

**STANFORD HYPNOTIC SUSCEPTIBILITY SCALES
AND LAMAZE CHILDBIRTH**

EDWARD J. MORRIS

STANFORD HYPNOTIC SUSCEPTIBILITY
SCALES AND LAMAZE CHILDBIRTH

An Abstract
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Edward J. Morris

May, 1984

ABSTRACT

This study was undertaken to examine the degree of relationship between scores on The Stanford Scales of Hypnotic Susceptibility (SSHS) and level of success with Lamaze Childbirth methods. The sample consisted of pregnant females taking prepared childbirth classes at hospitals in Hopkinsville and Madisonville, Kentucky. The total sample included 20 subjects, four of which were not available for follow-up. The relationship was not found to be statistically significant at the .05 level. Incidental findings include a multiple correlation of $+0.67$ between SSHS scores and the combined effects of age, education level, self-rating of sensitivity to pain, and self-prediction of ability to be hypnotized. This relationship was found to be significant at the .05 level.

STANFORD HYPNOTIC SUSCEPTIBILITY
SCALES AND LAMAZE CHILDBIRTH

A Thesis
Presented to
the Graduate Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Edward J. Morris
May, 1984

To the Graduate and Research Council:

I am submitting herewith a Thesis written by Edward J. Morris entitled "Stanford Hypnotic Susceptibility scales and Lamaze Childbirth." I have examined the final copy of this paper for form and content, and I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.



Major Professor

We have read this thesis
and recommend its
acceptance:


Committee Member


Committee Member

Accepted for the Graduate and
Research Council:


Dean of the Graduate School

ACKNOWLEDGEMENTS

With a study of this type the most difficult part is finding enough subjects willing to participate in activities about which they understand very little. This study could not have been possible without the support of the teachers of the childbirth classes. Ms. Deanna Staples has my heartfelt thanks and appreciation for her help and support as the childbirth educator for Jennie Stuart Medical Center in Hopkinsville, Kentucky.

I would also like to express my appreciation to and for Dr. John D. Martin whose cooperation and support during my time at APSU have been of inestimable value to me personally and professionally. In return for his supporting my work in hypnosis I can only humbly offer my friendship and admiration.

My appreciation goes to Dr. Linda Rudolph for her generous help on this paper, especially in light of my ignorant mistakes.

I would like to send my love to my parents who have given me love and support through many years of school.

This work is dedicated to Vickie, my wife. Her help every step along the way has been the impetus that has enabled me to conclude this work I began so long ago.

TABLE OF CONTENTS

CHAPTER	PAGE
1. INTRODUCTION	1
2. METHOD	5
The Sample	5
Description of the Instruments	5
Administration and Scoring	6
3. RESULTS	7
4. DISCUSSION	9
REFERENCES	11
APPENDIX	13

Chapter 1

INTRODUCTION

The possible relationship between hypnosis and various techniques designed to reduce the pain associated with childbirth has been a topic of controversy for years. The principal method of prepared childbirth explored has been psychoprophylaxis, or the Lamaze technique.

Lamaze (1972) himself addressed this concern by attempting to carefully distinguish between his method and hypnosis. The thrust of Lamaze's argument that hypnosis and psychoprophylaxis are not the same extends from his belief that the expectant mother is not given "suggestions." In his technique, she is instead "reeducated" about labor so that she now realizes that pain is not necessarily a part of labor contractions. Lamaze's second point is that in hypnosis the patient plays a passive role while a treatment (i.e. hypnosis) is used to alleviate the pain. The insinuation to the patient, then, is that this pain is therefore a normal, inevitable part of labor, whereas in psychoprophylaxis, the patient takes an active role in the labor using concentration, muscular relaxation, and specific breathing exercises.

The large part suggestion seems to play in the Lamaze method as well as the other major forms of prepared

childbirth has been noted by other authors (Kroger, 1977; Hilgard & Hilgard, 1975). Other similarities between hypnosis, especially obstetrical hypnosis, and the Lamaze method have been noted as well. When practicing the concentration and breathing techniques of the Lamaze method, a "trance-like" state seems to surface (Kroger, 1977). Kroger equates this state with "at least a light stage of hypnosis" (p. 228). Hilgard (1975) points out that although there may be many similarities between the techniques, one should be careful about equating the two. He warns that a non-hypnotizable person may be taught the psychoprophylactic method, "even if more hypnotizable women achieve a state indistinguishable from hypnosis" (p. 105).

The literature also finds other similarities and overlaps between hypnosis and the Lamaze or psychoprophylactic approach to childbirth. Lamaze techniques include using focal points for visual fixation during concentration as well as relaxation suggestions (Samko and Schoenfeld, 1975).

These overlaps between psychoprophylaxis and hypnosis may lead one to expect a significant correlation to exist between hypnotizability and success with the Lamaze method (Hilgard and Hilgard, 1975). This relationship has not been established through research. The only attempt to establish this relationship, or a lack thereof, found no significant correlation between the patient's self-rating of success with the Lamaze method and hypnotic susceptibility (Samko

and Schoenfeld, 1975). This study was, however, criticized by Hilgard (1975) for the use of retrospection in collection of the childbirth data.

A further criticism results from the use of what Hilgard refers to as a "fallible" scale used to measure susceptibility to hypnosis. The fallible scale referred to is the Hypnotic Induction Profile (HIP) developed by Spiegel and Bridger (1970). The criticism of the HIP as an instrument of hypnotizability research stems from the use of an assessment of the subject's ability to roll his or her eyes up as an indication of a physiological capacity for hypnosis (Spiegel and Spiegel, 1978). The validity of the eye-roll as a predictor of hypnotizability is questionable (Hilgard, 1982; Weitzenhoffer, 1980), although studies of the correlation between the full HIP and an older, more widely accepted instrument, the Stanford Scales of Hypnotic Susceptibility (SSHS) (Weitzenhoffer and Hilgard, 1959), have found moderate-to-high relationships between the two (Frischholz, Tryon, Fisher, Maruffi, and Spiegel, 1980).

It is possible that a relationship between SSHS scores and success with the Lamaze technique does exist given the close similarities in the methods. The Samko (1975) study may bear closer scrutiny due to the following factors. First, Samko's use of the HIP, which was designed to be used primarily as a clinical tool rather than a research instrument, may result in lower estimates of correlations

between the two variables because of the controversial validity of some of the items included in the test. Second, the use of "the degree to which the patient was awake, alert, and aware," as the primary indicator of success with the Lamaze technique is questionable. If the purpose of the Lamaze method is childbirth without pain as Lamaze (1972) states, it seems reasonable to utilize the amount of medication needed during childbirth to alleviate pain and discomfort as the criterion for success with the technique. Third, Samko used the patients' recollection of their childbirth experience which had taken place up to two years previously as the source of the information on the success or failure with the psychoprophylactic technique. This information was, however, verified by the physician's memory of the conditions.

The purpose of the present study was to examine the possibility of a significant correlation between the SHSS and medication needed to alleviate discomfort of childbirth when using the Lamaze technique. It was hypothesized that a negative correlation exists between hypnotizability as measured by the Stanford Hypnotic Susceptibility Scale scores and amounts of analgesic medication necessary for a Lamaze childbirth.

METHOD

The Sample

The subjects in the present study were volunteers solicited from the childbirth preparation classes taught at hospitals in Hopkinsville and Madisonville, Kentucky. The experimenter visited the classes and explained the purpose of the experiment and what would be required of the subjects. The total sample consisted of 20 subjects. Two of the subjects moved away from the area leaving no forwarding addresses. Two more had complications during their labor which resulted in Caesarean section deliveries. The final sample consisted of 16 subjects that were available for testing and follow-up. The mean age for the total sample was 26.5 with a range of 18-34 years.

Description of the Instrument

The Stanford Hypnotic Susceptibility Scale (SHSS), Form A, was used as the measure of hypnotic susceptibility. The test consists of a standard hypnotic induction followed by 12 test suggestions. The test suggestions are scored by assessment of the subject's reaction according to the specific objective behavioral criteria established by the manual. The observer scores either a pass or fail on each suggestion. The subject's score consists of the number of

suggestions passed.

Administration and Scoring

The SHSS was administered by the experimenter under the conditions suggested and described by the administration manual (Weitzenhoffer and Hilgard, 1959). The subjects' husbands were present and observed from a couch positioned behind the subject. The procedure takes approximately 45 minutes.

At the time of the first meeting the SHSS, Form A, was administered under the above conditions. The subject was then asked to complete a questionnaire designed to elicit the subject's current knowledge and expectations about hypnosis. Other questions covered attitudes about being pregnant, due date, and other biographical information.

Approximately six weeks after the subjects' due date they were contacted by telephone and the follow-up questionnaire was filled out. The follow-up elicited information about the amount of medication received during delivery. Subjects were asked to come in again for the post-test administration.

During the follow-up meeting the SHSS, Form B, was administered. Afterward, the subject was debriefed as to the SHSS scores and their significance. Unfortunately, only a small portion of the subjects kept their appointments for the post-test even after three recalls.

RESULTS

The amount of medication needed to relieve discomfort was classified into three levels. Level 0 was used for those who received no medication for delivery at all. Level 1 indicated the use of local anesthetics (e.g. pudendal blocks). Level 2 was designated for those who received regional blocks such as an epidural. Level 3 was to be used for those who received general anesthetic, however, this level was not populated.

The Pearson product-moment correlation statistic was used to determine the degree of relationship between the SHSS scores and medication levels. The mean of the SHSS scores was 6.93, which does not differ significantly from the mean of 5.62 for the SSHS standardization group (Weitzenhoffer & Hilgard, 1959). The mean medication level was .937. The SHSS scores were not significantly correlated with medication levels.

Multiple correlation analysis show a significant correlation between hypnotizability and the combined effects of age, education level, self-rating of sensitivity to pain, and self-prediction of ability to be hypnotized ($r = +.67$; $p < .05$). A multiple correlation of $+.44$ ($p > .01$) was found between success with Lamaze childbirth and the

combined effects of SHSS scores, age, self-rating of pain sensitivity, and self-rating of introversion-extroversion.

DISCUSSION

The similarities between the Lamaze technique and hypnosis would seem to indicate that those who are successful with one technique would tend to be successful with the other. The results of the study failed to confirm the hypothesis insofar as the SHSS measures hypnotizability and medication needed to relieve discomfort is an indication of success with psychoprophylaxis.

These findings may not be so surprising when one takes a careful look at the tasks involved in each technique. The assessment of hypnotizability involves measuring the subjects' ability to "internalize" an idea the operator has suggested to them. To pass the item involves a subjective alteration of perception. In the Lamaze technique the patient is asked to "externalize" her concentration on some focal point. This difference may be a function of the nature of hypnotizability as measured by the SHSS and other standard tests of hypnotizability including the HIP. The validity of all standard hypnotizability tests have come under attack recently (Weitzenhoffer, 1980).

The relatively strong relationship between hypnotizability and a combination of the effects of age, education, self-rating of pain sensitivity, and self-belief

in their own ability to be hypnotized is an interesting finding. With the degrees of freedom of 4 and 15 these preliminary findings need to be replicated before any strong conclusions can be drawn. If this relationship proves to be replicable it may be that one would have a fairly strong predictor of hypnotizability.

It might be interesting to see the results of comparisons of psychoprophylactic method success with some measure of ability to utilize self-hypnosis. Another area of future research might be the exploration of a less authoritative measure of suggestibility such as the Creative Imagination Scale (Barber, 1979). In light of Lamaze's (1972) distinction between hypnosis and psychoprophylaxis (that in psychoprophylaxis the mother takes an active part in the delivery and with hypnosis the patient is other-directed), measures of "self directed" suggestions may be more predictive of success with the Lamaze technique.

Given the small number of subjects in the present study, it might be premature to completely abandon the hypothesis without further research. However, the lack of relationship found in the present study suggests that research in another direction might be indicated.

REFERENCES

- Barber, T. X. & Wilson, S. C. (1979). The Barber Suggestibility Scale and the Creative Imagination Scale: Experimental and Clinical Applications. The American Journal of Clinical Hypnosis, 21, 98-105.
- Frischholtz, E. J. Tryon, W. W., 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. The American Journal of Clinical Hypnosis, 22, 185-196. ~
- Hilgard, E. R. (1982). Illusion That The Eye-Roll Sign is Related To Hypnotizability. Archives of General Psychiatry, 39, 963-966.
- Hilgard, E. R. & Hilgard, J. R. (1975). Hypnosis in the Relief of Pain. Los Altos, Ca.: William Kaufmann.
- Kroger, W. S. (1977). Clinical and Experimental Hypnosis In Medicine, Dentistry, and Psychology. Philadelphia: Lippincott.
- Lamaze, F. (1972). Painless Childbirth: The Lamaze Method. New York: Pocket Books.
- Samko, M. R. & Schoenfeld, L. S. (1975). Hypnotic Susceptibility and The Lamaze Childbirth Experience. American Journal of Obstetrics and Gynecology, 121, 631-636.
- Spiegel, H. & Bridger, A. A. (1970). Manual For Hypnotic Induction Profile. New York: Soni Medica.

Spiegel, H. & Speigel, D. (1978). Trance and Treatment:

Clinical Uses of Hypnosis. New York: Basic Books.

Weitzenhoffer, A. M. & Hilgard, E. (1959). Stanford

Hypnotic Susceptibility Scales, Form A and B. Palo

Alto, Ca.: Consulting Psychologists Press.

Weitzenhoffer, A. M. (1980). Hypnotic Susceptibility

Revisited. American Journal of Clinical Hypnosis,

22, 130-146.

APPENDIX

Questionnaire

Name: _____ Age: _____ Phone
 Number: _____ Highest educational level
 Completed: _____ Number of weeks since
 Conception: _____ Due date: _____ Pregnancy
 Number: _____ Husband's Age: _____ Husband's highest
 educational level completed: _____ Was this pregnancy
 planned? _____ If no: When did you plan to have children,
 if ever? _____ Have you ever had any type of
 surgery or procedure during which you were given general
 anesthesia: YES NO Please explain: _____

Are you generally happy about being pregnant? YES NO Have
 you already started getting the nursery or baby room ready
 for the baby? YES NO What have you done so
 far? _____ Do you

frequently daydream? YES NO Do you sleepwalk? YES NO
 If yes, how often? _____ Do you talk in your
 sleep? YES NO If yes, how frequently? _____

When you were a child, did you have an imaginary playmate?
YES NO Why are you planning to take Lamaze training?

Have you ever participated in any creative arts such as,
 painting, writing, music, needlework arts, or other? YES
NO Explain: _____ Do you
 consider yourself creative? YES NO Do you have a good or
 vivid imagination? YES NO How would you rate your ability

to withstand pain, form 1 to 5 with 1 as extremely sensitive to pain and 5 as extremely low sensitivity to pain?

1-----2-----3-----4-----5

When you are ill or feeling sick do you want to be alone or would you rather have a family member or some close friend to stay with you? _____ Who would that person

be? _____ Do you intend to have natural childbirth (no anesthetics)? YES NO Have you ever been hypnotized? YES NO If yes give description of circumstances and number of times: _____

Do you believe that you can be hypnotized? YES NO Do you believe that anyone can be hypnotized? YES NO Is there any reason you can think of why a person should not be hypnotized? _____

Do you have migraines? YES NO How often? _____

Have you ever been treated for emotional problems or depression? _____

Have you ever had a professional visit to a psychiatrist, psychologist or psychotherapist? YES NO Have you ever had any type of acupuncture treatment? YES NO Please explain: _____

How would you rate yourself on the following scale of introversion-extroversion?

1-----2-----3-----4-----5

Extremely introverted

Extremely extroverted

Have you ever had experience with faith healers? YES NO

please explain _____

Do you believe there are some people who can heal people

using only faith in religion and God's power? YES NO

please explain: _____

Follow-up Questionnaire

17

Name: _____ Date: _____ Age
of child: _____ M - F Birth wieght: _____

Medication

Did you have pain shots during labor? YES NO Number: _____

Type: _____ Did you have any general anesthesia? _____

_____ Type _____

How was the decision to have the medicaiton made?

Asked for it _____ Physician recommended it _____

Physician administered it without consulting you _____

How would you describe your emotional state since the birth
of your child?

Describe your childbirth experience in relation to amount
of pain and emotional state during labor and birth.

Coach's (husband or other) participation: _____