TEMPORALLY VERSUS-NON TEMPORALLY CONTIGUOUS
ADMINISTRATION OF THE TELLEGEN ABSORPTION
SCALE AND ASSESSMENT OF HYPNOTIC
SUSCEPTIBILITY

Thesis

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

For the Degree of

MASTER OF SCIENCE

By

Glenn N. Cawood, B. S.
Denton, Texas
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Cawood, Glenn Nicolson, *Temporally Versus Non-Temporally Contiguous Administration of the Tellegen Absorption Scale and Assessment of Hypnotic Susceptibility.* Master of Science (Clinical Psychology), August, 1988, 49 pp., 4 tables, references, 43 titles.

The present study tested the hypothesis that contiguity, regarding time of administration of the Tellegen Absorption Scale (TAS), differentially influences hypnotic susceptibility. Forty-eight subjects were administered the TAS immediately prior to assessment of hypnotic susceptibility versus 43 subjects who received the TAS one to three days before assessment of hypnotic susceptibility. Absorption, when measured in the temporally versus nontemporally contiguous context did not appear to affect hypnotic susceptibility. Absorption did, however, correlate significantly with hypnotic susceptibility in the temporally contiguous group as compared to a non-significant correlation in the nontemporally contiguous group. This finding suggests a relationship between differential administration of the TAS with regard to time of administration and hypnotic susceptibility.
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Hypnotic susceptibility can be defined as "the ability to become hypnotized, to have experiences characteristic of the hypnotized person, and to exhibit the kinds of behavior associated with it" (Hilgard, 1965, p. 68). Research indicates that an individual's hypnotic responsivity is a phenomena quite different from conformity, gullibility, persuasion, or other forms of compliance (Moore, 1964). There have been numerous attempts to correlate hypnotic susceptibility with personality characteristics through the use of standardized personality inventories and personal experience questionnaires; however, widely used assessment tools such as the Rorschach, Minnesota Multiphasic Personality Inventory (MMPI), and the California Personality Inventory (CPI) (Barber, 1964; Hilgard, 1965) as well as inventories measuring locus of control (Saavedra & Miller, 1985) have not shown to be reliable personality measures associated with hypnotic susceptibility. Presently, data do not show a consistent correlation between personality characteristics, as assessed by multidimensional personality inventories and hypnotic susceptibility (Hilgard, 1975; Kihlstrom, 1985; Spanos, 1982).
In the mid 18th century, Anton Mesmer described the phenomena of "mesmerism," later to be renamed "hypnosis." Since then, there has been considerable debate regarding if hypnosis is a "trance" state rather than a state of heightened suggestibility. Weitzenhoffer (1953) and Bernheim (1957) have referred to the concept of heightened suggestibility as "hypersuggestibility." It becomes evident that when hypnosis is conceptualized as a suggestive state, that "trance" interpretation of hypnosis is eliminated (Sarbin & Coe, 1972; Barber, 1969, 1972). Shor, 1959 stated, however, that "any state in which the generalized reality orientation has faded into relatively nonfunctional awareness may be a trance state." Research by Barber and Calverly, 1969 disputes the authenticity of trance as a state unique to hypnosis due to unreliable self report of hypnotic subjects. They found that individuals when asked the following questions--"did you experience the hypnotic state as basically 'similar' to the waking state?" and "did you experience the hypnotic state as basically 'different' to the waking state?"--answered affirmatively to both. Barber and Calverly concluded that an individual's report of their degree of hypnotizability was a function of the manner in which the question was stated. Orne (1983) argued this conclusion stating "the fact that [biased] wording of questions distorts subjects responses is well known in the area of public opinion . . . and ought not to be taken as
evidence that the manner in which the questions are phrased
determines the experience that the subject is reporting" (p. 424).

Hypnotic Susceptibility as a Stable Characteristic

Through the development of objective, quantifiable
hypnotic susceptibility scales (Barber, 1965; Shor & Orne, 1962; Spanos, Radtke, Hodgens, Bertrand, Stam, & Moretti, 1983; Weitzenhoffer & Hilgard, 1959, 1962), researchers are
now able to experimentally test the hypothesis that hypnotic
susceptibility is a stable personality characteristic or
trait, not to be discarded as a state dependent artifact.
Supporting this notion of hypnotic susceptibility as a
stable characteristic are Hilgard (1965, 1975) and
Kihlstrom's (1985) findings that alternate form reliability
between scoreable standard hypnotic susceptibility measures
and hypnotic susceptibility ranges in the upper 80's to
lower 90's. Additionally, Morgan, Johnson, and Hilgard
(1974) found that individuals tested 8-12 years subsequent
to college graduation had long-term retest correlations of
.60 on the Stanford Hypnotic Susceptibility Scale, Form A
(SHSS:A). Moreover, Weitzenhoffer and Hilgard (1959) found
correlations of .80 and .90 in retest intervals ranging from
several days to weeks on the SHSS: A and B. Further evidence
of hypnotic susceptibility as a stable personality
characteristic or trait was cogently demonstrated in
Morgan's (1972) study on heritability in twins. In a sample
of 140 pairs of twins receiving the SHSS: A, correlations for monozygotic and dizygotic twins were found to be .52 and .17, respectively.

In researching hypnotic susceptibility and personality characteristics, J. Hilgard (1970, 1972, 1974, 1979) found that an individual's ability to become imaginatively involved in sensory and imaginative experiences outside of contexts which would be defined as hypnotic in nature correlate with hypnotic susceptibility. Through interviews with undergraduate students at Stanford University, Hilgard, 1974, found that an individual's ability to become imaginatively involved in various activities, particularly reading, drama, and aesthetic appreciation of nature, was significantly related to hypnotizability. Imaginative Involvement in this context is defined as "the quality of almost total immersion in the activity, with indifference to distracting stimuli in the environment" (Hilgard, 1970, p. 5). However, recent findings suggest that an individual's capacity for imaginative involvement, in areas outside of contexts which would be described as hypnotic in nature, is not related to hypnotic susceptibility (Drake, 1986).

Absorption and Hypnotic Susceptibility

In 1974, Tellegen and Atkinson operationally defined J. Hilgard's concept of imaginative involvement in their development of the Tellegen Absorption Scale (TAS), a 37-item paper and pencil task. True/false statements comprised
of both imaginative involvement and MMPI items were used. An example of an imaginative involvement item is "I can become deeply involved in reading or hearing about someone else's experiences." Factor analysis of the TAS revealed three factors which were Introversion, Stability, and an orthogonal factor labeled "absorption." Absorption was found to correlate significantly with hypnotic susceptibility. Cross validation studies on the correlation between absorption and hypnotic susceptibility yield correlations of $r = .27$ and $r = .43$ (Tellegen & Atkinson, 1974). Additionally, absorption has been shown to consistently correlate .40 with hypnotic susceptibility (Hilgard, 1975; Hilgard, 1979; Singer & Pope, 1981; Spanos & Barber, 1974; Tellegen & Atkinson, 1974). Absorption as a factor considered to be correlated with hypnotic susceptibility is defined as:

A disposition for having episodes of "total" attention that fully engage one's representational (i.e., perceptual, enactive, imaginative and ideational) resources. This kind of attentional functioning is believed to be a result of a heightened sense of the reality of the attentional object, imperviousness to distracting events, and an altered sense of reality in general, including an empathetically altered sense of self. (Tellegen & Atkinson, 1974, p. 268)
The concept of absorption has been a central theme in both state and nonstate theories of hypnosis and has been differentially viewed as a stable personality trait or cognitive ability accounting for differences in hypnotic responsivity (Hilgard, 1975; Hilgard, 1979; Singer & Pope, 1981; Spanos & Barber, 1974; Tellegen & Atkinson, 1974). Generally, self report measures have been the most commonly used tool for assessing absorption. Through the development of experience questionnaires, As (1962b, 1963) and As et al. (1962) found that an individuals ability to become absorbed in such things as art, nature, or role-playing was related to hypnotic susceptibility. Furthermore, he found that individuals self report of trance like experiences as well as experiences of separation/ dissociation from ordinary experience was related to hypnotizability.

Absorption and Assessment of Hypnotic Susceptibility

Considerable research has shown that the Tellegen Absorption Scale (TAS) positively correlates with other instruments measuring hypnotic susceptibility. In support of this are the findings of Council, Kirsch, Vickory, and Carlson (1983). They used 100 subjects and found a low but significant correlation of .21 exists between scores on the TAS and scores on the Stanford Hypnotic Susceptibility Scale, Form C (SHSS; C). Additionally, Crawford (1982), using 56 subjects, found a correlation of .30 between the TAS and the SHSS: A and C. In a group administered version
of the SHSS:C using 188 subjects, Finke and MacDonald (1978) found a correlation of .39 with the TAS. Moreover, correlations ranging from .27 to .56 have been found between the Harvard Group Scale of Hypnotic Susceptibility (HGSHS), a revised version of the SHSS: A and B, and the TAS (Farthing, Venturino, & Brown, 1983; Saavedra & Miller, 1983; Spanos & McPeake, 1975; Yanchar & Johnson, 1981).

Context and Hypnotic Susceptibility

In 1983, Council et al. found that when the TAS was administered in a non-hypnotic context, a context in which subjects were unaware that they were participating in a "hypnotic" experiment, that TAS scores did not correlate with score on the SHSS: C. Differences in correlation between contexts suggested that response expectancies were generated when conditions are clearly identified as involving hypnosis, and that these response expectancies rather than actual subject response to hypnotic suggestion, contributed to the relationship between the TAS and hypnotic susceptibility scores. Indeed, Council et al. found that when they controlled for variance due to expectancy, absorption was unrelated to hypnotic responsivity. This led Council, Kirsch, and Hafner, (1986) to hypothesize that information on the TAS, when administered in a context openly identified as an experiment measuring hypnotic susceptibility, facilitates hypnotic responsivity. They reasoned that when an individual is administered the
absorption questionnaire, immediately prior to being assessed for hypnotic susceptibility, that their perception of the degree to which they answer true/false to the absorption items creates expectancy effects which therefore influences their hypnotic susceptibility. For example, an individual who finds himself endorsing affirmatively to the absorption questions may perceive himself as a good hypnotic candidate and therefore have a greater tendency to respond to hypnotic suggestions. Conversely, individuals endorsing only a few absorption items may tend to view themselves as poor hypnotic candidates and therefore respond accordingly.

To study this relationship between the context in which the TAS is administered and hypnotic susceptibility, Council et al. (1986) administered the TAS in both a hypnotic context and a non-hypnotic context setting. Subjects in the hypnotic context were informed that they were volunteering for a "hypnosis" experiment. They were assessed for hypnotic susceptibility immediately after receiving the TAS. Conversely, subjects in the non-hypnotic context group were unaware that they were participating in a hypnosis study and received the TAS as part of a battery of personality tests administered by a graduate student in their introductory psychology class. At a later date individuals in the non-hypnotic context group were contacted and asked to volunteer for a hypnosis experiment involving assessment of hypnotic susceptibility. No mention was made
of the previous TAS administration in their class. Council et al. found that individuals in the hypnotic context group had a low but significant correlation of .22 between their TAS and hypnotic susceptibility scores. More important, correlation between the TAS and hypnotic susceptibility scores for the non-hypnotic context group were -.03 and non-significant. Council et al. (1986) concluded that "when absorption is measured within a context that is associated with hypnosis, subjects interpret their responses to the scale as an indication of their hypnotizability and accordingly alter their expectations of how they will respond to hypnosis" (p.24).

In further testing of the effects of context-mediated administration of the TAS and its influence on hypnotic susceptibility scores, Drake (1986) administered the TAS to both a hypnotic and a non-hypnotic context group using high and low susceptibles for each group. High and low hypnotic susceptibles were defined as individuals scoring within 8-12 and 0-4, respectively, on the SHSS: C. Individuals in the hypnotic context group were scheduled for two sessions, one for an interview and administration of the TAS and one for assessment of hypnotic susceptibility to be done no later than one to three days subsequent to the TAS administration. Individuals in the non-hypnotic context group were scheduled for one session involving an interview and administration of the TAS. At later date, subjects in the non-hypnotic context
group were contacted by a different experimenter and asked to participate in an experiment involving hypnosis. No mention was made of the previous experiment involving the interview and administration of the TAS.

Drake found that the TAS failed to correlate with hypnotic susceptibility in both groups. He hypothesized that significant differences between scores on the TAS and scores on the SHSS: C in both groups as found by Council et al. was a result of not only the context in which the TAS was administered, but also the difference in temporal contiguity of the administration of the TAS and subsequent assessment of hypnotic susceptibility. Drake suggested that the relationship between administration of the TAS and scores on the SHSS: C was mediated by context as well as temporal contiguity. He proposed that the TAS creates expectancy effects in subjects which influences their level of hypnotizability, only when both administered in a context openly defined as involving hypnosis and when administered immediately previous to the assessment of their hypnotic susceptibility. This hypothesis is provocative in light of Chifalo and Coe's (1982) finding that the TAS did not significantly correlate with hypnotic susceptibility when was administered within a hypnotic context.

The preceding research suggests that there is an interaction effect between the context in which the TAS is administered and the contiguity with regard to time of the
administration of the TAS and hypnotic susceptibility. The present study was designed to test the hypothesis that temporally contiguous versus non-temporally contiguous administration of the TAS in a hypnotic context influences hypnotic susceptibility, as assessed by the SHSS: C.

Method

Subjects

Seventy-two subjects selected from among undergraduate Psychology students at University of North Texas voluntarily participated in return for extra credit points. Subjects scoring in the 8-12 and 0-4 range on the SHSS:C were defined as High and Low hypnotic susceptibles, respectively. Individuals were assigned to one of two treatment conditions. One treatment condition consisted of temporally contiguous administration of the TAS and assessment of hypnotic susceptibility. This refers to assessment of hypnotic susceptibility immediately after administration of the TAS. The second condition consisted of non-temporally contiguous administration of the TAS and assessment of hypnotic susceptibility. This refers to assessment of hypnotic susceptibility one to three days subsequent to the administration of the TAS. Determination of High and Low hypnotic susceptibles to be used for analysis was done after completion of the experiment. Twenty-one High and 15 Low hypnotic susceptibles were used as subjects under analysis in each of the two conditions yielding a total of 72 subjects.
Hypnotist

One masters student in Clinical Psychology served as the hypnotist in the temporally contiguous condition. The hypnotist had received formal supervision at The Pennsylvania State University in both the administration of the SHSS: C Induction format and use of hypnotic suggestion. Several clinical and counseling doctoral students in psychology served as hypnotists in the nontemporally contiguous condition. They had all received previous didactic training in administering standard hypnotic scales.

Materials

Stanford Hypnotic Susceptibility Scale, Form C (SHSS: C)

This was used as the instrument measuring hypnotic susceptibility. It is an individually administered 12-item susceptibility scale, normed on undergraduate students with scores ranging from 0-12. Weitzenhoffer and Hilgard (1962) defined High and Low hypnotic susceptibles as individuals scoring between 8-12 and 0-4, respectively. Each hypnotist did both the administration and scoring of the SHSS:C.

Tellegen Absorption Scale (TAS)

This is a 37-item, true-false paper and pencil questionnaire which assesses the capacity for an individual to become imaginatively involved in sensory and imaginative experiences. The TAS is labeled in the study as the "Personal Experience Questionnaire" following Council et al. (1988) (see Appendix A).
Field's Depth Inventory (FDI)

This is a 38-item, true-false paper and pencil questionnaire which was administered after completion of assessment of hypnotic susceptibility. It is used to assess the level of hypnotic depth as experienced by the subject (Field, 1965). The FDI positively correlates with the level of hypnotic susceptibility as assessed by the SHSS: C. The FDI is labeled in the study as the "Subjective Experience Questionnaire" following Drake (1986) (see Appendix B).

Procedure

Subjects were selected from a list of undergraduate Psychology students who volunteered to participate in psychology experiments in return for extra psychology course credit points. The experimenter contacted subjects in the temporally contiguous group by phone and scheduled a single two-hour session. Subjects were greeted by the interviewer and were read the following introduction:

You have signed up for an experiment in hypnosis and I want to explain to you why we are beginning with an interview. After this interview you will have an opportunity to experience hypnosis. This research project is concerned with how people respond to hypnosis. We have become aware through our earlier studies that there are areas of hypnotizability that are related to the kinds of experiences a person has had in ordinary life, outside hypnosis. Hence we want
to know about some of your interests, and some of your thinking about yourself. I shall be asking you some direct questions, but we hope that you will feel free to add anything that seems important to you, not waiting for specific questions. We appreciate your willingness to cooperate with us in the research. While this material is necessarily personal, your replies will be used in such a way that you will not be identifiable. (Drake, 1986)

Subsequent to this introduction, subjects were interviewed on areas of interest pertaining to reading, drama, and aesthetic appreciation of nature, following Drake's (1986) format. Subjects were then administered the TAS and Inventory of Imaginative Experience. Immediately following completion of the questionnaires, the interviewer brought the subject to a waiting room where the hypnotist greeted the subject. The subject was then escorted to a room by the hypnotist. Prior to assessment of hypnotic susceptibility, the experimenter read a brief introduction (based on S. Drake, 1986) to the subject which explained the nature of hypnosis and examples of hypnotic-like experiences. The introduction was as follows:

Hello, my name is . . . . I'm a graduate student in the Psychology program here at NTSU and I've been doing research on hypnosis for a few years. I'd like to tell you a little bit about hypnosis before we begin.
Hypnosis is not something mysterious but rather is a quite natural experience. In fact, most people have hypnotic-like experiences at various times practically every day. If you've ever been so interested or caught-up in a movie you were watching that you didn't notice the noises that people around you were making, you've had a hypnotic-like experience. Another hypnotic-like experience happens when you're driving on a familiar highway and you realize that you've been so engrossed in your own thoughts that you haven't been aware of passing familiar landmarks along the road.

While hypnotized, you will be in complete control of yourself. You can become hypnotized only if you wish to. The procedure we're going to use today is a standard hypnotic procedure which has been used with thousands of people. Ill effects are very rare, once in a great while someone may feel a little sleepy or stiff after hypnosis. You may withdraw from the study at any time. Most people find hypnosis to be a pleasant, enjoyable experience and feel relaxed and comfortable afterwards. (Drake, 1986)

After completing the introduction, the experimenter proceeded with the assessment of hypnotic susceptibility, using the SHSS: C. Immediately following, subjects were asked to fill out Field's Depth Inventory.

Subjects in the non-temporally contiguous group were recruited from sign-up sheets advertising "Research
Investigating Hypnotizability." The experimenter contacted subjects by phone and scheduled two separate sessions, one for the administration of the TAS and Inventory of Imaginative Involvement questionnaire and a second for assessment of hypnotic susceptibility. Subjects were scheduled for assessment of hypnotic susceptibility no later than one to three days subsequent to receiving the TAS. All subjects were instructed not to discuss the experiment with others until after they were debriefed by the experimenter subsequent to completion of the experiment.

A 2 x 2 ANOVA yielding 4 groups with one dependent measure was used to test for differences between temporally versus non-temporally contiguous administration of the TAS and hypnotic susceptibility. The 4 groups were as follows: (a) Absorption of High hypnotic susceptibles assessed within temporally contiguous context; (b) Absorption of Low hypnotic subjects assessed within a temporally contiguous context; (c) Absorption of High hypnotic susceptibles assessed within a non-temporally contiguous context; and (d) Absorption of Low hypnotic susceptibles assessed within a non-temporally contiguous context.

The dependent measure used for analysis was absorption as measured by scores on the Tellegen Absorption Scale (TAS) (Tellegen, 1982). Data on individuals in the temporally contiguous group in this study will be contrasted with individuals in the non-temporally contiguous group in
Drake's (1986) study. Data was made available for use in this study by Drake. It is acknowledged that utilizing separate data was a potential weakness in this study; however, all possible measures were taken to ensure that this study was conducted in the identical manner as in Drake's (1986) study.

**Results**

A $2 \times 2$ ANOVA (temporal versus non-temporal contiguity by High hypnotic versus Low hypnotic susceptibility) was performed to determine if there was a significant difference between temporally versus non-temporally contiguous administration of the TAS and scores on the Stanford Hypnotic Susceptibility Scale, Form C. The dependent measure used for this analysis was scores on the TAS.

There was no significant main effect of contiguity on absorption scores ($F = .000$, $df = 1/68$, $p < .985$) nor a significant interaction between contiguity and hypnotic susceptibility($F = .043$, $df = 1/68$, $p < .837$). There was, however, a main effect of hypnotic susceptibility on absorption ($F = 4.547$, $df = 1/68$, $p < .037$).

Additional analysis was performed to more accurately examine the relationship between the reactive effects of contiguity with regard to time of administration of the TAS and hypnotic susceptibility. The proposed $2 \times 2$ ANOVA using TAS scores as the dependent measure was anomalous as it did not accurately test this relationship. Instead, a $2 \times 2$
ANOVA with a median split of TAS scores as an independent factor was used with hypnotic susceptibility scores as the dependent measure. Means and standard deviations for scores on the SHSS: C appear in Table 1, Appendix A.

There was no significant interaction between absorption and contiguity ($F = .003, df = 1/87, p < .958$). Moreover, there was no main effect of absorption ($F = .898, df = 1/87, p < .346$) nor main effect of contiguity ($F = .085, df = 1/87, p < .771$).

A Pearson correlation matrix was obtained to determine if the TAS correlated with hypnotic susceptibility differently in the temporally versus non-temporally contiguous groups. A significant correlation was obtained in the temporally contiguous group as compared to a non-significant correlation in the non-temporally contiguous group (see Appendix A).

Correlations were obtained between hypnotic depth, as assessed by Field's Depth Inventory, and hypnotic susceptibility. Significant correlations were obtained in both the temporally and non-temporally contiguous groups as well as when groups were pooled (see Appendix A).

A one-way ANOVA was performed to test for differences between hypnotists. No significant differences were found ($F = .531, df = 6/127, p < .780$). It appears that differences between groups were not attributable to variation in hypnotists.
Discussion

The purpose of this study was to determine the reactive effects of administering the Tellegen Absorption Scale (TAS) (Tellegen & Atkinson, 1974) in a temporally versus non-temporally contiguous context and its effect on hypnotic susceptibility. It was hypothesized that administering the TAS immediately prior to rather than one to three days before assessment of hypnotic susceptibility would create expectancy effects in subjects, thereby influencing the manner in which they would respond to hypnotic suggestion.

Absorption, measured under both the temporally and non-temporally contiguous group did not influence hypnotic susceptibility scores as predicted. Moreover, neither absorption nor contiguity alone had an effect on susceptibility scores.

The hypothesis that differential administration of the TAS by time affects hypnotic responding was prompted by Drake's (1986) replication of Council et al. (1986) study. Council et al. hypothesized that there were differential effects of administering the TAS in a hypnotic versus non-hypnotic context, referring to subjects perception that they were/were not participants in a "hypnosis" experiment. In a test of this hypothesis, Drake obtained non-significant results and found through inspection of Council et al. work that time of administration of the absorption measure and subsequent assessment of hypnotic susceptibility differed
between groups. Such a finding suggested that the relationship between absorption and hypnotic susceptibility was mediated by time as well as context. Methodological differences between studies may have accounted for inconclusive results obtained by Drake.

The extant literature shows a relationship between absorption and hypnotic susceptibility. Absorption has been shown to positively correlate with hypnotic susceptibility (Hilgard, 1975; Hilgard, 1979; Singer & Pope, 1981; Spanos & Barber, 1974; Tellegen & Atkinson, 1974). Additionally, there is further evidence showing that the relationship between absorption and response to hypnotic suggestion is mediated by situational factors (Council et al., 1986). Research by Chiafalo and Coe (1982) and Spanos et al. (1976), using a modified version of the TAS, support this hypothesis in their finding that there was no correlation between absorption and hypnotic responding when measured in a hypnotic context (Chiafalo & Coe, 1982; Spanos et al., 1976).

Correlations between absorption and hypnotic susceptibility in this study support the hypothesis that temporally versus non-temporally contiguous administration of the TAS creates expectancy effects in subjects, thereby altering the manner in which they respond. Absorption was found to correlate significantly with hypnotic susceptibility in the temporally contiguous group; however,
this correlation was non-significant in the non-temporally contiguous group. Spanos and McPeake (1975a, 1975b), however, cast doubt on the significance of temporal proximity of measuring absorption and its effects on hypnotic responding in their finding of a significant correlation between absorption and hypnotic susceptibility when absorption was measured one week prior to assessment of hypnotic susceptibility.

The Field Depth Inventory (FDI) was used in this study to assess the level of hypnotic depth experienced by the subject (Field, 1965). When hypnotic depth was assessed in both conditions, it correlated significantly with hypnotic susceptibility suggesting that subjects' report of their hypnotic experience was congruent with actual hypnotic responding. Non-significant correlations between hypnotic depth and hypnotic susceptibility scores may have suggested that (a) subjects succumbed to demand characteristics of the study rather than actually experiencing a hypnotic state; and (b) experimenter error due to variation in administration of the SHSS: C occurred.

Temporally versus non-temporally contiguous administration of the TAS does not appear to influence hypnotic susceptibility. Correlational data does suggest, however, a temporal relationship between absorption and subsequent hypnotic responding. At present, the relationship between absorption and hypnotic susceptibility
is unclear due to methodological variation in research. Although absorption is consistently correlated with hypnotic susceptibility, it would be premature at this time to state that absorption predicts hypnotic susceptibility.
APPENDIX A

TABLES
Table 1

Means and Standard Deviations for Dependent Variable in Each Experimental Condition.

<table>
<thead>
<tr>
<th>Variable</th>
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Table 2

Correlations Between Tellegen Absorption Scale, Field's Depth Inventory, and Dependent Variable: Temporally Contiguous Context (n = 48)

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<th>Stanford Form C</th>
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<td>.5622**</td>
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* $p < .05$. ** $p < .001$. 
Table 3

Correlations Between Tellegen Absorption Scale, Field's Depth Inventory, and Dependent Variable: Non-Temporally Contiguous Context (n = 43)

<table>
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* p < .001.
Table 4

Correlations Between Tellegen Absorption Scale, Field's Depth Inventory, and Dependent Variable: Pooled Data (n = 91)

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APPENDIX B

HYPNOSIS AND INTERVIEW CONSENT FORM
INFORMED CONSENT

NAME OF SUBJECT: ________________________________ ss

1. I hereby give consent to Glenn Cawood to perform or supervise the following investigational procedure or treatment. Administration of the Stanford Hypnotic Susceptibility Scale, Form C. Interview on Imaginative Involvement

2. I have (seen, heard) a clear explanation and understand the nature and procedure or treatment; possible appropriate alternative procedures that would be advantageous to me (him, her); and the attendant discomforts or risks involved and the possibility of complications which might arise. I have (seen, heard) a clear explanation and understand the benefits to be expected. I understand that the procedure or treatment to be performed is investigational and that I may withdraw my consent for my (his, her) status. With my understanding of this, having received this information and satisfactory answers to the questions I have asked, I voluntarily consent to the procedures or treatment designated in Paragraph 1 above.

DATE

SIGNED: __________________________
WITNESS

SIGNED: __________________________
WITNESS RESPONSIBLE

SIGNED: __________________________
SUBJECT

SIGNED: __________________________
PERSON RESPONSIBLE

RELATIONSHIP

Instructions to persons authorized to sign:
If the subject is not competent, the persons responsible shall be the legal appointed guardian or legally authorized representative. If the subject is a minor under 18 years of age, the person responsible is the mother or father or legally appointed guardian. If the subject is unable to write his name, the following is legally acceptable: John H. (His X Mark) Doe and two (2) witnesses.
APPENDIX C

INTERVIEW INTRODUCTION
Interview Introduction

You have signed up for an experiment in hypnosis and I want to explain to you why we are beginning with an interview. After this interview you will have an opportunity to experience hypnosis. This research project is concerned with how people respond to hypnosis. We have become aware through earlier studies that there are areas of hypnotizability that are related to the kinds of experiences a person has had in ordinary life, outside hypnosis. Hence, we want to know about some of your interests, and some of your thinking about yourself. I shall be asking you some direct questions, but we hope that you will feel free to add anything that seems important to you, not waiting for specific questions fro me. We appreciate your willingness to cooperate with us in the research. While this material is necessarily personal, your replies will be used in such a way that you will not be identifiable.
APPENDIX D

INTRODUCTION TO HYPNOSIS SESSION
Introduction to Hypnosis Session

Hello, my name is __________. I'm a graduate student in the psychology program here at NTSU and I've been doing research on hypnosis for a few years. I'd like to tell you a little bit about hypnosis before we begin. Hypnosis is not something mysterious but rather is a quite natural experience. In fact, most people have hypnotic-like experiences at various times practically every day. If you've ever been so interested or caught-up in a movie you were watching that you didn't notice the noises that people around you were making, you've had a hypnotic-like experience. Another hypnotic-like experience happens when you're driving on a familiar highway and you realize that you've been so engrossed in your own thoughts that you haven't been aware of passing familiar landmarks along the road.

While hypnotized, you will be in complete control of yourself. You can become hypnotized only if you wish to. The procedure we're going to use today is a standard hypnotic procedure which has been used with thousands of people. Ill effects are very rare, once in a great while someone may feel a little sleepy or stiff after hypnosis. You may withdraw from the study at any time. Most people find hypnosis to be a pleasant, enjoyable experience and feel relaxed and comfortable afterwards.
Appendix D - Continued

You can be fully at your ease. Nothing will be done to embarrass you. There will be nothing personal in what you are asked to do or say. You will have a better opportunity to learn about hypnotism if you just let yourself go and do not try to watch and analyze what I am doing. Have you any questions?

BEGIN INDUCTION
APPENDIX E

TELLEGEN ABSORPTION SCALE
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

36–39 App E
41–43 App F

UMI
Personal Experiences Questionnaire

Please read each statement and decide whether it is mostly true or mostly false as applied to you. If you decide a statement is true or mostly true, circle a "1". If a statement is false or mostly false, as applied to you circle a "2". (There are no right or wrong answers.)

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<tr>
<th></th>
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<th>1. Sometimes I feel and experience things as I did when I was a child.</th>
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<th>2. I can become deeply involved when reading or hearing about someone else's experiences.</th>
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<th>3. When I watch a boat on the lake, I can almost feel what it would be like to be on it.</th>
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<th>4. I can be greatly moved by eloquent or poetic language.</th>
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<th>5. While watching a movie, a T.V. show, or a play, I may become so involved that I forget about myself and my surroundings and experience the story as if it were real and as if I were taking part in it.</th>
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<th>6. If I stare at a picture and then look away from it, I can sometimes &quot;see&quot; an image of the picture, almost as if I were still looking at it.</th>
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<th>7. Sometimes I feel as if my mind could envelope the whole world.</th>
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<th>8. I like to watch cloud shapes change in the sky.</th>
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9. If I wish, I can imagine (or daydream) some things so vividly that they hold my attention in the way a good movie or story does.

10. I sometimes "step outside" my usual self and experience an entirely different state of being.

11. I think I really know what some people mean when they talk about mystical experiences.

12. Textures--such as wool, sand, wood--sometimes remind me of colors or music.

13. Sometimes I experience things as if they were doubly real.

14. When I listen to music, I can get so caught up in it that I don't notice anything else.

15. If I wish, I can imagine that my body is so heavy that I could not move it if I wanted to.

16. Often I can somehow sense the presence of another person before I actually see or hear him (her).

17. The crackle and flames of a wood fire stimulate my imagination.

18. It is sometimes possible for me to be completely immersed in nature or in art and to feel as if my whole state of consciousness has somehow been temporarily altered.
19. I can sometimes recollect certain past experiences in my life with such clarity and vividness that it is like living them again or almost so.

20. I am able to wander off into my own thoughts while doing a routine task and actually forget that I am doing the task, and then find a few minutes later that I have completed it.

21. I have attempted to write poetry or fiction.

22. Different colors have distinctive and special meanings for me.

23. Things that might seem meaningless to others often make sense to me.

24. While acting in a play, I think I could really feel the emotions of the characters and "become" him (her) for the time being, forgetting both myself and the audience.

25. My thoughts often don't occur as words but as visual images.

26. I often take delight in small things (like the five-pointed star shape that appears when you cut an apple across the core or the colors in soap bubbles).
Appendix E--Continued

27. When listening to organ music or other powerful music, I sometimes feel as if I am being lifted into the air.

28. Sometimes I can change noise into music by the way I listen to it.

29. Some of my most vivid memories are called up by scents and smells.

30. Certain pieces of music remind me of pictures or moving patterns of colors.

31. I often know what someone is going to say before he or she says it.

32. I often have "physical memories"; for example, after I've been swimming I may still feel like I'm in the water.

33. The sound of a voice can be so fascinating to me that I can just go on listening to it.

34. At times I somehow feel the presence of someone who is not physically there.

35. Sometimes thoughts and images come to me without the slightest effort on my part.

36. I can find that different odors have different colors.

37. I can be deeply moved by a sunset.
APPENDIX F

FIELD DEPTH INVENTORY
Subjective Experience Questionnaire

Instructions For Completing This Questionnaire

On the following pages there are 38 numbered statements describing experiences you may have had during the experiment. Please read the statement carefully and decide whether it is TRUE (or mostly true) as applied to you. Then go on to the rest of the statements. IT IS ESSENTIAL THAT EVERY STATEMENT BE ANSWERED, even though some may seem difficult or unclear.

After you give careful thought about your answer to the statement CIRCLE '1' for true, '2' for false.

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1. Time stood still.
2. My arm trembled or shook when I tried to move it.
3. I felt dazed.
4. I felt aware of my body only where it touched the chair.
5. I felt I could have tolerated pain more easily during the experiment.
6. I could have awakened any time I wanted to.
7. I was delighted with the experiment.
8. The experimenter's voice seemed to come from very far away.
9. I tried to resist, but I could not.
10. Everything happened automatically.
11. Sometimes I did not know where I was.
12. It was like the feeling I have just before waking up.
13. When I came out I was surprised at how much time had gone by.
1 2 14. I came out of the trance before I was told to.
1 2 15. During the experiment I felt I understood things better or more deeply.
1 2 16. I was able to overcome some or all of the suggestions.
1 2 17. At times I was deeply hypnotized and at other times I was only lightly hypnotized.
1 2 18. During the final "countdown" to wake up I became more deeply hypnotized for a moment.
1 2 19. At times I felt completely unaware of being in an experiment.
1 2 20. I did not lose all sense of time.
1 2 21. It seemed completely different from ordinary experience.
1 2 22. I was in a medium hypnotic state, but no deeper.
1 2 23. Things seemed unreal.
1 2 24. Parts of my body moved without my conscious assistance.
1 2 25. I felt apart from everything else.
1 2 26. It seems as if it happened a long time ago.
1 2 27. I felt uninhibited.
1 2 28. At times I felt as if I had gone to sleep momentarily.
1 2 29. I felt quite conscious of my surroundings all the time.
Appendix F--Continued

30. Everything I did while hypnotized I can also do while I am not hypnotized.

31. I could not have stopped doing the things the experimenter suggested even if I tried.

32. It was a very strange experience.

33. I felt amazed.

34. From time to time I opened my eyes.

35. I couldn't stop movements after they got started.

36. I had trouble keeping my head up all during the experiment.

37. My mind seemed empty.

38. It seemed mysterious.
REFERENCES


developments and perspectives. Chicago: Aldine-Atherton (pp. 399-443). (b)


