisher, S., Maruffi, B. L., & Spiegel, H. (1980). The relationship between the Hypnotic Induction Profile and the Stanford Hypnotic Susceptibility Scale: Form C: A replication. American Journal of Clinical Hypnosis, 22, (4), 185-196.

Gillett, P. L., & Coe, W. C. (1984). The Effects of Rapid Induction Analgesia (RIA), hypnotic susceptibility and the severity of discomfort on reducing dental pain. American Journal of Clinical Hypnosis, 27, (2), pp. 81-90.

Goldsmith, M., (1934) Franz Anton Mesmer. London, England: Arthur Barker Ltd.

Gottfredson, D. (1973). Hypnosis as an anesthetic in dentistry. Doctoral dissertation, Brigham Young University, U.S.A. Dissertation Abstracts International. 33, 7-B.

Haley, J. (1960). The control of fear with hypnosis. American Journal of Clinical Hypnosis, 3, pp. 109-115.

Hilgard, E. R. (1965). Hypnotic Susceptibility. New York, U.S.A: Harcourt Brace Jovanovich.

Hilgard, E. R. (1967). A quantitative study of pain and its reduction through hypnotic suggestion. Proceedings of the National Academy of Sciences, 57, (158), pp. 1-6.

Hilgard, E. R. (1979). Divided consciousness in hypnosis: The implications of the hidden observer. In E. Fromm and R. E. Shor (Eds) Hypnosis: Developments in research and new perspectives. New York, U.S.A: Aldine Publishing Company.

Hilgard, E. R. (1980). Hypnosis in the treatment of pain. in G. D. Burrows & L. Dinnerstein (Eds) Handbook of Hypnosis and Psychosomatic Medicine. Elsevier, Holland: Elsevier\North-Holland Biomedical Press.

Hilgard, E. R. (1981). Hypnotic susceptibility scales under attack: An examination of Weitzenhoffer's criticisms. International Journal of Clinical and Experimental Hypnosis, 29, (1), pp. 24-41.

Hilgard, E. R., Crawford, H. J., Bowers, P. & Kihlstrom, J. (1977). Manual for the Tailored SHSS:C. Department of Psychology, Stanford University, U.S.A.

Hilgard, E. R., Crawford, H. J., & Wert, A. (1979). The Stanford Hypnotic Arm Levitation Induction and Test. International Journal of Clinical and Experimental Hypnosis, 27, (2), pp. 111-124.

Hilgard, E. R., & Morgan, A. H. (1975). Heart rate and blood pressure in the study of laboratory pain in man under normal conditions and as influenced by hypnosis. Acta Neurologiae Experimentalis, 35, pp. 741-759.

Hilgard, E. R., & Tart, C. T. (1966). Responsiveness to suggestions following waking and imagination instructions and following induction of hypnosis. Journal of Abnormal Psychology, 71, pp. 196-208.

Hilgard, J. R. (1970). Personality and hypnosis: A study of imaginative involvement. Chicago, U.S.A: University of Chicago Press.

Hilgard, J. R., & LeBaron, S. (1984). Hypnotherapy of Pain in Children with Cancer. Los Altos, California, U.S.A: William Kaufmann Inc.

Hull, C. H. (1933). Hypnosis and suggestibility: An experimental approach. New York, U.S.A: Appleton Century-Crofts.

Janet, P. (1889). A'Automatisms Psychologique, Paris, France: Felix Alcan.

Janet, P. (1924). Principles of Psychotherapy, New York, U.S.A: Macmillan.

Kihlstrom, J. F., & Evans, F. J. (1973). Forgetting to count reversibility: What constitutes posthypnotic amnesia? Paper presented at the 25th Annual Meeting of the Society for Clinical and Experimental Hypnosis, Newport Beach, California, U.S.A.

Kihlstrom, J. F., & Register, P. A. (1984). Optimal scoring of amnesia on the Harvard Group Scale of Hypnotic Susceptibility: Form A. International Journal of Clinical and Experimental Hypnosis, 32, (1), pp. 51-57.

Knight, P. (1982). Unpublished Honours Thesis, University of Victoria, Victoria, B.C., Canada.

Kraft, W. A., Rodolfa, E. R., & Reilley, R. R. (1985). Current Trends in Hypnosis and Hypnotherapy. American Journal of Clinical Hypnosis, 28, (1), pp. 20-26.

Lawrence, J. R., & Perry, C. (1982). Montreal norms for the Harvard Group Scale of Hypnotic Susceptibility, form A. International Journal of Clinical and Experimental Hypnosis, 30, (2), pp. 167-176.

Lehman, R. E. (1972). Imagery, Imagination and Hypnosis. Doctoral Dissertation, University of Oregon. U.S.A. Dissertation Abstracts International, 1973, 33, 4515b (University Microfilms No. 73-7923).

Liebault, A. A. (1886). Du sommeil et des etats analoques consideres surtout au point de vue de l'action moral sur le physique. Paris, France: V. Masson.

MacHovec, F. J. (1979). The cult of Asklipios. American Journal of Clinical Hypnosis, 22, (2), pp. 85-90.

McConkey, K. M. (1984). The impact of an indirect suggestion. International Journal of Clinical and Experimental Hypnosis, 32, (3), pp. 307-314.

McGlashan, T. H., Evans, F. J., & Orne, M. T. (1969). The nature of hypnotic analgesia and placebo response to experimental pain. Psychosomatic Medicine, 31, pp. 227-246.

Matthews, W. J., Bennett, H., Bean, W., & Gallagher, M. (1985). Indirect versus direct hypnotic suggestions: An initial investigation. International Journal of Clinical and Experimental Hypnosis, 33, (3), pp. 219-223.

Mayer, D., Price, D., Barber, J., & Rafii, A. (1976). Acupuncture analgesia: Evidence for activation of a pain inhibitory mechanisms of action. In J. Bonica, (Ed), Proceedings of the First World Congress of the International Association for the Study of Pain. New York, U.S.A: Raven Press.

Monteiro, K. P., Macdonald, H., & Hilgard, E. R. (1980). Imagery, absorption, and hypnosis: A factorial study. Journal of Mental Imagery, 4, pp. 63-81.

Morgan, A. H. (1973). The heritability of hypnotic susceptibility in twins. Journal of Abnormal Psychology, 82, pp. 55-61.

Morgan, A. H., & Hilgard, J. H. (1975). Age differences in susceptibility to hypnosis. International Journal of Clinical and Experimental Hypnosis, 21, pp. 78-85.

Morgan, A. H., Hilgard, E. R. & Davert, E. C. (1970). The heritability of hypnotic susceptibility of twins: A preliminary report. Behavior Genetics, 1, pp. 213-224.

Morgan, A. H., & Hilgard, J. R. (1979). The Stanford Hypnotic Slinical Scale for Adults. American Journal of Clinical Hypnosis, 21, (2&3), pp. 134-147.

Morgan, A. H., Johnson, D. L., & Hilgard, E. R., (1974). The stability of hypnotic susceptibility: A longitudinal study. International Journal of Clinical and Experimental Hypnosis, 22, pp. 249-257.

Morgan, A. H., & Lam, D. (1969). The relationship of the Betts' vividness of imagery questionnaire and hypnotic susceptibility: Failure to replicate. Unpublished manuscript, Hawthorne House Research Memorandum, No. 103.

Perry, C. (1973). Imagery, fantasy, and hypnotic suscepbility: A multidimensional approach. Journal of Personality and Social Psychology, 26, pp. 217-221.

Perry, C., & Lawrence, J. R. (1980). Hypnotic depth and hypnotic susceptibility: A replicated finding. International Journal of Clinical and Experimental Hypnosis 28, (3), pp. 272-280.

Platanov, K. I. (1959) The work as a physiological and therapeutic factor (2nd ed.) Moscow, USSR: Foreign Languages Publishing House. Russian original, 1955.

Podmore, F. (1909) From Mesmer to Christian Science. (Reprinted 1963), New York, U.S.A: University Books.

Orne, M. T., (1959). The nature of hypnosis: Artifact and essence. Journal of Abnormal and Social Psychology, 58, pp. 277-299.

Orne, M. T. (1980). Hypnotic control of pain. Toward a clarification of the different psychological processes involved. In J. J. Bonica (Ed) Pain. New York, U.S.A: Raven Press.

Raikov, V. L. (1980). Age Regression to Infancy by Adult Subjects in Deep Hypnosis. American Journal of Clinical Hypnosis, 22, (3) pp. 156-163.

Ruch, J. C., Morgan, A. H & Hilgard, E. R. (1974). Measuring hypnotic responsiveness: A comparison of the Barber Suggestibility Scale and the Stanford Hypnotic Susceptibility Scale, Form A. International Journal of Clinical and Experimental Hypnosis, 22, pp. 365-376.

Sacerdote, P. (1982). A non-statistical dissertation about hypnotizability scales and clinical goals: Comparison with individualized induction and deepening procedures. International Journal of Clinical and Experimental Hypnosis, 30, (4), pp. 354-376.

Sanders, B. D., & Schubot, E. D. (1969). Stanford Group Scale of Hypnotic Susceptibility, Form C. Unpublished manuscript. Cited in P. Bowers, The classic suggestion effect: relationships with scales of hypnotizability, effortless experience, and imagery vividness. International Journal of Clinical and Experimental Hypnosis, 30, (3), pp. 272.

Sarbin, T. R., (1950) Contributions to role-taking theory: 1. Hypnotic behavior. Psychological Review, 57, pp. 255-270.

Sarbin, T. R. (1972). Imagining as muted role-taking: A historical-linguistic analysis. In P.W. Sheehan (Ed.), The Function and Nature of Imagery. New York, U.S.A: Academic Press, 333-353.

Sheehan, P. W. (1976). A Shortened Form of Betts' Questionnaire Upon Mental Imagery. Journal of Clinical Psychology, 23, pp. 386-389.

Sheehan, P. W., & McConkey, K. M. (1979). Australian Norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. International Journal of Clinical and Experimental Hypnosis, 27, (3), pp. 294-304.

Sheehan, P. W., & Perry, C. W. (1976). Methodologies of hypnosis: A critical appraisal of contemporary paradigms of hypnosis. Hillsdale, N.J., U.S.A: Lawrence Erlbaum Associates.

Shor, R. E., & Orne, E. C. (1962). The Harvard Group Scale of Hypnotic Susceptibility, Form A. Palo Alto, California, U.S.A: Consulting Psychologists Press.

Shor, R. E., Orne, M. T., & O'Connell, D. N. (1966). Psychological correlates of plateau hypnotizabilty in a special volunteer sample. Journal of Personality and Social Psychology, 3, pp. 80-95.

Singer, J. L. (1978). Experimental studies of daydreaming and the stream of thought. In K. S. Pope & J. L. Singer (Eds.), The stream of consciousness. New York, U.S.A: Plenum Press, pp. 187-225.

Singer, J. L., & Pope, K. S. (1978). The use of imagery and fantasy techniques in psychotherapy. In J. L. Singer & K. S. Pope (Eds.), The power of human imagination: New methods in psychotherapy. New York, U.S.A: Plenum Press.

Spanos, N. P. (1971). Goal-Directed Fantasy and the Influence of Hypnotic Test Suggestions. Psychiatry, 34, pp. 86-96.

Spanos, N. P., & Barber, T.X. (1972) Cognitive activity during "hypnotic" suggestibility: Goal-directed fantasy and the experience of non-volition. Journal of Personality, 40, pp. 510-524.

Spanos, N. P., & Ham, M. L. (1973). Cognitive activity in response to hypnotic suggestion: Goal directed fantasy and selective amnesia. American Journal of Clinical Hypnosis, 15, pp. 191-198.

Spanos, N.P., Valois, R., Ham, M. W. & Ham, M. L. (1973). Suggestibility, and vividness and control of imagery. International Journal of Clinical and Experimental Hypnosis, 21, pp. 305-311.

Spellacy, F. J., & Wilkinson, R. A. (1979). Hypnotic responsiveness in aspects of a double induction procedure. Paper presented to the annual scientific meeting of the American Society of Clinical Hypnosis, San Francisco, U.S.A., 1979.

Spiegel, H., & Bridger, A. A. (1970). Manual for the Hypnotic Induction Profile. New York, U.S.A: Soni Medica.

SPSS. (1986). SPSS^{x} Manova Program. New York, U.S.A: McGraw Hill.

Sutcliffe, J. P. (1958). Hypnotic Behavior: Fantasy or Simulation? Unpublished doctoral dissertation. University of Sydney, Sydney, Australia.

Spanos, N. P., & McPeake, J. D. (1975). Involvement in everyday imaginative activities, attitudes towards hypnosis, and hypnotic Suggestibility. Journal of Personality and Social Psychology, 31, pp. 594-598.

Sutcliffe, J. P., Perry, C. W., & Sheehan, P. W. (1970). Relation of some aspects of imagery and fantasy to hypnotic susceptibility. Journal of abnormal Psychology, 76, pp. 279-287.

Tart, C. T. (1966). Thought and imagery in the hypnotic state: Psychological correlates. Paper presented at the meeting of the American Psychological Association, New York, U.S.A.

Tart, C. T. (1970). Self report scales of hypnotic depth. International Journal of Clinical and Experimental Hypnosis, 18, pp. 105-125.

Tellegen, A, & Atkinson, G. (1974). Openness to Absorbing and Self Altering Experiences ("Absorption"), A Trait Related to Hypnotic Susceptibility. Journal of Abnormal Psychology, 83, pp. 268-277.

Tellegen, A. (1978). On measures and conceptions of hypnosis. American Journal of Clinical Hypnosis, 21, (2&3), pp. 219-237.

Wagman, R., & Stewart, C. G. (1984). Visual imagery and hypnotic susceptibility. Perceptual and Motor Skills, 38, pp. 815-822.

Van Gorp, W. G., Meyer, R. G., & Dunbar, K. D. (1985). The efficacy of Direct versus Indirect Hypnotic Induction Techniques on Reduction of Experimental Pain. International Journal of Clinical and Experimental Hypnosis, 33, (4), pp. 319-328.

Weitzenhoffer, A. M. (1980). Hypnotic Susceptibility Revisited. American Journal of Clinical Hypnosis 22, (3), pp. 130-146.

Weitzenhoffer, A. M., & Hilgard, E. R. (1959). The Stanford Hypnotic Susceptibility Scale, Forms A & B. Palo Alto, California, U.S.A: Consulting Psychologists Press.

Weitzenhoffer, A. M., & Hilgard, E. R. (1962). Stanford Hypnotic Susceptibility Scale: form C. Palo Alto, California, U.S.A: Consulting Psychologists Press.

Weitzenhoffer, A. M., & Hilgard, E. R. (1963). Stanford Profile Scales of Hypnotic Susceptibility, forms 1 & 2 (Revised version, 1967). Palo Alto, California, U.S.A: Consulting Psychologists Press.

White, M. M. (1930). The physical and mental traits of individuals susceptible to hypnosis. Journal of Abnormal and Social Psychology, 25, PP. 293-298.

Wilkinson, H. H. (1978). An investigation of hypnotizability as related to measures of imagery and field dependence-independence. Dissertation Abstracts International, 39, 2533.

Wilson, S. C., & Barber, T. X. (1978). The Creative Imagination Scale as a measure of hypnotic responsiveness: applications to experimental and clinical hypnosis. American Journal of Clinical Hypnosis, 20, pp. 235-249.

EXPLANATION TO SUBJECTS OF TESTING PROCEDURES

Subjects were informed that hypnosis is an altered state of consciousness, in which they would be in a relaxed state of focussed concentration. In this state they would be more able to change an idea into a movement, perceptual alteration, or change in their thinking. It was emphasized that awareness would always be retained, and that the state of hypnosis does not resemble sleep. It was also emphasized that subjects were in total control of themselves at all times.

The differences between experimental and therapeutic hypnosis were outlined. The mechanisms of stage hypnosis were described and contrasted with standard use of hypnosis.

The examiner informed subjects that research compared different styles of hypnosis, and that their subjective experiences of both types would be useful.

Information about the separate test items within the hypnotizability scales was given, so that subjects could give informed consent. The age regression item was given particular attention, so that if subjects had experienced emotional trauma at the targetted regressed age, a different age was chosen, or the alternative item "Memory of Meal" substituted.

APPENDIX

THE INDIRECT SUGGESTION MODIFICATION OF THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C; NAMED THE VICTORIA C SCALE.

Protocol 1, Experiment 1

Induction into Hypnosis

The administrator should follow the general instructions given in the Explanation to Subjects of Test Procedures.

It is assumed that examiners are familiar with the administration and scoring of the Stanford Hypnotic Susceptibility Scale, Form C. This indirect suggestion modification follows the same scoring criteria.

If Memory for Meal item is to be used instead of Age Regression because of anticipated emotional abreaction, administer the Pretest for this item before beginning the hypnotic induction. Use instructions from Protocol 2, Experiment 2.

Ellipses indicate a pause in the narration, approximately longer according to the number of ellipsis points. (Subject is already seated)

"Ready to begin?

"Find the most comfortable position...change it as you need to at any time.

"And close your eyes...

"With your eyes closed, you can notice everything to do with yourself....more than you usually do....you can remember what the room looks like....and you can also notice what you see behind your closed eyelids.....perhaps lights and flashes....maybe colors..

(If eyelids are moving):"And those movements of your eyelids...let them move as much as they need to...you will notice them,in a way that you don't usually..and you won't notice when they do stop moving.

"And you can also notice all the sounds

around.....noticing them more than usual at the moment.

(If there are sounds outside the building or room):"All those outside sounds...but they're not important....and so it doesn't matter if you still hear them. But you may also be able to detect the hardly noticable sound right inside your ears.

(If there is relative quiet): "Hearing those very subtle sounds we don't usually pay attention to....in the room...and right inside your own ears.

"And as well as those sounds....and what you see behind your closed eyelids, you can notice the feeling of the chair around you...and the floor underneath your feet (or foot, if subject's leg is crossed over) which you might have forgotten.

(If subject is restless):"The need to move...not feeling anything very different yet.

"And all the thoughts that come into your mind.....perhaps curiosity.....doing something new and different.....maybe wondering what it will be like....at times, you may well find yourself distracted by other thoughts ..and if you would rather not bother with them, you can focus inward and leave them outside....but you will be able to notice every thought....very clearly.

"If you would like to feel more relaxed and comfortable, have that in mind, and it can happen.
Notice how your legs and feet feel, and just for a moment..tense up the muscles.....notice the sensations...(watch subject to pace appropriately).....and now let them relax, ...and notice how you let go of the tension....when you tense deliberately,...you gain control over the tension, and it doesn't have control over you.....soon your legs and feet can feel so relaxed that they just feel totally comfortable.

"And your arms and hands..bring a little tension into them.....notice how then can't feel relaxed like that.....and now let the tension go, and notice the difference.....there may be some buzzing or tingling sensations in your hands....or maybe not...and if there are they can settle down until later on there may be an interesting lack of sensation....a completely comfortable feeling.

"And your abdomen and stomach...tense a little...a guarding sensation....and then relax....and notice that slightly

deeper breath before it returns to normal...enjoy that feeling of well being which comes with being relaxe....and your back can relax....and chest...and shoulders...and neck....the more relaxed...the more comfortable....a very secure feeling....very restoring.

"And your face and head...find out if those areas already feel totally comfortable...if there is some tension, increase it a little...and then enjoy letting it (if subject has tensed face:)....and as you think of every muscle and nerve in your head and face unwinding...and taking it easy...a more and more comfortable feeling.

"And in their own time, the lights and flashes in your eyes can settle down and calm down.....until there is just a single shade or color...unless you're picturing something....and then it's easy for your mind to relax as well.....nothing else need interfere with this enjoyable...interesting...focussed experience.

"And your breathing...we don't normally notice our breathing....we don't need to.....it goes on by itself.....in fact it would be a bother to have to notice every breath.....and you may well not notice when you stop noticing your breathing.....but every time you do notice your breathing,.....discover how you can feel more relaxed.....more focussed.....more comfortable.....more aware of yourself.....and every time you breathe, notice how your relaxation can increase....every time you breathe out.....a taking it easy feeling.....having time for yourself.....further down.....and the more relaxed....the more comfortable...

"And as you breathe...notice the difference between breathing in.....and breathing out.... (time with inhalation and exhalation)....and notice the lightening feeling of breathing...in..and the deepening feeling of breathing ...out....and every time you breathe out.....drift further down.....and deeper down....into hypnosis.....into the centre of yourself....a very focussed,
reassuring....private.....comfortable.....feeling.....an interesting, state of mind.
"The more in hypnosis, the more in control of yourself.....your unconscious mind as well as your conscious mind.....in fact..you can notice an extra resistance against anything that doesn't suit you.....
"Being in hypnosis is also under your control.....at any time you could.....if you wished .....bring yourself right out of it.....or just lighten your

level.....in fact your might want to check that you can do this.....

(If subject shows no signs of arousal):"but you don't need .....you know you can do that...

(If subject <u>does</u> show signs of arousal):" And now that you've been able to do that,

(All subjects):"You can also do the opposite.....just by intending to.....you can deepen your depth of hypnosis any time.....

"And now...if you will...think of being in an interesting building.....something different.....the sort of place you might expect to be in on a perfect holiday.....where you are miles and miles away from it all.....perhaps high ceilings,.....sunlight coming in through windows.....new things to discover and explore.....and that you are standing at the top of a staircase....perhaps a magnificent staircase.....that has 20 steps.

"It doesn't matter if you don't picture it.....there are different ways of thinking about things.....with this as well.....you can remember what a breeze feels like blowing in through a window .....and you can remember what it feels like to step down a flight of stairs.....but don't do that just yet.....you may find yourself as if looking at yourself at the top of the staircase....or you may find yourself looking down the stairs.....discover if your staircase goes straight down.....or if it curves to the right or to the left.....

"But when I count, use the numbers to go down the steps with..and with each step...and with each number...you can go as far into hypnosis as you would like to go....that may be slightly into hypnosis.....or a long way into it.....very.....very.....deeply.....but no deeper than you want to go.

"Before you begin though, I want to know if it's all right (or O.K.) for you to be thinking about a staircase to use for going into hypnosis with.....?....You can let me know by telling me or moving your head.....(Wait for indication) (If subject indicates know, ask if thinking about being on a beach would be all right.....and if suitable, use directions below).....

(With the following countdown, pace numbers and some directives with subject's exhalations; use discretion according to each subject's style)

"So when you're ready..take a first step down.... 1 .....down your staircase....and more relaxed.....2.....down another step....3.....and as the numbers increase.....4.....so can the most relaxing .....5...unwinding....6....further down....7...comfortable..feeling....8...as you go deeper....9..into your most effective state of mind and body....10 halfway down.....11..... into hypnosis....12....maybe just drifting down....13...floating down....14 ...further down....15.....and further.....16.....and deeper down the stairs....17.....nice not to have do think of anything else....18.....even further.....19.....deeper.....20.....way down deep.....

"You may notice a comfortably heavy relaxed feeling.....or instead a light floating feeling.....at moments .....even.....as if just as if about to drift off into sleep.....but very alert.....focussed.....able to do things easily.....effortlessly...

(When saying 'find out' and 'deeper' in the next paragraph, and in the test items, lower pitch of voice slightly, and emphasize the words slightly, with a pause before and after the words.)

"And ...find out.....the interesting things to do and experience.....in fact.....each time you hear the words.....find out you can notice being very prepared....ready.....zeroing into your most effective state of mind....to achieve these things you can do with your mind.....and with those words ....find out.....as you breathe.....you find yourself drifting down as far into hypnosis as you need to go.....

"With relief.....maybe.....you don't even have to try to remember any of all this until later.....but when you hear the words focus inwards.....you can remember to float down into that focussed concentration as you hear those words.....and remember to notice looking forward to what you do next.....those words focus inwards.....it may come from me.....but it can

come from yourself.....as if hearing your own voice saying....focus inwards .....whenever it is needed...

"And now..... (continue with Item 1 without pausing)

(For subjects unwilling to use staircase countdown)

"What it would be like to be walking out on to a beach.....warm, dry soft sand that slows down your walking.....the waves.....blue of the water.....and sky.....finding the perfect place to lie down on the sand.....and even though your eyes are closed you can remember how everything looks.....the movement of the waves.....colors.....the melting warmth of the sun.....and the glow of it against your eyelids.....and the sound of the waves.....so relaxing.....just the perfect amount of breeze.....and the almost as if floating of.....into the beginnings of not quite sleep.....drifting off.....or the comfortably heavy feeling.....so comfortable.....miles away from it all...."

Continue without pausing with Test Item 1: Hand lowering.

APPENDIX

THE INDIRECT SUGGESTION MODIFICATION OF THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C; NAMED THE VICTORIA C SCALE

Protocol 1, Experiment 1

Test Items, to be used after the Preceeding Induction into Hypnosis

N.B. USE THE FOLLOWING INSTRUCTIONS WHEN THE SUBJECT FAILS AN ITEM "And we can leave that behind.....and on to something else.....Notice your level of hypnosis - it may have lightened.....let it deepen as you breathe.....remember the moments when you've felt deepest in hypnosis.....and every time you breathe out.....you can focus inwards again.....right back to where you were".

Item 1, Hand Lowering

"Choose one hand, and hold it out in front of you at shoulder height. Notice what it feels like, if it is tingling, or instead lacking in sensation. Find out if your arm is already feeling slightly heavy and tired, as if it is an effort to hold up..... and you can let it sink down when it feels that weight.

(If subject does not begin to lower hand, go to (!).

(If subject begins to lower hand continue with : " notice how it may well feel even heavier the further down it goes (pitch of voice should lower slightly) heavier,.....and it sinks down.....heavier.....the weight.....(*)

(!)(If hand remains outstretched and does not show signs of descending): "Notice if there is an interesting effortlessness of your hand out there by itself, and just wait, and see how your arm responds to your ideas. Now silently tell your hand and arm to get heavy and tired, as if it were made of lead, or you were carrying something heavy.....and when you notice the beginnings of heaviness ..... but your hand won't feel heavy, only your arm..... begin to let your arm sink down, in its own time.....

(If arm begins to move down): notice the sensations.....and how the weight increases as it sinks down.....what ever time it needs....the relief of letting it sink down.....looking forward to when it can rest again.....(*)

(When arm contacts chair or lap: "until it reaches where it was before, and notice how soon the heaviness and tiredness goes and can feel totally comfortable.

(If arm still does not move down)If your unconscious mind is leaving your hand out there like that, you can be interested in that ability to have a really heavy arm float out in space like that....as if it didn't belong to you.....<u>or</u>..... if it is a conscious resistance to letting your mind control your sensations, and you are having to use some effort to hold your hand up, you can be interested in that as well,. When you are ready, allow it to slowly drift down every time you breathe out..... and notice the changing sensations. When your arm is back in a resting position, it may ache for several seconds before it feels normal again.....and enjoy allowing the whole of your body to relax so comfortably as well in contrast.

Score + if hand has lowered by six inches after (*) within 10", regardless of which (*) is used.

Note the time on the score sheet at which subject moves hand.

Item 2, Moving Hands Apart

(Position of hands has been demonstrated by examiner in the introduction and description of the items in the scale)

"Hold both your hands out in front of you, stretching them out,.....just far apart enough so that you can feel the heat of each hand with the other. I would like you to nod your head when you can feel that warmth. (Wait in silence until subjects nods head).

"The warmth can feel as if it's expanding and pressing against your hands and increases until it tries to push your hands apart.....keep you hands close together for a moment..... just notice those sensations .....and now .....find out..... that your hands can begin to move apaprt.....the more you notice the pressure of the air between your hands.....they float apart.....the air between them pushing them apart..... ....further apart.....wider apart.....(*)

(if necessary repeat suitable suggestions if hands are not at least 6" apart)

(When hands have moved as much as they are going to, say:"Now open your eyes for a moment and notice where your hands they are,.....is that where you thought they were?..... and then let your hands can rest comfortably back in position again while your eyes close again.

"Every time you have done one of these tasks, your relaxation can deepen in contrast, and your depth of hypnosis, even further...and further.

Score + if hand have moved apart by at least 6 inches within 10" of (*)

If subject has hallucinated a response, i.e. thought hands had moved apart when they had not, repeat item stating "lets do that again, but this time suggest to your hands that they can move in reality when your mind thinks they are. Score accordingly.

Item 3, Mosquito Hallucination

And go into an even deeper hypnotic, relaxed, taking it easy feeling, the sort of feeling you might remember on a summer day.....outside....very warm....with your eyes closed in the sun.....the hum of summer....and even though your eyes are closed you know how everything looks.....colors....trees.....and not even bothering to think.....and the sound of insects.....and hearing one....near... and even with your eyes closed you know if it's a mosquito or a fly....and the buzz gets louder.....and landing on your hand.....and its sound stops, and the feeling of it crawling on your skin, and find out.....that automatic twitch of your hand to fling it off.....and then the sound as it flies away.....

(If subject has not twitched or moved hand) :"and hearing it coming nearer to your face, ... and the noise stops .....and wondering where it has landed.....feeling it .....and then it flies away again, ...and you hear it fly off into the distance.....and you enjoy all the things around, and the comfortable, tranquil, private state.

Score + if subject twitches or moves hand or face at any point.

Item 4, Taste Hallucination

"What sweet taste do you like best?.....staying in hypnosis, would you tell me what it is?.....

(wait for response, and use the taste appropriately, substituting for the example chocolate with variations in rhetoric where necessary).

"And remember when you were actually tasting that chocolate.....find out.... as if it is in your mouth now.....notice the texture, the smell, ...the taste of chocolate in your mouth.....and how it feels when you swallow it.....and the difference when it is gone, and how you want another taste, and as you put more in your mouth, the chocolatiness of it.....tell me, is the taste in your mouth slight? or medium.....or stronger.....?

(If subjects denies taste or reports it as slight):"well there is chocolate and chocolate, and perhaps you can remember the very best chocolate, with the stronger, intense flavor.....and even as it is in your mouth, as you breathe in, you can smell the chocolate.....How is the taste now?.....

"And lemon, that fragrance of lemon, and even watching someone bite into a lemon makes your mouth water, how sharp and sour it is, and maybe you.....like me would never actually bite into a lemon it is so sharp.....but you could imagine just what it would taste like.....that lemony sharpness that makes your mouth pucker.....What is the taste like right now?..... mild, strong?

"And the tastes and the thoughts of them can go..... as you breathe go further,.....further.....every time you breathe out.....(pace with exhalations in usual way)

Score + if both tastes are experienced, and if one taste is reported as strong or accompanied by oral movements.

Items 5, Arm Rigidity

"Please choose one hand and arm to hold out again, and hold it out stiff and straight.....with your fingers outstretched,...and hand.....and arm.....and think of it becoming so stiff that it would be unable to bend....find out how that would feel.....the elbow locked ....as if it's been so long since it bent it doesn't know how to.....or the joint in your elbow won't move..... refuses to .....
"As you think of your arm being like that, it can happen, so that your arm won't bend until you change your thoughts back again.... "But don't test your arm yet!.....wait until your unconscious mind knows you are ready, and your head can nod when you are ready to try to bend it and find it won't.....

(I subject nods, (*) count 10" and note any movement.

(If subject has not nodded head) "take your time and don't try until you're ready....and notice the surprise when you discover what it is like.

(If subject still has not nodded head: "Imagine what it would feel like for your elbow to be locked.....or as if your arm is in a tight cast.....or it is so long since it has bent it seems natural to be straight out and unable to bend.....and now.....even if you are not entirely convinced that your elbow can't bend, test it out.....* notice the sensations.....and what you think of .....and how the conscious mind thoughts have different effects from unconscious mind thoughts...

"And now lower your arm back again and it will return to normal sensations in its own time.

(If subject unsecessfully attempts to bend arm i.e. evidence of effort and less than 2 inches of bend): "And now change your thoughts back again so that you reverse the stiffness, and your elbow is normally flexible again, and when you've done that, bend your elbow and relax back into position. Expect it to take a few seconds,

"After that work, for your mind and arm, enjoy taking it easy, and drifting further and deeper into the most focussed, relaxed, comfortable feelings, even the beginnings of drowsiness maybe, or perhaps not quite yet.

Score + if elbow bends less that 2 inches within 10" of (*)
or within 10 " of evident effort of trying to bend arm.

Item 6, Dream

"Continue, as you rest deeply, ...and ....so comfortably.....drifting.....further back.....into either the heavy, comfortable feeling....just before sleep.....or the light floating, drifting off feeling.....as you begin to go to sleep.....but not asleep yet.....but like the times when it can be the hardest thing in the world to stay awake.....perhaps first thing in the morning when it would be so easy to drift right back to sleep again.....or after lunch....trying to concentrate on something dull..... ..perhaps a lecture or work that has to be done.....and you try to stay awake, but drift off without realizing...and dream.....and just hear the sounds of someone saying something but not listening.....and drift off.....an a dream.....a night time sort of dream about hypnosis.....find out.....what hypnosis means to you.....and further into that.....(lower voice gradually)..so comfortable.....so..relaxed.....not even having to try to stay awake.....not even having to try to dream..... while I keep quiet for two minutes..

(Time 2 minutes) "And now you can awaken back into ordinary hypnosis, staying as deeply as you wish to in it, but a more alert focussed hypnosis,.....still very....very....far into it....and you can tell me your dream please,.....without it disturbing your depth of hypnosis.....
(Record dream verbatim)

Score according to the concreteness of imagery as in the Stanford Hypnotic Susceptibility Scale, Form C.

Item 7. Age Regression

(N.B. hypnotist has already ascertained with subject during the introduction that grades 5 and 2 are suitable for use for this item, being relatively good years for the subject. This is to prevent possible abreaction of emotionally traumatic material. If the subject states that childhood was an unhappy time, ask if he/she can remember an enjoyable event at a particular time in school, and ask subject if it is all right to think back to that event. If subject agrees, use that one for the following instructions; do not attempt more than one regressed episode. If the subject shows hesitation, or states that he/she cannot rmember any good times, DO NOT CONTINUE WITH THIS TEST ITEM)

"While you remain with your eyes closed, I'll give you a pencil and some paper, and you can hold them so you can write easily with your eyes closed. Please write your name at the top of the paper.

"And now, let the clock turn back, through 1986...to 1985,.then...1984,..then....1983.....1982.....1981.....
..1980....., but much earlier.....further back.....way back.....until.....find out.....you're in grade 5 at school, in class.....at a particularly good time in grade 5.....a small boy (girl) sitting in class on a nice day..... aware of.....the room around you,.....where you are sitting.....what you are wearing.....writing or drawing.....the sound of the teacher's voice.....the familiar smell.....the hardness of your chair.....feeling younger and smaller.....

"Would you please tell me what you are doing?.....
"Would you please put your name on the paper.....
"And now.....you can become even younger and smaller.....as if a whole year younger.....and a year younger still.....and even another year.....feeling younger and smaller, until you're in grade 2, a little boy (girl) sitting in class in the second grade, with some paper and pencils.....perhaps your teacher seems so big when you're so small.....maybe the sun is shining outside and you feel a little restless.....the feel of your desk or table.....the sounds of your friends moving or talking.....and what it was like to print or write your name.....the care you took to get each letter right.....
"And please tell me your name?..
"And how old are you?
"And please put your name on the paper.....and your

age.....

"And now you can leave that memory behind in the past..... and return your awareness to the present.....to your ordinary adult self.....your present age.....aware of being in the chair you are in.....in this room.....still deeply in hypnosis....

(Ensure voice returns to adult-to-adult intonation).

"And I'll take these things away. (remove paper and pencil) While you continue in the interesting, focussed, effective state of hypnosis.

Score + if clear change in handwriting between present and at least one regressed age.

N.B. If unpleasant emotional arousal occurs, use general counselling skills to be sypathetic to the situation; to ask if the subject would like to leave that behind in the past where it belongs; and ask subject if ready to continue with something else.

Item 9, Arm Immobilization

"Discover how totally comfortable you might like to feel, with perhaps even a heavy feeling, that it's nice not to have to move, feeling so relaxed.
"Now, as you breathe.....one arm can get lighter than the other, perhaps hardly noticably at first.....if you place your arm so that it only just touches the fabric....or the arm of the chair (use which ever is applicable) as you breathe in....each time....you can notice a natural tendency for your arm to rise. As that arm does that, the other arm, in contrast may seem even heavier.....than normal.....not wanting to bother to move.....settled against the chair (or lap, or leg) (lower pitch of voice slightly) .....the lighter arm.....(if lifting up) even lighter as the other arm gets heavier....and lighter still.....(if hand does not lift up.....find out..... which is more noticable.....the lightness of the light arm....or maybe the other arm is heavier than the other arm is light.....and as you notice the weights, the heavy arm heavy, and maybe even the arm that is supposed to be light feels heavy instead.....there is so much of that comfortably heavy feeling.....as if not wanting to bother to move....as if the heavy arm refusing to move.....

"In a moment, when you are ready try to move the heavier arm.....wait until you know you mind has accomplished what it needs to .....and then test it to see how heavy it is as if too relaxed and heavy to lift up.....like the feeling we have after a lot of effort when we just can't be bothered to move and feel as if made of lead.....

(If subject attempts to lift hand and arm, observe extent of movement. After 10 seconds of attempted movement, say: "And now rest completely, and think in such a way as to let both your arms and hands return to their normal weights again....let me know by nodding or saying something when you've done that.)

(If subjects has not tried to lift arm): "and now test your arm, see if it will lift..(**)

Score + if arm rises less than one inch in ten seconds of beginning to attempt to lift hand and arm. OR within ten seconds of (**)

Item 9, Anosmia

(Use peppermint oil or coffee alternately for each subject. Give the alternative substance for the regular (direct suggestion) Stanford Hypnotic Susceptibility Scale, Form C.

"One of the interesting things to do with human experience is that we select what stimuli to notice or not. Right now, you may have been unaware of your feet.....or perhaps your eyelids.....you probably won't notice when you stop being aware of your hands.....the sensations of clothes.....ignored.....even when in the past you might have been uncomfortable....shoes, slight headache, ... or whatever.....if something really takes your interest, you don't notice it.....as if you have switches in your brain that you turn off when there are other things to be attended to instead.....

"But these things happen often without our actually intending them to happen.....in hypnosis though,.....you can intend.....and discover the effect.....other senses.....smell.....you can have it diminish or disappear temporarily.....I don't know if you will smell what I hold in front of you slightly less.....or a lot less.....or not..smell...it...at....all.....just find out.....but don't try to lose your sense of smell.....just find out.....and while you prepare to smiff this substance and not smell it, you can float off into an even deeper ...depth of hypnosis.....while I hold this in front of you for you to try to smell....

(Hold substance about 2 inches under subject's nose

"...so sniff.....

"Did you smell something? (wait for response)

(If subjects indicates smell):"Do you know what it was?

"And now think of your sense of smell returning to normal, completely normal.....let me know when it has recovered by nodding your head. (Wait for response)

"Now sniff this again.....(Present substance).....how does it compare with the first time?

"And now on to another sensation.... leaving that behind.....drifting even further.....and further down.....

As if you were saying to yourself silently 'further.....further.....whispering that word to yourself.....deeper.....and deeper....

Score + if subjects denies smell.

Item 10, Hallucinated Voice

"The mind does interesting things with sounds...we can be absorbed in a conversation with one person in a room full of people.....and not hear the others.....or not hear the radio when we're off in a daydream.....Even important things.....like a dull lecture.....and you are off in a daydream, with that imaginary conversation as if completely real.....and you don't even hear the lecturer....who is speaking in reality.....your brain has ignored it.....and you actually hear that conversation in your minds ear.....just as you pictured being in a classroom in your mind's eye.....

"When we daydream in public.....we don't speak aloud.....our mind keeps an unconscious check on ourselves, however lost in the daydream we are.....but when we are by ourselves, it can be a natural extension to reply to an imaginary conversation out loud, as if we were rehersing something.....and that is perfectly natural.....as an important part of thinking is in words....if someone were to hear unexpectedly, we would be embarrassed.....but in hypnosis find out..... you can feel as if sufficiently private in this different setting...

"In a moment, listen to a daydream voice as if over the intercomm asking you what you will be doing when you have left here.....and answer out loud when you hear the question in your mind's ear.....begin to hear it now.....

(If no response, "did you hear the question?).

Score + if verbal response, but check when debriefing after completion after the scale to ensure that the response seemed a natural one, and not compliance with perceived request of the administrator.

Item 11, Negative Visual Hallucination

"Continue .....as you breathe....to enjoy drifting down into the most profoundly deep state of hypnosis.....while I put some things on the table by your side (or in front, etc). Something else which we take for granted about our sensory systems is that we ignore a lot of what we see.....in fact we would be overloaded if we had to see everything we looked at.....if you remember when you met a certain person.....did not notice what they were wearing?.....or if something is missing from a room.....not noticing it because of not noticing it enough before.....taken for granted.....you, like me may have put something down.....and wonder where on earth it is.....and then it has been there easily visible all the time.....
"Even when your eyes are closed, you can picture things.....and even when your eyes are open.....the vividness of a daydream.....and the other way round.... not seeing what your eyes are looking at.....looking at and not seeing.....
"In a moment, when I ask you to open your eyes,....find out.....that..... you will see two small boxes on the table - just two boxes.....but I don't know which colors.....and nothing else.....go as deeply into hypnosis as you need to go,.....and when you are ready.....your eyes can open slowly and see the two boxes.....

(If subject opens eyes) "Tell me what you see.....(wait for indication)....."What colors are they?.....(wait for response)

(If subject reports two boxes): " Do you notice anything else?

(Unless subject now reports third box):"Now suggest to yourself that you will be able to see the third box.....and let me know when you do.....and make sure that you get it as clear as the others.....(Wait for report).

(If subject immediately reports three boxes, ask if they are all as clear as each other): "yes there are three.

"And let your eyes close again.....you may notice the after image of them fade behing your closed eyelids, and as the image goes, so can the thoughts of that.....as you find out what your hands are feeling like.....maybe they were forgotten.....perhaps a lack of sensation.....but very relaxed.....and as you breathe, ...drift down with

your breath.....further....and further...

(Continue without pause into Item 12, Amnesia)

Score + if only two boxes are reported, even if subject soon reports seeing the third.

Item 12, Amnesia

"You have done all you need to for now, and take a few moments to notice your sensations, and adjust your position if you need to.....or you may not need to.....not having to think even, or to bother to try to remember.....but the most deeply relaxed feeling you've been able to experience, to remember those comfortable sensations vividly.....and enjoy drifting deeper.....and deeper.....and the staircase.....remember what it was like to go down it.....find out.....how you can remember that..and now.....to bring yourself back from hypnosis.....in your own time.....begin at the bottom of the staircase and as you think of returning up the stairs, you bring yourself back from hypnosis, keeping some of the relaxed, totally comforable feeling if you would like to although it can be an awake, alert, relaxed feeling, very at ease, but with a rested energy..... up the stairs in your own time.....you don't need to count them to yourself, but you can if you wish.....and take as much time as you need.....as you return to the ordinary, defocussed state.....aware of the chair.....and the room around you..... and when you have reached the top stair.....whhen you are ready.....that will be the right time to open your eyes. But don't open them until you are completely ready, and then keep the rested, restored feeling.

(When subject opens eyes):"How are you doing?.....(allow a little time for subject to reorient)

" Would you please try to tell me the things you were asked to do or experience after going down the staircase? (record comments verbatim. When subject stops, ask if there is anything more. Wait a few moments for further response.

(Then engage eye contact, make voice a little lower and slower paced):

"And now you can remember everything".

(Record further comments. Give subjects enough time. If amnesia has been complete, up to a minute may be required for the amnesia to reverse.)

Score according to criteria in regular administration. In addition, record the number of items reported after amnesia was lifted, and use as reversal score.

APPENDIX

THE INDIRECT SUGGESTION MODIFICATION OF THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C; NAMED THE VICTORIA C SCALE

Protocol 2, Experiment 2

Induction into Hypnosis

It is assumed that examiners are familiar with the administration and scoring of the Stanford Hypnotic Susceptibility Scale, Form C, since this modification uses the same scoring criteria.

The examiner should follow the general instructions given in the Explanation to Subjects of Test Procedures.

Ellipses indicate a pause in the narration, the length of time elapsed according to the examiner's judgement.

If subject is to be given Test Item Memory for Meal instead of Age Regression, give the Pretest at this time, before the induction into hypnosis. Use the instructions given immediately following Test Item 7, Age Regression.

(Subject is already seated)

"Ready to begin?
"Find the most comfortable position.....

(model ideal position, legs uncrossed, feet on floor, lean against back of chair)

"And change it as you need to at any time.
"And let your eyes to close when you're ready to begin.

(Wait until subject closes eyes).

"With your eyes closed, you notice everything to do with yourself.....more than you usually do..... you can notice what you see behind your closed eyelids.....maybe lights and flashes .....everything sparkly.....or everything grey.... or perhaps something else .....just begin to notice what you are aware of.....but you can remember what the room here looked like.....and also outside the building.....and then what you do see

again behind your eyelids.

(If eyelids are moving): "And those movements of your eyelids.....let them move as much as they need to.....you will notice them.....in a way that you don't usually.....and you won't notice when they do stop moving.

"And you'll also notice all the sounds around at the moment.....noticing them more than usual .....

(If there are sounds outside the room or building)
"All those outside sounds.....but they're not important.....and so it doesn't matter <u>if</u> you still hear them. But you may also be able to detect the hardly noticable sound right inside your ears.....

(If there is relative quiet):
"Hearing those very subtle sounds we don't usually pay attention to....in the room.....and at very quiet moments, the sound right inside your own ears...

"And as well as those sounds.....and what you see behind your closed eyelids,.....you can notice the feeling of the chair around you.....and the floor underneath your feet (or foot, if subject's leg is crossed over) which you might have forgotten.

(If subject is restless): "The need to move.....not feeling anything very different yet.....

"And all the thoughts that come into your mind.....perhaps curiosity.....doing something new and different.....maybe wondering what it will be like.....at times, you may well find yourself distracted by other thoughts .....and if you would rather not bother with them, you can focus inward and leave them outside.....but you will be able to notice every thought .....very clearly.....

"If you would like to feel more relaxed and comfortable, notice how your hands feel..... and just for a moment.....tense up the muscles.....notice the sensations.....(watch subject to pace appropriately).....and now allow them to relax.....and notice how you do that, ... later on they may become so relaxed there will be an interesting lack of sensation at times.....just a deeply comfortable feeling.....

"And your legs and feet.....bring some tension into them.....notice how you can't feel totally relaxed like

that....but the more you tense deliberately.....the more relaxed.....afterwards.....and ....now.....let your feet and legs relax..... .....and notice how you let go of the tension.....when you tense deliberately,.....you gain control over the tension, and it doesn't have control over you.....
"And your abdomen and stomach.....tense a little...a guarding sensation.....while the rest of your body relaxes even more in contrast .....and then as you allow your stomach to relax..... notice that slightly deeper breath before your breathing returns to normal.....all the way down with each breath.....and your back can relax .....and chest.....and shoulders..... and neck.....take all the time you need.....

(If subject does not look very relaxed): "Don't relax before you're ready.....but.....the more relaxed...the more comfortable.....an unwinding, taking it easy feeling

"And your face and head.....find out if those areas already feel totally comfortable.....but bring a little tension into your forehead ...and jaw.....while the rest of your body doesn't have to tense ..... and .....find out.....as you allow that tension to go....the difference in the way you feel.....
You have the ability to tense.....and you have the ability to relax.....and feel very comfortable....

"And your breathing.....as you notice your breathing, you know that most of the time you don't notice it.....and you don't need to.....it goes on by itself.....but every time you do notice your breathing,.....enjoy that unwinding, relaxing, focussed..... comfortable..... aware of yourself.....and every time you breathe, notice how your relaxation can increase.....focussing inwards every time you breathe out.....a taking it easy feeling.....having time for yourself .....drifting down to your most effective state of mind .....as you drift down with each breath..... And outside things.....whatever they are.....very different from your inner experience.....

"And as you breathe.....notice the difference between breathing in.....and out..... (time with inhalation and exhalation)..... .....and notice the lightening feeling of breathing...in.....and the deepening feeling of breathing out.....and float down.....every time you breathe out.....you have the ability to follow your breathing as you float

down.....

"The more in hypnosis, the more in control of yourself.....your unconscious mind as well as your conscious mind.....you can notice an extra resistance against anything that doesn't suit you.....

"Being in hypnosis is also under your control.....at any time you could.....if you wished .....bring yourself right out of it.....or just lighten your level.....in fact if you want to, ... check that you can do this.....

(If subject shows no signs of arousal): "but you don't need to.....you know you can do that.....

(If subject <u>does</u> show signs of arousal): "And now that you've been able to do that.....

(All subjects): "You can also do the opposite.....just by intending to.....you can deepen your depth of hypnosis any time.....you need to by zeroing into your most effective state of mind.....every time you breathe.

"And now,.....if you will.....think of being in an interesting building.....something different.....the sort of place you might expect to be in on a perfect holiday.....where you are miles and miles away from it all.....perhaps high ceilings,.....sunlight coming in through windows.....new things to discover and explore.....and that you are standing at the top of a staircase....perhaps a magnificent staircase.....that has 20 steps.....you can remember what it's like to look down an interesting staircase.....although you may find yourself as if looking at yourself at the top of the staircase....or you may find yourself looking down the stairs.....and if you do.....discover if your staircase goes straight down.....or if it curves to the right or to the left.....but don't <u>try</u> to picture it if that's not your style of thinking....."It <u>doesn't matter</u> if you don't picture it.....there are different ways of thinking about things.....with this as well.....you can remember what a breeze feels like blowing in through a window .....and you can remember what it feels like to step down a flight of stairs...

"Before you begin, I want to know if it's all right (or O.K.) for you to think of slowly stepping down the staircase?.....you can let me know by moving your head if you would rather not have to talk.

(If subject does not want to use staircase, ask if beach is comfortable to think about, and use instructions given for this at the end of the protocol for hypnotic induction).

(In the following countdown, consistently match either the numbers, or the words such as 'deeper', 'relaxed', 'further' etc with exhalations)

"So when you're ready, take a first step down your staircase....**one**.....and more relaxed.....two..... and down another step.....three.....and with each step....four.....and with each ....five.....discovering how relaxed.....six.....you you would like to feel.....seven....further down.....eight.....until just drifting down.....nine.....floating down.....ten.....halfway down your staircase....eleven....enjoy the subtle changes.....twelve.....each step down.....thirteen.....further down....in the most effortless way.....fourteen....looking forward....fifteen....nothing else need interfere with this focussed.....sixteen....so aware.....seventeen.....comfortable.....eighteen.....even further down your staircase.....nineteen.....even further.....twenty.....twenty..

."You may notice a comfortably heavy relaxed feeling.....or instead a light floating relaxed feeling.....at moments .....even.....as if just as if about to drift off into sleep....or very alert.....focussed.....always able able to do things easily.....effortlessly....your conscious mind will be very aware of it all.....but your unconscious mind will be doing the work.....but effortlessly.....

"And remember, very clearly ....the feeling of being the furthest into this comfortable, focussed.....effective state of mind.....drifting down as you breathe....and focussing inwards.....those words focus inwards.....you can remember to float down into that focussed concentration as you hear those words.....and looking forward to what you do next.....those words focus inwards.....it may come from me.....but it can come from yourself.....as if hearing your own voice saying....focus inwards .....whenever it is needed...

"And ...find out.....the interesting things to do and

experience.....in fact.....each time you hear the words.....find out you can notice being very prepared....ready.....zeroing into your most effective state of mind....to achieve these things you can do with your mind.....and with those words ....find out.....as you breathe.....you find yourself drifting down as far into hypnosis as you need to go.....in your own style....but those words can fade as you breathe and drift down into the most effortlessly relaxed.....comfortable.....focussed state...

"And now.....(continue with Test Item 1 without pausing)

(For subjects unwilling to use staircase countdown)

"What it would be like to be walking out on to a beach.....warm, dry soft sand that slows down your walking.....the waves.....blue of the water.....and sky.....finding the perfect place to lie down on the sand.....and even though your eyes are closed you can remember how everything looks.....the movement of the waves.....colors.....the melting warmth of the sun.....and the glow of it against your eyelids.....and the sound of the waves.....so relaxing.....just the perfect amount of breeze.....what the sand feels like under you....and between your fingers. .....so comfortable.....miles away from it all.....enjoying all the things around you.....so relaxed....."
"And part of your mind can be right there.....and part of your mind right here.....while you do the tasks right here.....part of your mind can still be reflecting on being out in that place.

Continue immediately with Test Item 1.

Proceed to test item #1. Hand Lowering

APPENDIX

THE INDIRECT SUGGESTION MODIFICATION OF THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C; NAMED THE VICTORIA C SCALE

Protocol 2, Experiment 2

Administration of Test Items
To be used after the preceeding hypnotic induction.

Item 1, Hand Lowering

"Choose one hand, and hold it out in front of you at shoulder height. Notice what it feels like, all the sensations.....in your hand.....and then your arm.....discover if it a slight effort to hold out your arm.....or quite a lot of effort....Find out if your arm is already feeling slightly heavy and tired, an effort to hold up.....as you hold it up a bit longer..... and as you notice the weight..... like the branch of a tree weighted down with snow...(voice pitch down slightly).....and naturally sinks down.....your arm may be heavier than your hand....or the other way around.....(if subject begins to lower arm).....and the relief of allowing it to naturally drift down as you notice that weight....and may feel even heavier as it sinks down.....not having to try to hold it out.....noticing all those sensations.....(* 1)

(1f subject does not begin to lower hand, go to (!).

(If arm is moving down, but not all the way down, continue with : " notice how it feels as it drifts down.. voice should lower slightly) .....and as it sinks down with that weight.....take all the time you need.....(* P2)

(!)(If hand remains outstretched and does not show signs of descending): "Notice if there is an interesting effortlessness of your hand out there by itself, and just wait, and see how your arm responds to your unconscious mind.....will your arm get heavy soon?.....or not for a few moments?.....and you might wonder how the heaviness will begin....close to your shoulder....or maybe futher down.....but every time you breathe....as you notice the

breathing out.....your arm can begin to drift downwards as you notice the drifting downwards of breathing out.....and every time you breathe out.....(* 3)

(If hand still remains in same outstretched position)

"Now silently tell your hand and arm to get heavy and tired, as if it were made of lead, or you were carrying something heavy.....and when you notice the beginnings of heaviness ..... but your hand won't feel heavy, only your arm..... allow your arm to respond naturally to those heavy sensations.(* 4)

(If arm still does not move down)If your unconscious mind is leaving your hand out there like that, you can be interested in that ability to have a really heavy arm float out in space like that....as if it didn't belong to you.....<u>or</u>..... if it is a conscious resistance to letting your mind control your sensations, and you are having to use some effort to hold your hand up, you can be interested in that as well,. When you are ready, deliberately allow it to slowly drift down every time you breathe out..... and notice the changing sensations. When your arm is back in a resting position, it may ache for several seconds before it feels normal again.....and enjoy allowing the whole of your body to relax so comfortably as well in contrast.
(*5)

<u>Reversal suggestion</u>

(When arm is about to contact chair or lap)
"Until it reaches where it was before, and notice how the heaviness and tiredness fades, and your arm becomes entirely comfortable again.

Score + if hand has lowered by six inches or more by reaching (*3) Record appropriate marker number in score sheet, whether or not item is passed or failed.

Item 2, Moving Hands Apart

(Position of hands has been demonstrated by hypnotist in the introduction and description of the items in the scale)

"And now.....would you hold both your hands out in front of you, stretching them out.....with the palms of your hands facing each other.....just far apart enough so that you can feel the heat of each hand with the other. I would like you to nod your head when you can feel that warmth. (Wait in silence until subjects nods head).

"The warmth can feel as if it's expanding and pressing against your hands and increases until it tries to push your hands apart.....but don't let your hands drift apart yet.....keep them close together for a moment longer..... just notice those sensations .....and now .....find out..... that as you don't try to keep your hands together they drift apart...as you breathe.....either in a moment or right now.....the more you notice all those minute details of the air between your hands.....as you concentrate on the pressure....they are forced apart.....with every breathe.....the air between them pushing them apart..... ....further apart.....wider apart.....even further. (*P)

Reversal suggestion

"Now open your eyes for a moment and notice where your hands they are,.....is that where you thought they were?..... and then let your hands can rest comfortably back in position again while your eyes close again.

(If subject indicates that hands were in correct position, continue with Item # 3. If subject hallucinated a response, i.e. thought they would be wider apart than they really were, state "Isn't that interesting". Note this response on score sheet.

(IF ITEM IS FAILED, GIVE FOLLOWING SUGGESTIONS:)

"Notice your level of relaxation, and drift down further into the most comfortable, taking it easy, feeling, ...focus inwards....every time you breathe out.....leaving that behind, and on to something very different
Score + if hand have moved apart by at least 6 inches by (*P)

Item 3, Mosquito Hallucination

N.B. Use mosquito ideation only in parts of the world where mosquitoes are found. Otherwise use fly ideation alone.

"And go into an even deeper hypnotic, relaxed, taking it easy feeling, the sort of feeling you might remember on a summer day.....outside....very warm....with your eyes closed in the sun.....the hum of summer....and even though your eyes are closed you know how everything looks.....colors....trees.....and not even bothering to think.....and the sound of insects.....and hearing one....near... and even with your eyes closed you know if it's a mosquito or a fly....and the buzzing or singing sound gets louder.....and lands on your hand.....and its sound stops, and maybe you can just feel it on your skin.....and wondering what it's going to do next....and .....at last the sound as it flies away.

(If subject has not twitched or moved hand) :"And remembering what it's like, perhaps with annoyance, when it comes back.....and hearing it come nearer to your face, ... and the noise stops .....and wondering where it has landed.....feeling it .....almost too lazy to do something about it.....and then it flies away again, ...and you hear it fly off into the distance.....and you enjoy all the things around, and the comfortable, tranquil, private state.

Score + if subject twitches or moves hand or face at any point.

Item 4, Taste Hallucination

"What sweet taste do you like best?.....staying in hypnosis, would you tell me what it is?.....

(Wait for response, and use the taste appropriately, substituting for the example given of chocolate with variations in rhetoric as appropriate. Ensure that a suggestion for the actual taste of the substance is not given in the first part - only suggestions of other senses. If subject has no experience of taste, or only slight experience, suggestion for taste can then be given, using the guidelines in the chocolate example).

"And remember when you were opening (e.g.) up the covering of chocolate.....and the way it smells..... the sound as you break a piece off.....and put it in your mouth.....the melting quality.....the texture.....and when you swallow it.....perhaps looking at more chocolate.....the color..... another taste, and as you put more in your mouth, the chocolatiness of it.....tell me, is that taste of chocolate slight? or medium.....or stronger.....? (*?P1)

(If subjects denies taste or reports it as slight):

"Well, there is chocolate and chocolate, and perhaps you can remember the very best chocolate, with the stronger, intense flavor.....and how good that can taste.....and even as it is in your mouth, as you breathe in, you can smell the chocolate.....How is the taste now?.....(*?P2)

(N.B. ONLY MENTION THE TASTE OF THE SUBSTANCE IN THE SECOND PRESENTATION OF THE SUGGESTION).

(e.g. of strawberry.
"Strawberries! Remember when you were eating a perfect strawberry.....the scent of it.....the color.....the strawberriness of it.....and what it was like to swallow it....and then another.....perhaps you like sugar on them....or maybe they don't need sugar....they're that sweet.....and you pick it up.....the smell of it....and bite into it....
(If taste reported as mild or nonexistant): :Some strawberries are O.K.....others are incredible....the most intense strawberry taste....the flavor....the sweetness....how is that taste now....?

(All subjects):

"And lemon, that fragrance of lemon, and even watching someone bite into a lemon makes your mouth water, how sharp and sour it is, and maybe you.....like me would never actually bite into a lemon it is so sharp.....but you could imagine just what it would be like.....that lemony sharpness .....or what it would be like to bite into what you believed was a very sweet orange.....and you bite into it, .and then find with a surprise or even shock that finding it's a lemon instead and how you would feel.

"What is the taste like right now?.....mild, strong? (*?P 3)

REVERSAL SUGGESTION

" And allow the tastes and the thoughts of them to go and you experience your normal tastes again.....as you leave that experience behind..... and further into this focussed, aware state .....state every time you breathe.....
Score + if both tastes are experienced, and if in addition one taste is reported as strong or accompanied by oral movements.

Note pass numbers on score sheet.

(IF ITEM FAILED, GIVE FOLLOWING SUGGESTIONS)

"And that's all finished with.....and find out what your depth of hypnosis is like.....it may have lightened.....unless I'm wrong.....and use your breathing to go way back .....(pace with breathing) .into the furthest you've felt in hypnosis.....zero down with every breath.....into that foccused state of mind.....focus inwards.....

Item 5, Arm Rigidity

"Please choose one hand and arm to hold out again, and hold it out stiff and straight.....with your fingers outstretched,...and hand.....and arm.....and think of it becoming so stiff that it would be unable to bend....find out how that would feel.....the elbow locked ....as if it's been so long since it bent it doesn't know how to.....or the joint in your elbow won't move..... refuses to .....or it may be that your arm could bend.....but just doesn't want to..... so that your arm won't bend until you change your thoughts back again....
"But don't test your arm yet!.....wait until your unconscious mind knows you are ready, and your head can nod when you are ready to try to bend it and find it won't.....

(I subject nods, (*) count 10" and note any movement.

(If subject has not nodded head by about five seconds) "take your time and don't try until you're ready....and notice the surprise when you discover what it is like.

(If subject still has not nodded head: "Imagine what it would feel like for your elbow to be locked.....or as if your arm is in a tight cast.....or it is so long since it has bent it seems natural to be straight out and unable to bend.....and now.....even if you are not entirely convinced that your elbow can't bend, test it out.....* notice the sensations.....and what you think of .....and how the conscious mind thoughts have different effects from unconscious mind thoughts...

REVERSAL SUGGESTIONS

(If subject unsuccessfully attempts to bend arm i.e. evidence of effort and less than 2 inches of bend): "And now change your thoughts back again so that you reverse the stiffness, and your elbow will respond to your ideas....and becomes flexible again, ... and when you've done that, bend your elbow and relax back into position. Expect it to take a few seconds, and let me know when you've got it back to normal.

(If subject bends arm): notice all your thoughts and those sensations.....and.....if you noted any stiffness, reverse that until your arm becomes normal.....If your arm was so relaxed that it was as if it refused to become stiff.....or you didn't want to bother.....notice all those thoughts and feelings very carefully.....and

notice how all these effects only happen when deep down you permit them to.....

"After that work, for your mind and arm, enjoy taking it easy, and as you relax again your arm and the whole of your body.....and the thoughts of that fading away as you relax your mind.....drifting further and deeper into the most focussed, relaxed, comfortable feelings, even the beginnings of drowsiness maybe, or perhaps not quite yet.....

Score + if elbow bends less that 2 inches within 10" of (*)
or within 10 " of evident effort of trying to bend arm whenever subject begins to attempt arm bending.

Item 6, Dream

"Continue, as you rest deeply, ...and ....so comfortably.....drifting.....further back.....into either the heavy, comfortable feeling....just before sleep.....or the light floating, drifting off feeling.....as you begin to go to sleep.....but not asleep yet.....but like the times when it can be the hardest thing in the world to stay a wake.....perhaps first thing in the morning when it would be so easy to drift right back to sleep again.....or after lunch....trying to concentrate on something dull..... ..perhaps a lecture or work that has to be done.....and you try to stay awake, but drift off without realizing...and dream.....and just hear the sounds of someone saying something but not listening.....and drift off.....an a dream.....a nighttime sort of dream about hypnosis...and what hypnosis means to you.....and further into that.....(lower voice gradually)..so comfortable.....so..relaxed..and find out.....not even having to try to stay awake.....not even having to try to dream..... while I keep quiet for two minutes..

(Time 2 minutes. Then continue with:)

"And now you can awaken back into ordinary hypnosis, staying as deeply as you wish to in it, but a more alert focussed hypnosis,.....still very....very....far into it....and if you had a dream....but you may not have....you can tell me your dream please,.....without it disturbing your depth of hypnosis.....
"If you don't want to describe your dream, then don't....."

(If subject does not want to describe dream, say "That's fine, lets go on to the next experience."

(If subject has not described dream, check criteria for scoring later after completion of scale. When discussing the sponteneity items after the scale has been completed ask if the dream seemed like a real dream with spontaneous imagery, or more like ordinary thinking.)

(If subject describes dream, record verbatim).

Score according to the concreteness of imagery as in the regular administration.

Item 7, Age Regression

(N.B. hypnotist has already ascertained with subject during the introduction that grade 2 is suitable for use for this item, being a good year for the subject. This is to prevent possible abreaction of emotionally traumatic material. If the subject states that childhood was an unhappy time generally, USE THE ALTERNATIVE ITEM, MEMORY OF MEAL INSTEAD)

(If subjects have been educated abroad, use age in school instead of Grade level; check before testing during introduction)

"While you remain with your eyes closed, I'll give you a pencil and some paper, and you can hold them so you can write easily with your eyes closed.
(Hand subject pencil and pad of paper)

"Please write your name at the top of the paper.

"And now, I wonder if you can remember an enjoyable incident a year ago.....and the year before that.....reviewing them in your mind.....and then way back.....five years ago.....and then even further..... as if turning back the pages.....in school.....year by year.....until.....you are feeling even younger and smaller .....stopping at a particularly good time in grade 2.....and way back then...you didn't have any idea what yu would be doing here today.....way back then....in Grade 2.....just the classroom around you.....the chair.....a day when nice things happen.....all the others around you..... .....maybe a bit restless.....whispering now and then.....the familiar smell.....the sound of chalk on the board the hardness of your chair.....what you are wearing.....what you are doing.....the care and effort when learning to print or write....how to get each letter right.....the sound of the teacher's voice..... .....and .....perhaps you teacher seems so big when you're so small .....feeling interested in something.....or bored.....maybe the sun is shining outside maybe you can see out of the window.....and you even daydream.....

"And now....keeping your eyes closed..... put your name on the paper you're holding.....and put how old you are.

(During the following statements, ensure voice gradually returns to adult intonation if necessary)

"And now gradually leave that memory behind in the past..... and return your awareness through the years.....to the present.....to your ordinary adult self.....your present age.....aware of being in the chair you are in.....in this room.....still deeply in hypnosis....notice your normal physical size.....your position..... feeling ordinarily adult.....everything back to normal.....childhood way back in the past where it belongs....and notice everything you experience right now.....leaving all that behind.....as you notice your sensations.....sounds.....everything you are aware of .....and all these things can add to your comfortable, focussed experience.

"And I'll take these things away. (remove paper and pencil) While you continue in the interesting, focussed, effective state of hypnosis.

Score + if clear change in handwriting between present and regressed age.

N.B. If unpleasant emotional arousal occurs, use general counselling skills to be sypathetic to the situation; then ask if the subject would like to leave that behind in the past where it belongs; and ask subject if ready to continue with something else. After all testing is completed, debrief thoroughly to ensure that the subject is back to normal.

ALTERNATIVE ITEM 7 FOR SUBJECTS FOR WHOM AGE REGRESSION IS UNSUITABLE

(From Stanford Profile Scale 1)

PRETEST OF MEMORY BEFORE HYPNOTIC INDUCTION

BEFORE beginning hypnosis, give pretest for later recall of meal

"I want to test your memory for something. Exactly a week ago today.....What did you have for dinner....? (If subject can't remember) 'Take a moment to see if your memory will come back'

(If subject remembers any item, go back another week and try again; if subject remembers, again go back another week. When subject finds a day on which the meal is forgotten, record date and say:

"That's fine", or "O.K."

Alternative Item 7, Recall of Meal

(Before hypnotic induction, pretest according to previous instructions)

"Before you went into hypnosis, I asked you about a meal you had a week (2 weeks etc) ago. You couldn't remember it then. But an interesting thing about memory is that the unconscious mind can search by itself and have information return. This can happen with the meal.....I bet you've forgotten someone's name when you see them, and you ask yourself 'what is that name.....I know it....' you give your mind that request.....and the name comes back.....later.....
"When you begin to remember what you had to eat then, it may not be inthe right order.....it may be the most enjoyable food first...or the most unusual...or something else about it.....or if you will remember something else that reminds you of what it was.....where your were.....what you had been doing before or after.....that meal.....or something to do with preparing or buying it.....I don't know.....but while your mind reviews all that at one level.....your conscious mind can review the things about that meal you already knew.....perhaps where you were sitting.....and what you were wearing.....who you were with.....and when your mind has found what it was searching for tell me out loud what it was you had to eat then.....

(After ten seconds ask subject how he/she is doing and record details of any food memories).

"Anything yet?.....

(If subject remembers, record items, and score + if at least 2 items remembered.

(If no memory} "Tell me later on when it returns.."
"Trying to remember can be such an effort.....and enjoy not having to.....and leaving all that behing.....as you focus inwards.....into that taking it easy.....not having to try to think feeling.....

Item 8, Arm Immobilization

"Discover how totally comfortable you might like to feel, with perhaps even a heavy feeling, that it's nice not to have to move, feeling so relaxed.

(If necessary) "Put each hand and arm on your legs or the arms of the chair.

"Now, as you breathe.....one arm can get lighter than the other, perhaps hardly noticably at first.....if you place your arm so that it only just touches the fabric....or the arm of the chair (use which ever is applicable) as you breathe in....each time....you can notice a natural tendency for your arm to rise. As that arm does that, the other arm, in contrast may seem even heavier.....than normal.....not wanting to bother to move.....settled against the chair (or lap, or leg) (lower pitch of voice slightly) .....the lighter arm..... even lighter as the other arm gets heavier....and lighter still.....(if hand does not lift up.....find out..... which is more noticable.....the lightness of the light arm....or maybe the other arm is heavier than the other arm is light.....and as you notice the weights, the heavy arm heavy, and maybe even the arm that is supposed to be light feels heavy instead.....there is so much of that comfortably heavy feeling.....as if not wanting to bother to move....as if the heavy arm refusing to move.....

"In a moment, <u>try</u> to move the heavier arm.....nod your head when you are ready to test it.....it to see how heavy it is .....as if too relaxed and heavy to lift up.....like the feeling we have after a lot of effort when we just can't be bothered to move and feel as if made of lead.....

(If subject attempts to lift hand and arm, observe extent of movement. After 10 seconds of attempted movement, say: "And now rest completely, and think in such a way as to let both your arms and hands return to their normal weights again....let me know by nodding or saying something when you've done that.)

(If subjects has not tried to lift arm): "and now test your arm, see if it will lift..(**)

(If it is not clear what S is doing, e.g. trying to lift the raised arm instead of the contacted arm, ask him if he is trying to lift an arm, and which arm).

Score + if arm rises less than one inch in ten seconds of beginning to attempt to lift hand and arm. OR within ten seconds of (**)

REVERSAL SUGGESTIONS

"And allow your arm and hand to return to their normal feelings....with just the same amount of lightness or heaviness that you had before.....and be sure that your hands are equal in weight.

Item 9, Anosmia

(Use peppermint oil , vanilla or almond oil alternately for each subject. Give the alternative substance for the Stanford Hypnotic Susceptibility Scale, Form C.)

" Smell..... How often we don't smell things. You have the ability to smell.....and you have the ability to not smell...And now, are you willing to let your unconscious mind change your sense of smell for a moment? .....I'll hold something in front you in a moment, and you can notice a surprise..... either you lose your sense of smell completely, or smell ammonia.....but maybe not recognize it.....or an unexpected nothing.....find out...which..... .....as if you were trying to smell something when you have a cold.....and can't smell what other people can smell....
"And you can be curious about what will happen.....
"I'll hold this under your nose...

(Hold substance about 2 inches under subject's nose)
(Ensure subject sniffs well)

"Did you smell something? (wait for response)
(If subjects indicates smell): "Do you know what it was?

"And now suggest to yourself that your sense of smell returning to normal, completely normal... suggest to yourself consciously and unconsciously that your sense of smell is now entirely normal.... and let me know when it is normal in every way by nodding your head.

(Ensure subject has nodded head) .....

"Now test it.....(Present substance).....how does it compare with the first time?

"And now on to another sensation.....while your mind rests.....and all that completed.....ready to do something new.

Score + if subjects denies smell or smells ammonia instead of presented substance.

Item 10, Hallucinated Voice

"The mind does interesting things with sounds...we can be absorbed in a conversation with one person in a room full of people.....and not hear the others.....or not hear the radio when we're off in a daydream.....even important things.....like a dull lecture.....and you are off in a daydream, with that imaginary conversation as if completely real.....and you don't even hear the lecturer....who is speaking in reality.....your mind has ignored it.....and you actually hear that conversation in your minds ear.....just as you pictured being in a classroom in your mind's eye.....

"When we daydream in public.....we don't speak aloud.....our mind keeps an unconscious check on ourselves, however lost in the daydream we are.....but when we are by ourselves, it can be a natural extension to reply to an imaginary conversation out loud, as if we were rehersing something.....and that is perfectly natural.....as an important part of thinking is in words....if someone were to hear unexpectedly, we would be embarrassed.....but in hypnosis find out..... you can feel as if sufficiently private in this different setting...

"In a moment, in a daydream....listen to a daydream voice asking you what you will be doing when you have left here.....and answer out loud when you hear the question in your mind's ear.....begin to hear it now.....

(If no response, "did you hear the question?).

Score + if verbal response.

Check when debriefing after completion after the scale to ensure that the response seemed a natural one, and not compliance with perceived request of the administrator. Use any adjusted score for revised scoring.

REVESAL SUGGESTIONS

"And those thoughts can fade and be left behind like things heard in a classroom, and come in one ear and go out through the other.....

Item 11, Negative Visual Hallucination

(Use colored blocks. If Stanford Hypnotic Susceptibility Scale, Form C has been administered first, use four blocks instead of three. If SHSS:C-indirect is being performed first, use three blocks. Use the red block as the block to be not seen; place it between the other colors, if using three; if using four, place blocks in a separated square).

"Continue .....as you breathe....to enjoy drifting down into the most profoundly deep state of hypnosis.....while I put some things on the table by your side (or in front, etc). Something else we take for granted is that we ignore a lot of what we see.....in fact we would be overloaded if we had to see everything we looked at.....if you remember when you met a certain person.....did not notice what they were wearing?.....or if something is missing from a room.....not noticing it because of not noticing it enough before.....taken for granted.....you, like me may have put something down.....and wonder where on earth it is.....and then it has been there easily visible all the time.....

"Even when your eyes are closed, you can picture things.....and even when your eyes are open.....the vividness of a daydream.....and the other way round.... not seeing what your eyes are looking at.....looking at and not seeing.....and what we expect to see we see.
"In a moment, when I ask you to open your eyes,....find out.....that..... you see the two (three) blocks, (boxes) blue and green (and yellow) on the table (chair) so intensely.....that they make everything else fade out.....nothing else but those blue and green (and yellow) blocks..... .....you can picture them before you open your eyes.....and expect to see them clearly.....and go as deeply as you need to go into hypnosis, you can wonder if the blue and green (and yellow) color is the way you imagined it.....and if the blocks are the size you imagined.....and wonder which you will see first.....the green.....or the blue first.....and green after.....and when you are ready.....you can tell me what shape they are as soon as you've opened your eyes.....so when you're ready open your eyes.....

(If subject opens eyes) "Tell me what you see.....(wait for indication)....."What colors are they?.....(wait for response)

"Are they the same or different from the way you imagined? (If subject reports two blocks): "Do you notice anything else?

(Unless subject now reports third block): "Now suggest to yourself that you will be able to see another block .....and let me know when you do.....and make sure that you get it as clear as the others.....(Wait for report).

(If subject immediately reports three blocks, ask if they are all as clear as each other, then state:)
"Yes there are three.

"And let your eyes close again.....you may notice the after image of them fade behing your closed eyelids, ...and as the image goes, ...so can the thoughts of them as well....fading away.....as you find out what your hands are feeling like.....maybe they were forgotten.....perhaps a lack of sensation.....but very relaxed.....and as you breathe, ...drift down with the breath.....further into the most relaxed and comfortable feeling that you would like.

(continue without interrupting flow into #12, Amnesia)

Score + if red block is not reported, even if subject does not maintain negative hallucination (i.e. according to criteria in regular aministration).

Item 12, Amnesia

"You've done all you need to for now, and take a few moments to notice your sensations, and adjust your position if you need to.....or you may not need to.....not having to think even; .....but remember clearly the most deeply relaxed feeling you've been able to experience, to remember those comfortable sensations vividly.....and leave everything else behind....and enjoy drifting deeper.....and deeper.....and the staircase.....you can remember that.....find out.....how you can remember what it was like to go down it....like a dream....and then dreams are forgotten.....and now.....to bring yourself back from hypnosis.....begin at the bottom of the staircase and as if a door closed on it.....and as you think of returning up the stairs, you bring yourself back from hypnosis, keeping some of the relaxed, totally comforable feeling if you would like to although it can be an awake, alert, relaxed feeling, very at ease, but with a rested energy.....like waking up from a good sleep..... up the stairs in your own time.....you don't need to count them to yourself, but you can if you wish.....and take as much time as you need.....as you return to the ordinary, defocussed state.....aware of the chair.....and the room around you..... and when you have reached the top stair.....whhen you are ready.....use that as the right time to open your eyes. But don't open them until you are completely ready, and then keep the rested, restored feeling. And you will find when you <u>are</u> ready to open your eyes either that things may look a little fuzzy for a few moments.....or extra clear.....

(If subject has not opened eyes by now:

"Take all the time you need to awaken.....and don't even try to open your eyes until you are completely ready.

(When subject opens eyes): "How are you doing?.....(allow a little time for subject to reorient)

"Try to tell me the things you were asked to do or experience after going down the staircase? (record comments verbatim.)

When subject stops, ask if there is anything more. Wait a few moments for further response.

(Then engage eye contact, make voice a little lower and

slower paced): "And now suggest to yourself ....that you can remember everything.....you can do this in various ways. You can think 'in a moment I'll remember everything'.....or just find that it happens without having to use that conscious suggestion. Or find an image comes to mind that has to do with your memory for those experiences in hypnosis returning completely.

(Record further comments. Give subjects enough time. If amnesia has been complete, up to a minute may be required for the amnesia to reverse.)

Score according to criteria in regular administration. i.e. if subject recalls 3 or fewer items. In addition, record the number of items reported after amnesia was lifted, and use as reversal score.

(N.B. omit mention of staircase if this has not been used in the induction, and mention beach scene appropriately).

QUESTIONNAIRE

PREFERENCE FOR DIRECT OR INDIRECT SUGGESTION VERSIONS

OF THE STANFORD HYPNOTIC SUSCEPTIBILITY SCALE, FORM C

1. In which did you find yourself generally furthest in hypnosis at the end of the countdown, before the test items?

2. In which version did you feel more relaxed?

3. In which version did hypnotic effects seem to happen by more by themselves, spontaneously, without deliberate effort?

4. In which version were you more aware of outside noises?
[NB discount the real effect of major distractions]

5. In which version were you more distracted by irrelevant thoughts?

6. In which version did you prefer the manner of the hypnotist?

7. Which approach to hypnosis would you prefer to make use of if you were to use hypnosis for therapy?

8. Which version appeared more effective?

9. Which version fitted your previous expectations about what hypnosis would be like?

10. Which version did you prefer?

N.B. Examiner reads out questions, and records subject's comments. Any ambiguities are questioned. If no preference is stated for any item, no score is recorded.

LISTING OF THE DATA

The raw data are listed on the following pages.

Abbreviations used in the Listing

Note.

Variables which are in the listing of the data but not analyzed for the dissertation, have been ommitted from this description.

ID	Subject number
STUDY	1 - Experiment 1; 2 = Experiment 2.
SEX	Gender of Subject: 1 = Male; 2 = Female.
ORDER	1 = Stanford Hypnotic Susceptibility Scale, Form C, (direct suggestion) taken first; Victoria C scale (indirect suggestion) taken second. 2 = Victoria C scale (indirect hypnosis) taken first; Stanford Hypnotic Susceptibility Scale, Form C (direct suggestion) taken second.
DIRECT	Subject's total score on the Stanford Hypnotic Susceptibility Scale, Form C (direct suggestion).
DIRALT	Subject's alternate score on the Stanford Hypnotic Susceptibility Scale, Form C (corrected for compliance responses).
INDIRECT	Subject's total score on the Victoria C scale (indirect suggestion).
INDALT	Subject's alternate score on the Victoria C scale, corrected for compliance responses.
TESTER	Examiner
PREFDIR	Subject's total items on Preference Questionnaire: preference for direct suggestion.
PREFIND	Subject's total items on Preference Questionnaire: preference for indirect suggestion.

HILOHI Level of hypnotizability, 2 levels.
Score is based on Stanford Hypnotic
Susceptibility Scale, Form C.
1 = higher hypnotizability (scoring 7-12)
2 = lower hypnotizability (scoring 0-6)

HIMEDLO Level of hypnotizability, 3 levels.
Score is based on Stanford Hypnotic
Susceptibility Scale, Form C.
1 = high hypnotizability (9-12).
2 = medium hypnotizability (5-8).
3 = low hypnotizability (0-4).

DIR 1-12 Pass/fail of each separate test item in the
Stanford Hypnotic Susceptibility Scale, Form C.
0 = Fail
1 = Pass

IND 1-12 Pass/fail of each separate test item in the
Victoria C scale.
0 = Fail
1 = Pass

ID	STUDY	SEX	ORDER	DIRECT	DIAL	INDIRECT	INDALT	TESTED	DEPTHD	DEPTHIN	PREFDIR	PREFIND	LEXACUT	LEVIM	AGE	MILOMI	MIMEDLO	DIR1	DIR2	DIR3	DIR4	DIW5	DIW6	DIW7	DIW8	DIR9	DIW10	DIW11	DIW12	IND1	IND2	IDW3	IND4	IND5	IND6	IND7	IND8	IND9	IND10	IND11	IND12	METHODIFF
1	1	2	1	7	7	10	10	2	.	.	3	9	.	.	.	1	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	3.00
2	1	2	1	6	6	2	2	2	.	.	4	6	.	.	.	2	3	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-4.00
3	1	2	1	4	4	3	5	2	.	.	2	7	.	.	.	1	3	1	1	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
4	1	2	1	9	9	5	9	2	5	6	2	4	1	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1.00
5	1	2	1	8	9	7	9	2	5	7	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	.00
6	1	2	1	7	8	8	9	2	5	7	0	7	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-3.00
7	1	2	1	6	7	5	7	2	5	5	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	2.00
8	1	2	1	5	6	6	8	2	5	5	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1.00
9	1	2	1	6	6	5	7	2	5	5	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	3.00
10	1	2	1	5	5	5	6	2	5	5	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1.00
11	1	2	1	4	5	4	5	2	5	5	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	2.00
12	1	2	1	5	5	4	4	2	5	5	0	6	0	1	.	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	2.00
13	1	2	1	5	5	10	10	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	5.00
14	1	2	1	4	4	10	10	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	4.00
15	1	2	1	7	6	10	10	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	3.00
16	1	2	1	6	6	4	4	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-4.00
17	1	2	1	5	4	7	7	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1.00
18	1	2	1	4	4	6	6	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	2.00
19	1	2	1	4	4	6	6	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	3.00
20	1	2	1	9	9	10	10	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
21	1	2	1	8	8	9	9	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1.00
22	1	2	1	7	7	8	8	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1.00
23	1	2	1	6	5	7	8	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	2.00
24	1	2	1	5	4	6	7	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	.00
25	1	2	1	4	3	5	6	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1.00
26	1	2	1	10	10	11	11	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1.00
27	1	2	1	12	11	13	14	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-3.00
28	1	2	1	11	12	10	10	2	.	.	3	8	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1.00
29	1	2	2	7	7	6	6	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
30	1	2	2	7	7	5	5	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
31	1	2	2	6	5	4	4	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
32	1	2	2	5	4	4	4	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
33	1	2	2	4	4	4	4	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	.00
34	1	2	2	3	3	4	4	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	.00
35	1	2	2	12	12	5	5	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-3.00
36	1	2	2	11	12	5	5	2	.	.	4	5	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
37	1	2	2	7	7	2	2	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	.00
38	1	2	2	6	6	2	2	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-2.00
39	1	2	2	5	5	2	2	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-3.00
40	1	2	2	8	8	1	1	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1.00
41	1	2	2	11	11	1	1	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-2.00
42	1	2	2	12	12	1	1	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	-1.00
43	1	2	2	2	3	2	2	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	2.00
44	1	2	2	3	4	2	2	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	.00
45	1	2	2	2	2	2	2	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	.00
46	1	2	2	4	4	5	5	2	.	.	1	7	1	0	.	2	2	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	1	1.00

05 MAY 86 SPSS-X RELEASE 2.1 FOR IBM VM/CMS PAGE 3
15:12:54 UNIVERSITY OF VICTORIA IBM 3090X VM/SP CMS

ID	STUDY	OPSER	DIRECT	DIRALT	INDIRECT	INDALTR	TESTHD	DEPTHIN	PREFDIR	PREFIND	LEVAUT	LEVIM	AGE	HILOMI	HIMEDLO	DIR1	DIR2	DIR3	DIR4	DIR5	DIR6	DIR7	DIR8	DIR9	DIR10	DIR11	DIR12	IND1	IND2	IND3	IND4	IND5	IND6	IND7	IND8	IND9	IND10	IND11	IND12	METHDIFF
93	2	1	2	9	9	8	8	3	4	3	.	.	.	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	0	1	0	0	-1.00
94	2	2	2	8	8	10	10	3	4	6	0	9	.	1	2	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0	2.00
95	2	1	2	10	10	7	7	3	6	4	0	9	0	1	2	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	0	0	-3.00
96	2	2	2	7	7	6	6	3	7	5	8	1	4	1	2	1	0	1	1	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	0	1	0	0	-1.00
97	2	2	2	7	7	6	6	2	9	8	2	4	.	1	2	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	1	1	1	1	0	0	0	-1.00

NUMBER OF CASES READ = 97 NUMBER OF CASES LISTED = 97

VITA

Surname: VERNON-WILKINSON Given Names: ROSEMARY ANN

Place of Birth: Newark, England.

Date of Birth: 6 May, 1940.

Educational Institutions Attended, with Dates of Entering and Leaving:

UNIVERSITY OF VICTORIA, B.C.	1974 to 1987
	1979 to 1987

Degrees, Diplomas, Etc., Awarded with Dates and Names of Institutions:

B.A.	1977	University of Victoria, B.C.
M.Sc.	1981	University of Victoria, B.C.

Awards:

University of Victoria Fellowship,	1979 to 1980
	1980 to 1981
	1981 to 1982
	1982 to 1983

Publications:

(1984) Emotional disorders. In Spreen, O., Tupper, D., Risser, A., Tuokko, H., Edgell, D. Human developmental neuropsychology. New York: Oxford University Press.

PARTIAL COPYRIGHT LICENSE

I hereby grant the right to lend my dissertation (the title of which is shown below) to users of the University of Victoria Library, and to make single copies only for such users or in response to a request from the library of any other university, or similar institution, on its behalf or for one of its users. I further agree that permission for extensive copying of this dissertation for scholarly purposes may be granted by me or a member of the University designated by me. It is understood that copying or publication of this dissertation for financial gain shall not be allowed without by written permission.

Title of Dissertation

An Experimental Comparison of Direct and Indirect Approaches to Hypnosis Using the Stanford Hypnotic Susceptibility Scale, Form C.

Author [redacted]

ROSEMARY VERNON WILKINSON

1 June, 1986