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PHYSICIAN-PATIENT RELATIONSHIP

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Samuel W. Mallaron

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of the requirements for

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Joseph Reyher
Major professor

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SUGGESTIBILITY AND TYPE OF PHYSICIAN-PATIENT RELATIONSHIP

By

Samuel W. M. LeBaron

A DISSERTATION

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ABSTRACT

SUGGESTIBILITY AND TYPE OF
PHYSICIAN-PATIENT RELATIONSHIP

By

Samuel W. M. LeBaron

On the basis of psychoanalytic theory the suggestibility of medical patients should be optimized when patient anxiety and paternalistic treatment by the physician result in a regressive transference. The suggestibility of abortion patients was tested by the physician either just prior to the surgical procedure when anxiety was high, or several days post-surgery when anxiety was low. These groups were further divided into paternalistic and egalitarian treatment groups. Two hypotheses were tested. The first hypothesis, that high anxious patients would score higher on suggestibility when treated in a paternalistic rather than an egalitarian manner, was supported. The second hypothesis, that suggestibility of patients treated in a paternalistic manner would be higher for those whose anxiety was high, was not supported. Corollaries of the experimental hypotheses were that regressive transference, physiological distress during and after surgery, and use of medications would be affected by anxiety and type of treatment in the same way as suggestibility. Regressive transference scores for the physician and nurses were higher in the paternalistic treatment

condition, but there were no differences due to degree of anxiety. An unexpected finding was that transference scores were higher for nurses than for the physician. When patients were given suggestions for well-being prior to surgery, patients with high suggestibility in either treatment condition had fewer high symptom scores than did patients with low suggestibility. However, fewer objectively verifiable signs of surgical shock were found in the paternalistic treatment condition than in the egalitarian condition, regardless of degree of suggestibility. Post-surgical complications and use of medications were unrelated to any other variables. Results support a view that suggestibility increases as a function of regressive transference. The anxiety measures may be unrelated to other variables due to the confounding of anxiety regarding one's physical well-being with interpersonal anxiety or with guilt, or due to unreliability in techniques of obtaining anxiety ratings.

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made a pleasure out of what would otherwise have been an ordeal.

Throughout this long process, family members (parents in particular) have contributed much of a personal nature. The greatest gift was the love of my wife, Christine, who endured many days and nights of deprivation, yet cheerfully encouraged me along every step of the path.

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CHAPTER I

INTRODUCTION

One of the earliest reports of the use of suggestion in controlling pain was by Esdaile (1850), who claimed that he was able to reduce dramatically the degree of pain experienced by surgical patients. Despite the rejection of Esdaile's results by his contemporaries, hypnosis has gradually become accepted as a useful method for producing analgesia in some circumstances. Its use is of particular importance for medical and dental patients whose pain may not be eliminated by drugs. Studies of hypnosis and pain in the laboratory indicate that both hypnotic susceptibility and the ability to control pain with hypnosis are stable traits normally distributed in a given population (Hilgard & Hilgard, 1975). However, many reports of hypnotic analgesia in surgery, obstetrics, and dentistry indicate a higher degree of success in reducing or eliminating pain than might be expected in laboratory studies (Moll, 1958; Reis, 1966; Pascatto & Mead, 1967; Kolouch, 1964, 1968; Kline, 1965; Reyher, 1968; Crasilneck & Hall, 1973; Barber, 1977). Until recently, however, there have been no systematic attempts to determine the factors responsible for the putative increase

in suggestibility found in medical and dental patients.

Reyher (1970; 1977) asserts that three critical factors are largely responsible for heightening the suggestibility of medical patients with or without standard hypnotic procedures: (1) the passive-receptive behavior of the patient, who is obliged to place him/herself in the physician's care; (2) the patient's anxiety resulting from injury or illness, and from his/her own lack of resources; and (3) the physician's paternalistic, caretaking behavior which fosters the patient's passivity and dependency strivings. In an effort to clarify the operation of these variables, Reyher (1977) has advanced a two-stage theory of suggestibility: an initial increase in suggestibility (hyper-suggestibility, level I) is realized simply by allowing individuals to adopt a passive-receptive attitude wherein they remain silent and listen uncritically to instructions. A further increase in suggestibility (hyper-suggestibility, level II) is realized whenever individuals in a passive-receptive attitude experience a reactivation of early childhood reminiscences of being cared for by protective, omniscient parental figures. In psychoanalytic terms, this is a regressive transference that is initiated as a defense against feelings of helplessness, pain, and the concomitant heightening of anxiety.

Evidence for hyper-suggestibility, level I is buttressed largely by laboratory investigations, whereas hyper-

suggestibility, level II is consistent with clinical observations. Reyher (1977) reasoned that if a passive-receptive attitude is the critical factor in producing hyper-suggestibility, level I, then the induction procedure typical of traditional standard scales may be unnecessary. To test this, Reyher & Pottinger (1976) eliminated the induction from the Harvard Group Scale of Hypnotic Susceptibility, Form A and found no decrement in the pass percentages of the items as compared to the standard administration of the scale. In a related investigation (Reyher, 1977), the order of presentation of items on susceptibility scales did not influence the pass percentages of the items. That is, the pass percentages were the same at the beginning as at the end of the scale. This finding supported the hypthesis that suggestibility is enhanced immediately for individuals who maintain a passive-receptive attitude. In another investigation, Wilson (1974) compared the suggestibility of a baseline group receiving a formal hypnotic induction with three treatment groups which were characterized by an alleged passive-receptive attitude. The suggestibility scores of each of these four groups, which were all compared to a fifth group in which subjects were prevented from assuming a passive-receptive attitude by instructing them to verbalize their spontaneous visual imagery. Consistent with Wilson's hypotheses, the three passive-receptive groups did not differ from one another nor from the baseline hypnotic

induction. However, the mean of the baseline hypnotic group was significantly greater than that of the verbalizing group. These results are consistent with the argument that the suggestibility of individuals who assume a passive-receptive attitude is comparable to the suggestibility associated with a formal hypnotic induction. Bowers (1977) has also pointed out that good hypnotic subjects have been observed to have a special talent for achieving a receptive mode of attention.

Anxiety related to illness or injury appears to be a powerful motivating force for patients to enter into a passive-dependent and regressive relationship with the physician, psychologist, or other caretaking individuals. According to Janis (1958) and King (1963) such patients seem motivated to recreate the comfort and security of being cared for in a passive relationship with parental figures. The patient's physical condition represents a moment of crisis, making him more receptive to outside influence (Moos, 1977).

A variety of sources, including an excellent review by Bowers (1977), have documented the profound effects, both psychologically and physiologically, which may potentially result from the reactions of patients to medical personnel (Reyher, 1977; Reyher, Wilson & Hughes, in press; Janis, 1958; Houde, Wallenstein, & Rogers, 1960; Egbert, Battit, Welch, & Bartlett, 1964; Cheek, 1966; Melzak, 1974;

Williams, Jones, Workhoven & Williams, 1975; Moos, 1977). It is apparent that physicians who relate to their patients in an authoritative, paternalistic and caretaking manner reinforce the patient's objective dependency, thus fostering a childlike dependency, or in psychoanalytic terms, regressive transference. There is evidence that this dependency may be associated with a further increase in suggestibility. Two dramatic sources which illustrate this paternalistic caretaking behavior are August's (1963) film of a Caesarean section under hypnoanesthesia, and the performance of major surgery in which it may be inferred that the patient's apparent transference was the sole basis for an anesthesia (Reis, 1966). Reyher (1977) has noted that the patient's objective dependency may be reinforced further by aspects of the medical setting such as (a) difficulties in obtaining appointments; (b) being obliged to follow directions, and wait upon auxiliary personnel such as receptionists, nurses, and physician's assistants; (c) having one's ideas dismissed in favor of the physician's diagnostic and prescriptive activity; and (d) the prestige attributed to medical degrees and diplomas, esoteric language and apparently complex medical instruments and procedures. Reyher (1977) speculates that this complex of interpersonal, intrapsychic and environmental stimuli reactivates childhood perceptions (reminiscences) of being cared for by loving, omnipotent parents. These reactivated reminiscences constitute the

regressive transference which mediates the enhancement of suggestibility. Reyher (1977) opines that this enhancement of suggestibility is mediated by the brain mechanisms associated with the original reminiscences (perceptions) of omnipotent parents. These reminiscences are not discreet memories, but sensory-tonic feeling states aptly described as longings or affectively toned strivings to find respite or sanctuary in relationship with an accepting, strong, authoritative person. These speculations are consistent with earlier observations (Hadfield, 1920; Janis, 1958; Kline, 1958) that individuals rendered helpless by their injuries and suffering show an increase in suggestibility. These patients, lacking the skill or knowledge to treat their own anxiety-producing symptoms, are objectively dependent on the physician who possesses the requisite competence.

This matrix of inter- and intrapersonal processes constituting hyper-suggestibility, level II appears to have been reconstructed unintentionally in a laboratory study by Gur (1974). Gur's intention was to employ painful electric shock as an attention-controlling method of inducing and enhancing suggestibility. Subjects listened to a taped induction of the Stanford Hypnotic Susceptibility Scale, Form A over a set of earphones. In order to avoid an electric shock, they were required to press a button whenever they heard the word "relax." Through lapses of attention, all subjects received occasional shocks. Although Gur

succeeded in enhancing the suggestibility of apparently non-suggestible subjects, he found that the enhancement of suggestibility occurred only when the experimenter was physically present in the room. In a related study (Smyth, 1977), laboratory subjects received electric shock; however, the subjects evaluated the shock as painless. For these subjects suggestibility was not enhanced, even when the experimenter was physically present in the room. In Gur's research, as in a medical setting, it appeared that the threat of painful shock in the context of an interpersonal relationship forced the subjects into objective dependency. Their feelings of helplessness in turn allegedly reactivated passive-dependent strivings, reminiscences of omnipotent parents, and perforce, hypersuggestibility level II.

Reyher (1977) has asserted that physicians who wish to enhance their patient's suggestibility would be advised to assume a paternalistic, authoritative demeanor, consonant with the patient's objective dependency. When a physician abandons a paternalistic manner in favor of a more egalitarian mode of interaction, the patient's dependency strivings are frustrated. This frustration may result in anger, and a subsequent decrease in suggestibility. This formulation of the psychodynamic and interpersonal process is supported by Janis (1958), who noted that in the absence of paternalistic medical care, the patient may experience a profound sense of abandonment. He may feel, for example,

that the physician is withdrawing as a means of punishing him. Consequently, the patient may ultimately experience a sense of despair, hopelessness, loss of self-esteem, and low suggestibility.

In comparison to a paternalistic mode of interaction, an egalitarian relationship would be more reciprocal; for example, the patient would be given more freedom to assert his/her judgment and to express opinions (Barber, 1974; Wilson & Barber, 1976). Whereas a paternalistic demeanor enourages passivity and objective dependency, an egalitarian manner encourages the patient to remain relatively independent and increases the patient's status as an active participant in treatment outcome. Consequently, an egalitarian relationship would also encourage the patient to retain a somewhat critical, evaluative attitude, which has been shown to diminish suggestibility (Reyher, 1977; Reyher, Wilson & Hughes, in press).

Objective dependency is a function of anxiety stemming from personal insufficiency, and it relates to degree of suggestibility as a moderating variable. For example, patients who are awaiting relatively painless, routine procedures such as a physical exam, a PAP test, or a routine post-surgical exam should experience much less anxiety than patients who are ill, injured, or about to enter surgery (Janis, 1958; Moos, 1977). Thus, post-operative patients returning for a routine examination would be less objectively

dependent and should be less susceptible (hypersuggestibility, level I) to suggestions than patients awaiting surgery (hypersuggestibility, level II). Consequently, a paternalistic mode of induction may result in an enhancement of suggestibility only for highly anxious patients.

Accordingly, these relationships were phrased operationally in terms of the following hypotheses:

H_1: Pre-surgical patients (i.e., "high-anxiety" patients) who receive a paternalistic mode of treatment experience a greater degree of suggestibility than pre-surgical patients who receive an egalitarian mode of treatment.

H_2: When the mode of treatment is paternalistic, pre-surgical patients (i.e., "high-anxiety" patients) experience a greater degree of suggestibility than post-surgical patients (i.e., "low-anxiety" patients).

The data were also analyzed to determine the relationships between level of anxiety, treatment condition, degree of regressive transference and severity of reactions to surgery.

CHAPTER II

METHOD

Subjects

Female patients requesting abortions were invited to participate in research in "The role of attention and relaxation in medicine." All were patients who were referred to a physician in private practice in a rural community by authoritative sources who were highly positive regarding the physician's competence and manner. They were reassured that their decision regarding participating would not affect the quality of their care. Fifty seven patients consented and were randomly divided into four approximately equal groups, according to type of treatment, and pre vs. post-surgery testing. The mean age of the patients was 21.77 years, and ranged from 16 - 43 years. There were no age differences between experimental groups. Any patients who needed unusual medical intervention which necessitated performing the abortion in the local hospital were rejected by the principle investigator. Also, the principle investigator rejected any patients who were taking major tranquilizers or who were unmanageable as a result of extreme panic and hostility toward the office staff.

Experimental Groups

The physician, who was ignorant of the experimental hypotheses, tested individually each patient's responsiveness to suggestions. The patients in the pre-operative testing condition, were given relaxation instructions and were tested for responsiveness to a suggestibility scale immediately prior to the abortion, a time at which anxiety is presumably high. The patients in the post-operative testing condition, were given similar relaxation instructions and were tested with the same suggestibility scale several days later, when they returned for a post-operative examination, and their anxiety was presumably low. Any patient in the post-operative condition who reported pain, bleeding, or other physical discomfort was eliminated because such symptoms allegedly induce much more anxiety than a routine examination. Only the pre-operative condition received specific suggestions, prior to the abortion, regarding analgesia and well-being during and following surgery. Thus, the post-operative condition served as a control group for the suggestions of well-being given to patients in the pre-operative testing condition. The pre- and post-operative groups were randomly subdivided into two sub-groups of approximately 15 patients each. These sub-groups were assigned to paternalistic or egalitarian conditions of treatment. A fifth group of 15 patients did not participate in any experimental procedures. This group, observed prior

to the others, received the physician's customary mode of treatment, and served as a baseline control group for symptoms during surgery.[1]

Materials

The degree of suggestibility was measured in terms of the patient's response to a suggestibility scale (Appendix A) patterned after the research of Reyher, Wilson & Hughes (in press). This scale consists of 11 tests of suggestibility related to perceptions of neuro-sensory functioning, e.g., sensations of warmth, coolness, numbness and itching. The scale has two distinct modes of administration, corresponding to either a paternalistic or egalitarian interpersonal style. In another study,[2] the egalitarian form of the suggestibility scale correlated .74 with the Stanford Hypnotic Susceptibility Scale, Form C (Weitzenhoffer and Hilgard, 1962). There were no differences due to order of presentation.

The attending nurses, who were ignorant of the hypotheses and of the experimental manipulations, asked

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[1]The physician's customary behavior toward his patients was to palpate briefly their neck, breasts, and stomach, while exchanging a few words with the patient in a reassuring manner. He would then proceed with the abortion as follows: (1) before administering the local anesthetic, he customarily said, "Now you'll feel something like a pinch"; (2) While beginning the dilation, he customarily said, "Now you'll feel something like menstrual cramping."

[2]S. LeBaron. Unpublished manuscript, University of Saskatchewan, Canada.

patients to indicate their degree of anxiety on the basis of a 10-point scale, on which 0 represented "no anxiety" and 10 represented "extreme anxiety." Anxiety ratings were obtained at four times: (1) when the patient first agreed to participate in the study; (2) when the patient returned to the office on the day of surgery; (3) within several minutes after surgery; and (4) when the patient returned to the office for a post-surgery exam. In a separate study[3] where laboratory subjects were subjected to high and low anxiety conditions with paternalistic or egalitarian treatment, the 10-point anxiety self-rating scale correlated .74 with the anxiety items on the Multiple Affect Adjective Checklist, a standardized measure of anxiety (Zuckerman, 1960; 1962).

Transference was operationally defined in terms of a "Regressive Transference Scale" (Appendix B) which was intended to assess both the quality and intensity of positive and negative feelings toward the doctor or the nurses.[4] These feelings were elicited from all patients by means of a "Patient's Post-Operative Questionnaire" (Appendix C), which inquired whether the patients had felt worried or reassured during surgery, and if so to explain why. This questionnaire was given to patients as soon as possible after surgery (usually about 20 minutes). "Transference

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[3]S. LeBaron & G. Dobbin. Unpublished manuscript, University of Saskatchewan, Canada.

[4]The original version of this scale was developed in collaboration with Joseph Reyher, Ph.D. & David Hayes, M.A. at Michigan State University.

scores" were computed for each patient by assigning a rating to each positive or negative statement obtained from the Post-Operative Questionnaire. A sum of these ratings for each patient resulted in two separate scores, one for the physician and one for the nurse.

During the surgical procedure, nurses recorded both non-verbal and verbal indications of patient's physical discomfort. A list of these symptoms were assigned a rating of 1 - 3 in terms of severity, by two female psychology students who were unaware of the hypotheses or of the groups to which patients belonged.

Examples of behavior rated at 1 (mild discomfort) are (a) brief wincing, (b) frown, (c) "like mild cramps." Examples of behavior rated at 2 (moderate discomfort) are: (a) grimace, (b) tensing of the entire body, (c) "like a poke." Examples of behavior rated at 3 (severe discomfort) are (a) physical resistance, (b) "Ouch!," (c) "It hurts like hell!"

In addition to the ratings of apparent physical discomfort, observable signs of severe physiological distress were rated at 4. These included: (a) vomiting, (b) a sudden, dramatic drop in pulse and/or blood pressure, and (c) diaphoresis. A symptom rating of 5 was assigned when the patient showed indications of shock, and was administered atropine.* Further examples of symptom scoring are in

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*A drug used to prevent physiological shock by increasing the heart rate.

Appendix D. The total symtom score for each patient was the sum of ratings assigned to each indication of discomfort, physiological distress, and/or shock experienced by that patient.

All patients were asked to record their daily use of medications during the several days between surgery and the post-operative exam, on a "Patient Medication Log" (Appendix E). When patients returned for their post-operative exam, they were all asked to complete a "Post-Operative follow-up questionnaire" (Appendix F). This questionnaire consisted of a list of physical and emotional symptoms, and patients were asked to check off those symptoms which they had experienced since the abortion.

Procedure

Patients were required to make a visit to the physician's office to verify that they were, in fact, pregnant, and to determine the existence of any medical or psychological factors which might contraindicate performing an abortion. During this initial office visit, the physician responded to patients in either a relatively paternalistic or egalitarian manner.

During the proceeding interaction, the physician gave the patient a pelvic examination, and briefly described the abortion procedure, adjusting his manner according to the treatment condition. For both conditions, the physician displayed the same degree of warmth and concern in his

tone of voice.

Initial Office Visit, Paternalistic Treatment. The physician employed non-verbal behavior, such as touching the patient frequently, standing next to the patient while she was lying down, and stroking her head. The physician conducted as much of the session as possible with the patient supine. He dictated the sequence of events: i.e., "Now I'll ask you some questions," or "Now I'll examine you." While examining the patient, the physician gave as little feedback as possible regarding the rationale of the examination. Throughout the interaction, the physician made statements such as: "You can tell me everything about it (the circumstances of the pregnancy)," or "I'll take care of you," or "Just let yourself go now while I examine you here . . ." or "You can place yourself in my hands."

Initial Office Visit, Egalitarian Treatment. The physician employed non-verbal behavior such as touching the patient only when necessary for conducting the physical examination. Also, the patient was invited to sit up as soon as the examination was completed. The physician told the patient at the beginning: "As we proceed, I'll be interacting with you to get the information I need to do the best possible job." Then, the physician continued to give feedback, or to request the patient's cooperation in the following manner: (a) "By our working together, I'll be able to do the best job for you"; (b) "I have to give you a physical

exam. I'll let you know if I find any problems, and then we can talk about it"; (c) "If you don't mind, I need to examine . . ." (d) During the examination: "Now I'd like to examine . . ." or "Now I'm checking to see if . . ." or "Is there anything about . . . (the area being examined) . . . that would be helpful for me to know?" Throughout the examination, the physician gave the patient feedback about his findings. Whenever appropriate, he made such statements as: "If this is a problem for you, why don't we talk about it?" and "Do you have any questions before we continue?"

Relaxation instructions and virtual suggestions were given to patients in the pre-operative groups (i.e., "high-anxiety" patients) immediately prior to surgery; patients in the post-operative groups (i.e., "low anxiety" patients) were not given those instructions and suggestions until the time of their post-surgery examination. When post-operative patients received their abortion they were treated in a manner consistent with that of the initial office visit, that is, in either an egalitarian or paternalistic manner. The suggestibility scale was administered in the same room in which physical examinations and abortions were routinely performed.

Relaxation Instructions, Paternalistic Treatment. The relaxation instructions were intended to reinforce an attitude that the physician was in control, and largely responsible for determining the patient's experience. The

physician frequently touched the patient, which was intended to encourage passivity and regression.

"Relaxation is important to insure, a smooth procedure, so I want you to become as comfortable as you can, and I'll show you how to relax."

I want you to close your eyes so that you can notice what I'm describing. I'll begin by checking for areas of tension. (Physician applies pressure with fingertips, a few seconds in each spot: on patient's temples, behind patient's ears, each side of patient's neck, and on patient's shoulders. Continues to repeat sequence as he speaks.) As I release tension from different areas notice a pleasant feeling of relaxation moving from your head downward. As the relaxation moves below your shoulders, you'll feel like taking a deep breath. Good. That helps the relaxation to move down through the rest of your body. (Removes hands.) I want to check for tension in your arms. (Physician holds patient's arms down.) Now push up slowly against my hands. (Wait 5 seconds.) Now relax. (Release hands.) Notice them feeling lighter. Now try lifting them, and nod your head when you notice how light and relaxed they are. Good.

Now, in a moment, I'm going to press my hand on your back, and you'll need to take a deep, comfortable breath. You'll take a deep breath and hold it until I count to three. Then, as you let the air out, you'll feel your chest fall and your body will seem to get heavier. When your lungs are

empty don't take another breath until I count to three, again. (Place hand on patient's back.) Deep breath. Hold it . . . one . . . two . . . three. Good. Now let the air out. Heavy relaxed feeling. Hold it out . . . one . . . two . . . three. Good. Now one more time. Breath in. Hold it . . . one . . . two . . . three. Good. Continue breathing. Now I'm going to raise your right hand, then drop it. (Lift patient's hand a few inches and quickly release. If there is no opposition to movement, patient is ready.)

As we continue, I will be asking you to notice a number of things, with your eyes closed. I want you to raise your right hand, this one, about this far up (move patient's arm) when you first notice the things that I describe. Keep your eyes closed so that you remain relaxed while you wait.

Relaxation Instructions, Egalitarian Treatment. The initial instructions were modified to reinforce an attitude that the patient had a relatively large degree of freedom in determining how she responded.

(Physician sits in another chair.)

"Relaxation can be important to insure a smooth procedure, so why don't you go ahead and relax yourself any way you wish, while I continue talking. It could be helpful for your relaxation if you closed your eyes. (If patient's eyes do not close: so why don't you go ahead and close them.) Relaxing yourself is one of the ways in which you can focus

your attention. If you wish, you can pay attention to a variety of things that I'll mention. For example, while you're making yourself relaxed, you might notice some part of your body feeling more relaxed than other parts. It would be helpful to try relaxing any areas that seem especially tense. You might notice how your breathing is affected by relaxation: whether it's staying about the same, or becoming deeper. You can breathe deeply as you relax. As we go along, you might notice that what I say really doesn't make as much difference in what you experience, as your own mind, and your interest in relaxation. Mostly, I can just remind you of ways in which you're capable of relaxing, and of experiencing things which you may not have noticed. For example, because you're becoming so relaxed, if you tried moving right now, you might find it harder than usual.

If you wish, you can learn to control your own attention. For example, as you become aware of your breathing, you can notice how it feels to fill your lungs and then let the air out. This feeling could be more noticeable if you held your breath for a few seconds after you breathe in, and then held it again for a few seconds after you breathe out. You could try it. Deep breath . . . hold it a few seconds. Breathe out . . . hold out . . . and in again. Hold . . . and out. Among other things, you may notice how your body felt heavier and more relaxed as you let the air out and

your chest fell, and how your body felt lighter as you filled your lungs with air and your chest rose. Perhaps you'll find yourself just sinking into a pleasant, relaxed state as you continue breathing. Now I'm going to raise your right hand, then drop it. (Lift patient's hand a few inches and quickly release. If there is no opposition to movement, patient is ready.)

Now I'll mention a number of things which you may notice, while your eyes remain closed. You could raise your hand a few inches from the arm of the chair to let me know if you're experiencing the things I mention. If you keep your eyes closed, that could help you to relax while you do this."

The Use of Virtual Suggestions. After patients had been given relaxation instructions, the virtual suggestions were presented in the following order, with a ten second pause before removing the suggestion.

Virtual Suggestions, Paternalistic Treatment. I want to see how sensitive you are now that you are relaxed.

1. Now I want you to be aware of your body temperature. While I apply pressure to your right hip, you will notice your right leg feeling warmer. Lift your right hand to let me know when you feel this. (Remove pressure.) Now your leg feels normal again.

2. I want you to continue being aware of your body temperature. I'm going to apply pressure to your left knee.

You will notice your left leg feeling cooler. Let me know when you feel this. (Remove pressure.) Now your leg feels normal again.

3. Notice the light on your eyelids getting brighter as I press this spot on your forehead. Raise your right hand as soon as you see this. (Remove pressure.) Now the brightness of light returns to normal.

4. (Physician places fingers on patient's earlobes.) I want you to listen very carefully, and raise your right hand as soon as you hear a ringing in your ears. (Remove fingers.) Now the ringing has stopped.

5. Raise your right hand when you feel me touching the back of your left hand with a feather.

6. I'm going to pinch the back of your left hand (physician pinches briefly); when you feel the fingers of your right hand begin to tingle, nod your head. Now your hands are back to normal.

7. Now I want you to raise your right hand as soon as you smell a mild order of ammonia (open a bottle of water).

8. I am going to press a nerve on your left shoulder (the physician did not press any particular spot). Nod your head when you feel your left hand becoming numb. (If the patient nodded her head within ten seconds, the physician said): I am going to take my hand away and the numbness will remain for about 30 seconds. Now I am going to press

a pointed instrument on the back of your left hand. The only thing you will feel, if anything at all, will be pressure. Now I will do the same to your other (right) hand. Nod your head when you notice a difference between the two hands. (If the subject nodded her head the physician proceeded to make multiple pin pricks with progressively increasing pressure on the numbed hand until he was convinced he would break the skin or the patient gave some indication of pain.) Now your hand is normal again.

(If the patient did not nod her head within ten seconds, the physician said): Now I'm going to press a pointed instrument on the back of your left hand. Now I'll do the same thing to your other (right) hand. Nod your head when you notice a difference between the two hands. (Physician continued with multiple pin pricks as above). Now your hand is normal again.

9. Now I'm going to sprinkle the back of your hand with this powder (talc), and you'll feel an itching sensation. Raise your other hand as you feel the itching. (Wipe off talc.) Now your hand is normal again.

10. I'm going to raise your arms now, and as I slowly lower them you'll notice a feeling like you need to cough. Nod your head when you feel this. That feeling is leaving now.

Virtual Suggestions, Egalitarian Treatment. Let's see how sensitive you are now that you are relaxed.

1. If you don't mind, could you apply pressure to your right hip, like this? (Physician demonstrates.) If you focus your awareness on your body temperature, you may notice your right leg feeling warmer. If you feel this, would you raise your right hand to let me know? As you release the pressure on your hip, your leg can feel normal again.

2. Continuing to pay attention to your body temperature, could you apply pressure with your left hand, to your left knee, like this? (Physician demonstrates.) You may notice your left leg feeling cooler. If you feel this, could you raise your hand to let me know? As you release the pressure on your knee, your leg can feel normal again.

3. Could you press this spot on your forehead with your index finger, like this? (Physician demonstrates.) You may notice the light on your eyelids getting brighter as you press. If it seems brighter, could you raise your hand? As you stop pressing, your perception of light can return to normal.

4. Would you mind putting a finger under each ear, like this? (Physician demonstrates, fingers on patient's earlobes.) If you listen very carefully, you may hear a ringing in your ears. If you do hear this, could you nod your head? As you remove the pressure from your ears, your hearing can return to normal.

5. If you focus your attention on your left hand, you may feel the back of it being touched by a feather. If you do, would you raise your hand?

6. Would you mind just briefly giving the back of your left hand a sharp pinch? Now if you notice the fingers of your right hand begin to tingle, could you nod your head? Any tingling has probably disappeared by now, as your hand returns to normal.

7. If you pay attention to smells, you may notice a mild odor of ammonia. (Physician opens bottle of water.) If so, could you raise your hand?

8. By pressing a nerve on your left shoulder, right here (physician did not press any particular spot), you may feel your left hand becoming numb. If so, could you nod your head? (If patient nodded her head within ten seconds, the experimenter said): You could take your hand away and the numbness may remain for about 30 seconds. Now I am going to press a pointed instrument on the back of your left hand. You can be aware of what that's like for you. Now I'll do the same to your other (right) hand. Could you nod your head if you notice any difference between the two hands? (If the subject nodded her head the physician proceeded to make multiple pin pricks with progressively increasing pressure on the numbed hand until he was convinced he would break the skin or the patient gave some indication of pain.) Now, as time passes, your hand is becoming normal again.

(If the patient did not nod her head within ten seconds, the physician said): Now I'm going to press a pointed instrument on the back of your left hand. Now I'll do the same thing for your other (right) hand. Could you nod your head if you notice any difference between the two hands? (Physician continued with multiple pin pricks as above.) Now, as time passes, your hand is becoming normal again.

9. Now I'm going to sprinkle the back of your hand with this powder (talc). If you focus your attention on your hand, you may feel an itching sensation. If so, could you raise your hand. (Wipe off talc.) As time passes, any itching is disappearing.

10. Now would you raise your arms? As you slowly lower them, you may notice a feeling like you need to cough. If so, could you nod your head? Now you'll probably notice that feeling is leaving now.

Post-Hypnotic Suggestions for Pain Reduction and Post-Operative Recovery. Research and case reports indicate that both suggestion and the physician-patient relationship may play a role in reducing the patient's post-operative pain and stress (Houde, Wallenstein, & Rogers, 1960; Modell & Houde, 1958; Egbert, Battit, Turndorf, & Beecher, 1963; Egbert, Battit, Welch, & Bartlett, 1975; Reis 1966; Pascatto & Mead, 1967; Cheeck, 1966; Benson, 1971). Pre-operative patients were given the following suggestions, intended to

reduce operative pain and anxiety, and to induce a sense of well-being during the post-operative period.

Post-Hypnotic Suggestions, Paternalistic Treatment. I want you to lie down and continue to relax, breathing deeply and comfortably. Because you're relaxing more deeply with each breath, you will sense a feeling of comfort and relief. I want you to focus all your mind on those feelings of comfort and relief; let your attention be captivated only by relaxation and pleasant sensations. As you continue to relax, you'll feel as if every nerve and every muscle in your body were being refreshed. The fact that you're relaxing more and more, and that you're letting yourself be aware only of pleasant sensations means that you'll enjoy a speedy and uncomplicated recovery.

Post-Hypnotic Suggestions, Egalitarian Treatment. You can lie down and continue to relax yourself, in whatever way you wish. As you're relaxing, you can be aware of how relaxed you feel, and of any other feelings such as the feelings of comfort and relief. You may wish to focus all your mind on feelings of comfort and relief. As time passes, you can be aware of the effects of relaxation on every nerve and muscle in your body. By relaxing yourself more and more, you can let yourself be aware only of those thoughts and sensations that you wish. By doing so, you may produce a more speedy and uncomplicated recovery.

Physician's Behavior During Abortion, Paternalistic Treatment. The physician employed non-verbal behavior, such as touching the patient frequently, standing next to the patient while she was lying down, and stroking her head. The physician also dictated the sequence of events: i.e., "Now I'll examine you," or "Now I'm going to touch you here." While examining the patient, and proceeding with the abortion, the physician gave as little feedback as possible regarding his activity; rather, he made such statements as: "Everything will be fine," or "Just let yourself go; I'll take care of you," or "If there's anything you want to let me know just tell me all about it."

Physician's Behavior During Abortion, Egalitarian Treatment. The physician employed non-verbal behavior such as touching the patient only when necessary. He preceded the pre-operative palpatation with a statement such as: "I'd like to check your chest and abdomen just to make sure everything is okay. Ill let you know if there are any problems." The physician continued to describe what he was doing, and what his findings were. He also asked, "Do you have any questions before we continue?" Then, the physician continued to give feedback, or to request the patient's cooperation in the following manner: (a) "By our working together, I'll be able to do the best job for you," (b) "If it's okay, I need to check here . . . ," (c) "Now I'm checking to see if . . . ."

Nurses' Behavior, Pre and Post-Surgery. Throughout the duration of the research, the nurses maintained their usual style of interacting with patients, regardless of experimental conditions. They were observed by the author to be quite "maternalistic" most of the time; that is, they frequently touched patients in a reassuring manner, and gave instructions in an authoritative way.

Summary of Procedure

First visit to physician's office	Second visit to office (3-7 days after first visit)	Third visit to office (5-8 days after surgery)
1. anxiety rating (Anx1) 2. physical exam by physician, who behaves in either a paternalistic or egalitarian manner 3. orientation and preparation by nurses for abortion.	1. anxiety rating (Anx2) 2. preparation by nurses for surgery 3. (a) "Pre" groups tested for suggestibility and given suggestions for feeling good during and after surgery (b) "Post" groups not tested for suggestibility nor given suggestions 4. all patients observed during surgery for signs of discomfort or shock 5. anxiety rating (Anx3) after surgery 6. patient's post-operative questionnaire 7. patients given medication log to take home.	1. anxiety rating (Anx4) 2. post-operative follow-up questionnaire 3. "Post" groups tested for suggestibility.

The major differences between paternalistic and egalitarian modes of interaction may be summarized as follows:[5]

Type of behavior by physician	Treatment Condition	
	Paternalistic	Egalitarian
frequency of touching	often	seldom
physical position of physician	superior to patient	not superior to patient
quantity of information offered by physician	little	much
language modality of physician	declaritive	permissive
modality of suggestions	directive	indirect
responsibility	assumed by physician	shared with patient

[5]The author is grateful to Bruce L. Miller, Ph.D. for suggesting this summary.

CHAPTER III

RESULTS

Scale Reliabilities

Anxiety. Nurses' objective ratings of patient anxiety were compared with patients' subjective ratings of anxiety by means of a Pearson product-moment correlation. The inter-rater reliability was .83 ($p < .001$).

Transference. Scoring of the transference questionnaires was done blind by the author and an honors psychology student; the inter-scorer reliability, computed by a Pearson product-moment correlation, was .89 ($p < .001$).

The following examples illustrate the variety of responses on the post-operative questionnaire for patients in the paternalistic and egalitarian treatment conditions:

Patient #	Paternalistic treatment condition: "Pre" group; i.e., patients tested prior to surgery and received post-hypnotic suggestions.
#120	"I felt that I was being taken care of at all times, with the best of knowledge."
#141	"I always felt well taken care of."
#110	"I felt relaxed with Dr. Stack. He's a very warm man and doctor. His voice is relaxing and

I felt good. Everything he said was reassuring. I really enjoy him talking . . . (the nurse) was beautiful. Very warm and friendly. I felt special, not (like) just another patient."

#148 "The nurse was fantastic. She helped a great deal."

#121 "(The doctor's) voice had a personal tone that relaxed and comforted me. . . . When it became painful (the nurse and doctor) knew and reassured me by holding my hand and talking to me."

Patient # Paternalistic treatment condition: "Post" group; i.e., patients tested at post-surgery check-up, and did not receive post-hypnotic suggestions.

#162 "He was calm and slow moving. I never felt like part of an 'assembly line procedure' or that he was rushing to get me out of there."

#163 "Just the fact of him explaining every step of the procedure as he went along made me feel good and safe in his hands. . . . (The nurse) was there for security."

#154 "I felt I was in very good hands . . . I truly felt like I was treated (by the nurse and doctor) as a real person . . . and not just another medical case. The lounge . . . gave me a more 'homey' feeling, instead of a medical atmosphere."

#129 "I felt good about the procedure, safe, and the nurse was especially nice and comforting. Physical contact (by the nurse) was really comforting. She made me feel safe when she touched my hands. She had a real nice smile. She was warm and concerned."

#136 "(I felt reassured, but it was) nothing in particular, I just felt reassured in general."

#115 "I had all the trust in the world in Dr. Stack."

#109 ". . . I didn't have time to think about being scared because I was listening to her (the nurse)."

Patient # Egalitarian treatment condition: "Pre" group; i.e., patients tested prior to surgery, and received post-hypnotic suggestions.

#132 "He talked and said what he was going to do before he did it. The way he said things, like a couple of joking statements, helped me to relax better."

#153 ". . . she (the nurse) made me feel (as if everything) was okay. It was like having my own mother right there beside me."

#143 "He was just very pleasant . . ."

#157 "His general attitude (was reassuring)."

#159 "(I felt reassured) when I heard the machine go on and I realized it was almost over . . . (the

nurse) was there when I needed someone to hang on to."

#144 "(I felt no worries and was reassured) . . . when I tried to take my mind off what was going on . . . (The doctor told me) I was doing very well. That helped because I thought I would do everything wrong. . . . (The nurse) kept reassuring me . . . and she let me hold her hand."

Patient # Egalitarian treatment condition: "Post" group; i.e., patients tested at post-surgery check-up, and did not receive post-hypnotic suggestions.

#161 "I was well satisfied!"

#131 "You did a good job."

#116 "At times I was worried, but I am not sure about what, exactly. I felt safer when Dr. Stack was explaining what he was doing. . . . (Also) I felt better when the nurse said I was doing fine, but I was worried through the whole thing."

#108 "(The doctor) was very reassuring. I felt very confident under his care. . . . His whole attitude was one of assurance and that he knew exactly what he was doing. That made me feel less worried."

#105 "(The doctor) told me what he was doing every minute."

#137 "During the whole procedure, (the doctor) was telling me everything he was doing and told me I was doing fine. The nurse made me feel safe, too. She helped me a lot. . . . If she wouldn't have been there I wouldn't have been so relaxed."

#117 "When we first started I was very at ease. But I got very scared as time went on. . . . (The doctor was reassuring) just by explaining what he was doing. I feel the nurses helped me feel the safeness (sic) and security I needed. Thank you so much for being there."

Symptoms. The inter-scorer reliability, calculated by a Pearson product-moment correlation, was .77 ($p < .001$). The raters agreed on 68% of the symptoms, and did not disagree by more than one point on the rating scale for any symptom.

Pre-Conditions for Testing the Experimental Hypotheses

To test the experimental hypotheses, it first must be shown that self ratings of pre-surgery anxiety by patients assigned to the two treatment conditions did not differ, and that anxiety self-ratings did indeed differ between pre- and post-surgery testing. These two pre-conditions were satisfied. As shown in Tables 1 and 2, a 2 x 2 fixed design analysis of variance for anxiety ratings showed a significant

TABLE 1

Summary of Means and Standard Deviations for

Anxiety Self-Ratings at Time of Suggestibility Testing

	paternalistic treatment	egalitarian treatment
Pre-Surgery Testing n=27	5.08 (1.75)	6.00 (1.85)
Post-Surgery Testing n=30	1.57 (1.34)	2.27 (2.02)

TABLE 2

Analysis of Variance for

Anxiety Self-Ratings at Time of Testing

Source	SS	df	ms	F	P
A	9.30	1	9.30	3.05	n.s.
B	186.02	1	186.02	61.13	.001
AB	0.18	1	0.18	0.06	n.s.
Error	161.28	53	3.04	---	---

A = Paternalistic vs. egalitarian treatment

B = "Pre" vs. "post" groups.

(F (1, 53) = 61.13; $p < .001$) main effect for time of testing, but no main effect for assignment to type of treatment.

Experimental Hypotheses

Means and standard deviations for suggestibility scores for each of the four experimental groups are presented in Table 3. The two experimental hypotheses were tested with one-tailed t-ratio comparisons (Kirk, 1968). As shown in Table 3, the first hypothesis, which predicted that suggestibility would be higher in a paternalistic condition than in an egalitarian condition, was supported (t = 1.93), while the second hypothesis, which predicted that suggestibility would be higher in the "pre" paternalistic condition than in the "post" paternalistic condition, was not (t = 1.06). The means and standard errors of the mean are shown graphically in Figure 1.

TABLE 3

Summary of Means, Standard Deviations, and t-Ratios for Suggestibility Scores

	paternalistic treatment n=28	egalitarian treatment n=29	t	p
"Pre" testing n=27	7.46 (1.61)	5.80 (2.37)	1.93	< .05
"Post" testing n=30	6.57 (1.50)	5.07 (3.08)		
t	1.06			
p	n.s.			

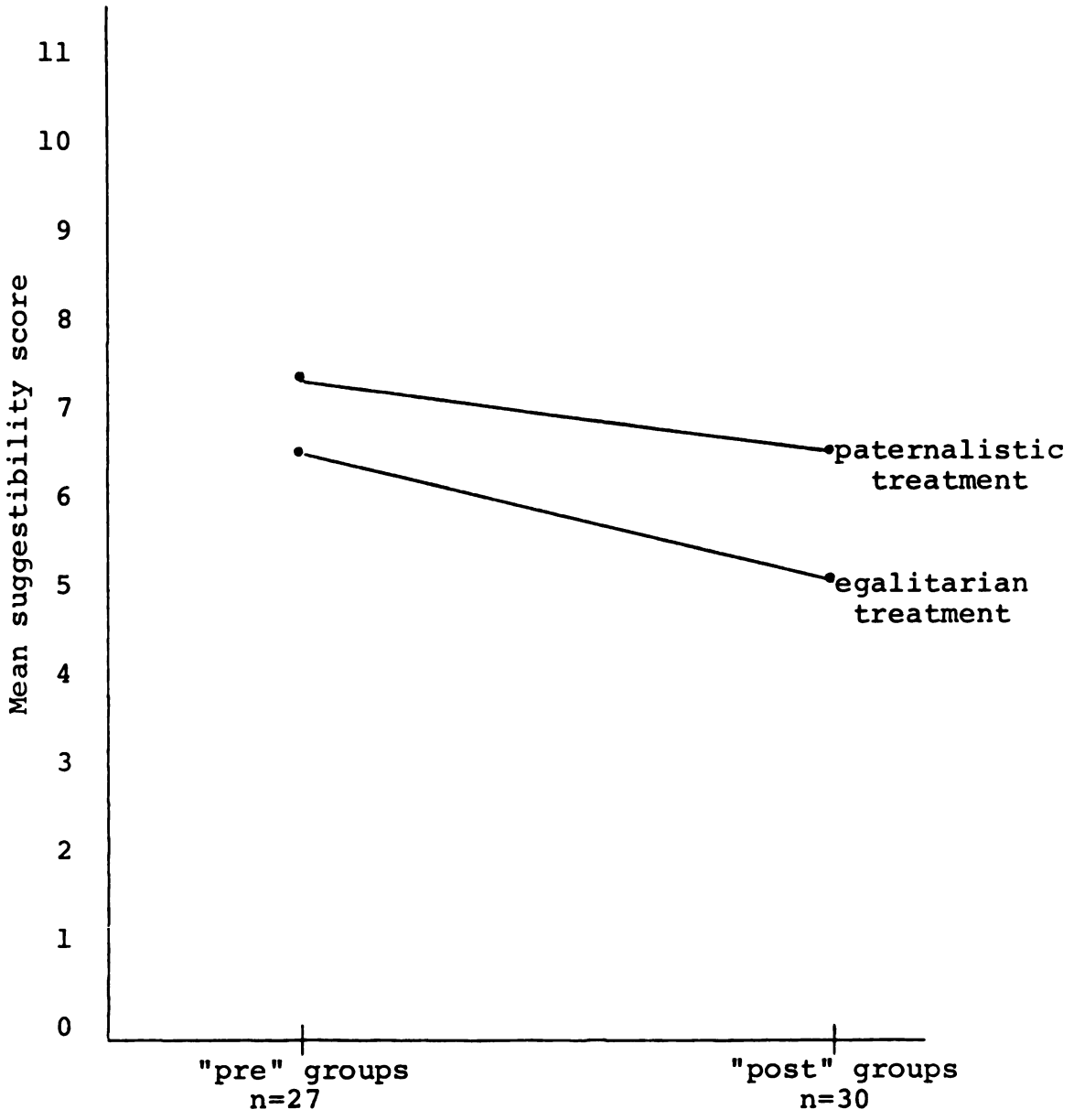

Figure 1. Mean Suggestibility Scores for Paternalistic and Egalitarian Treatment Conditions in "Pre" and "Post" Testing Groups

Since recent investigations by Sheehan (1971) and by Reyher & Smyth (in preparation) show that degree of suggestibility is partly a function of personality variables (e.g. dependency strivings), the patients were trichotomized into high, medium, and low suggestibility. The division of patients into three groups rather than using a median split was based on a differentiation by these investigators between individuals with extremely high vs. extremely low suggestibility. Accordingly to these investigations, high suggestibility should be more strongly associated with the paternalistic treatment condition. As shown in Table 4 all but two of the patients in the paternalistic treatment condition had suggestibility scores which were 6 or higher on the 11 point scale. Results of this chi-square analysis showed a significant ($\chi^2 = 14.11$; $p < .001$) relation between degree of suggestibility and type of treatment. These results are consistent with the conception that a paternalistic relationship between practitioner and patient maximizes suggestibility.

Other Relevant Analyses

Because expressions of regressive transference and the occurrence of physiological symptoms are essential corollaries of the experimental hypotheses, these two variables were also evaluated, using a fixed design analysis of variance.

TABLE 4

Number of Patients With High (8-11), Medium (6-7), or Low (0-5), Suggestibility in Paternalistic and Egalitarian Treatment Conditions*

	paternalistic treatment n=27	egalitarian treatment n=30
High suggestibility n=16	11	5
Medium suggestibility n=23	14	9
Low suggestibility n=18	2	16

$\chi^2 = 14.11$; df = 2; $p < .001$

*The three groups are slightly unequal due to the large number of patients with scores of 6 or 7.

Regressive Transference. Transference scores were evaluated using a 2 (type of practitioner) x 2 (type of treatment) x 2 (time of testing) fixed design analysis of variance. Means and standard deviations for the physician and nurse transference scores are shown in Table 5.[6]

[6]Responses of one patient were unscorable because she was accidentally given a preliminary version of the questionnaire.

TABLE 5

Means and Standard Deviations for Physician and Nurses Transference Scores

	Physician		Nurses	
	paternalistic treatment	egalitarian treatment	paternalistic treatment	egalitarian treatment
"Pre" testing	5.75 (3.54)	3.53 (2.29)	6.33 (2.81)	6.20 (2.43)
"Post" testing	6.07 (3.23)	4.00 (4.34)	8.21 (4.74)	5.80 (3.63)

As shown in Table 6, significant main effects were found for type of practitioner, i.e., physician vs. nurses (F (1, 104) = 7.76; $p < .01$), and for type of treatment (F (1, 104) = 6.70; $p < .025$). However, there was no significant main effect for time of testing. Mean transference scores for each of the four groups are presented graphically in Figure 2.

The significant main effect for type of treatment with respect to transference is consistent with the significant main effect for suggestibility scores; that is, both suggestibility scores and transference scores were higher in the paternalistic than in the egalitarian treatment condition, and both were unrelated to pre vs. post-surgery testing.

TABLE 6

2 x 2 x 2 Analysis of Variance for

Physician and Nurses Transference Scores

Source*	SS	df	ms	F	P
A	96.57	1	96.57	7.76	< .01
B	83.35	1	83.35	6.70	< .025
C	7.77	1	7.77	.62	n.s.
AB	4.68	1	4.68	.38	n.s.
AC	.46	1	.46	.04	n.s.
BC	7.92	1	7.92	.64	n.s.
ABC	10.22	1	10.22	.82	n.s.
Error	1294.80	104	12.45	----	----

*A = Practitioner (Physician vs. nurse)
B = Treatment (Paternalistic vs. egalitarian)
C = Time of suggestibility test (Pre vs. Post)

The higher transference scores for nurses was surprising. The significant main effect for type of practitioner suggests that, although the physician was generally perceived as a potent and essential figure as a consequence of both his caring demeanor and professional expertise, the nurses were often more reminiscent of a kindly protective parent. In the words of one patient, "It was like having my own mother right there beside me." Retrospectively, these results are understandable, in view of the fact that

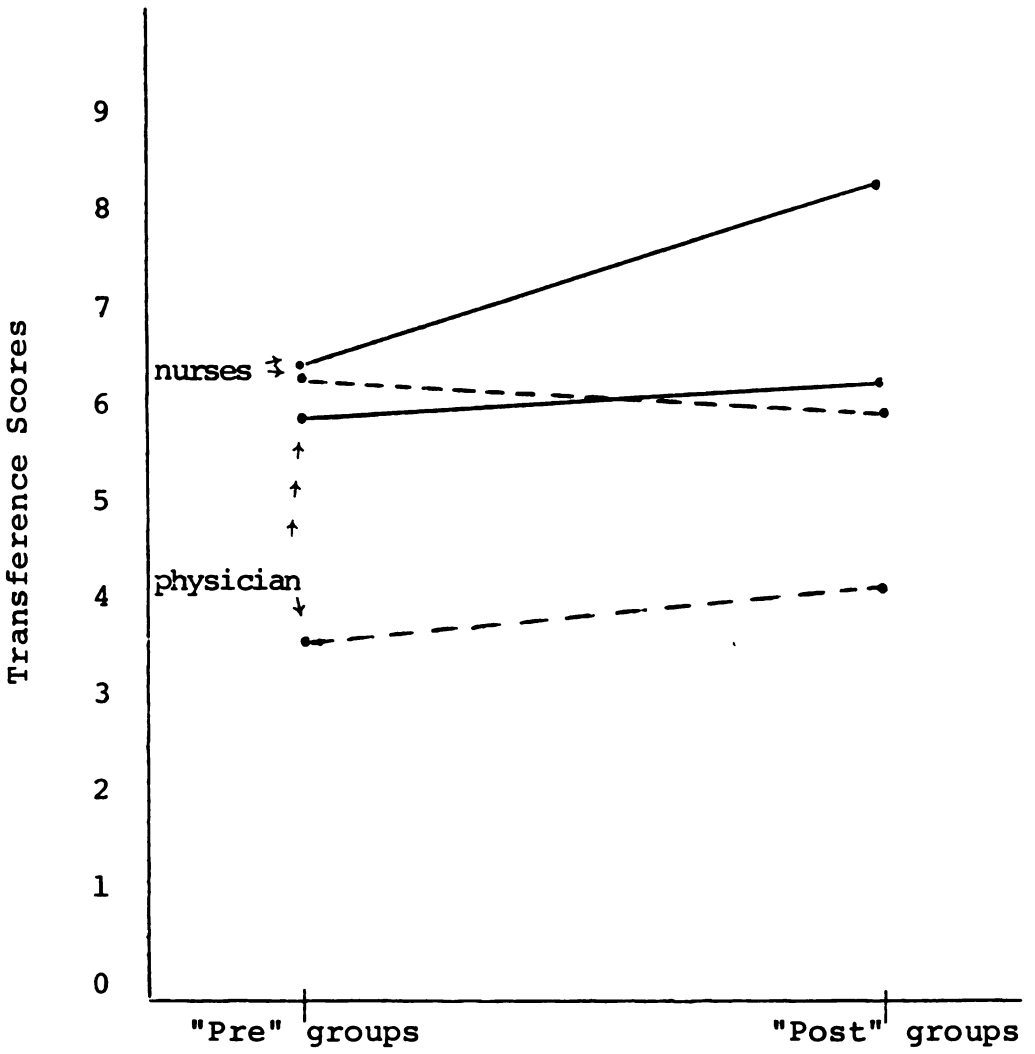

Figure 2. Mean Transference Scores for Physician and Nurses, in Paternalistic and Egalitarian Treatment Conditions, and "Pre" and "Post" Testing Groups

Paternalistic treatment ————
Egalitarian treatment ----------

it was the nurses who first discussed with the patients their decision to terminate pregnancy; the physician's role was only to confirm that the patient is indeed pregnant. After the physician agreed to perform the abortion, the patient spent from 10 minutes to an hour (or more) alone with the nurse sharing her feelings about termination of the pregnancy. At this time the nurse also described the procedures involved in the abortion, so that the patient would feel as comfortable and reassured as possible, under the circumstances. Thus, the nurse was likely perceived as a more accessible and reliable figure on whom the patient could depend.

Like suggestibility, regressive transference should be more strongly associated with a paternalistic, rather than an egalitarian, interpersonal relationship. Accordingly, the transference scores for the physician were trichotomized in the same manner as the preceding analysis of suggestibility scores. Results of a chi-square analysis, presented in Table 7, showed a significant ($\chi^2 = 6.27$; $p < .05$) relation between transference and type of treatment. These results are consistent with the conception that both suggestibility and transference are associated with the acceptance by the patient of a paternalistic relationship.

TABLE 7

Number of Patients With High (5-18), Medium (3-4) and Low (0-2) Transference Scores[7]

	paternalistic treatment n=26	egalitarian treatment n=30
High transference n=25	16	9
Medium transference n=15	6	9
Low transference n=16	4	12

$\chi^2 = 6.27$; df = 2; $p < .05$

Discomfort and Symptom Scores During Surgery. The frequency of indications of "symptoms" (discomfort and physiological distress) was virtually identical for the four experimental groups. Means and standard deviations are shown in Table 8. Symptom scores, calculated on the basis of both frequency and severity, were also virtually identical for the four groups (Table 9).

[7]Note: Since the distribution of scores was skewed at the high end and dense between 0-4, this is the closest possible approximation of trichotomization.

TABLE 8

Summary of Means and Standard Deviations

for Frequency of Symptoms

	paternalistic treatment	egalitarian treatment
"Pre" testing	3.38 (1.66)	3.40 (1.84)
"Post" testing	3.21 (1.53	3.53 (1.81)

TABLE 9

Summary of Means and Standard Deviations

for Symptom Scores

	paternalistic treatment	egalitarian treatment
"Pre" testing	6.62 (4.54)	8.00 (4.22)
"Post testing	7.36 (3.50)	6.60 (4.13)

However, the preceding analyses of symptoms and symptom scores (Tables 8 and 9) did not take into account the possibility that, for those patients who received suggestions prior to surgery ("pre" groups), their degree of suggestibility may have had a moderating influence on

symptoms. That is, if the suggestions for feelings of well-being given to patients in the "pre" groups were effective, then high suggestibility should be more strongly associated with low, rather than high, symptom scores. The small sample size did not permit trichotomization as in the previous analyses. Accordingly, a median split was performed on patients in the "pre" groups on the basis of suggestibility and symptom scores. Table 10 shows the number of patients in each category.

TABLE 10

Number of Patients in "Pre" Groups With High (7-11) or Low (6-0) Suggestibility Scores, and With High (8-17) or Low (0-7) Symptom Scores

Suggestibility:	paternalistic treatment		egalitarian treatment	
	high n=7	low n=6	high n=8	low n=7
High symptom score n=14	1	4	3	6
Low symptom score n=14	6	2	5	1

The proportion of high suggestible patients who had high symptom scores was significantly smaller than the proportion of low suggestible patients who had high symptom scores, for both the paternalistic ($Z = 1.97$; $p < .05$) and

egalitarian ($Z = 1.96$; $p < .05$), treatment condition. Thus, although suggestibility had been shown to be associated more strongly with the paternalistic treatment condition (Table 4), high suggestibile patients in both treatment conditions were less likely to have high symptom scores than were low suggestibile patients.

Because the symptom reports on which these analyses are based were composed largely of nurses' descriptions of non-verbal behavior, they were subject to considerable bias. Therefore, another comparison of patients in the "pre" groups was carried out, this time making use only of objectively verifiable signs of physiological distress ("surgical" shock), such as a large decrease in blood pressure or pulse, clammy skin, vomiting, fainting, or combinations of such signs, which warned the physician and nurse of impending physiological shock. Of the patients treated in a paternalistic manner, 15% showed evidence of surgical shock, whereas these objectively verifiable symptoms were found in 47% of patients treated in an egalitarian manner. These symptoms were distributed equally between high and low suggestible patients. The difference between these two proportions was statistically significant ($Z = 2.00$; $p < .05$).

In summary, for patients in the "pre" group, symptom scores were found to be related to the patients' degree of suggestibility, rather than to the manner in which they were treated by the physician. Surgical shock, on the other

hand, was found more frequently in the egalitarian treatment condition, and was unrelated to degree of suggestibility.

Patient Medication. The mean number of medications taken by patients during the several days following surgery did not differ between experimental groups (Table 11). When patients in the "pre" groups were dichotomized on the basis of suggestibility and number of medications taken post-operatively, no significant relationship was found between these variables (Table 12). As shown in Table 15 there were no significant relationships (Pearson r) between the number of medications taken and suggestibility, anxiety, or transference scores.

TABLE 11

Means and Standard Deviations

for Medications Taken Post-Operatively[8]

	paternalistic treatment n=18	egalitarian treatment n=24
"Pre" testing	25.28 (15.79)	25.18 (13.64)
"Post" testing	25.83 (14.42)	26.15 (12.38)

[8]Because some patients did not return their questionnaires, data in Tables 11-14 do not represent all of the patients.

TABLE 12

Number of Patients in "Pre" Groups With High (7-11) or Low (6-0) Suggestibility Scores, and With High (30-48) or Low (0-29) Doses of Post-Operative Medication

	paternalistic treatment		egalitarian treatment	
Suggestibility:	high n=3	low n=3	high n=5	low n=6
High use of medication n=8	1	1	3	3
Low use of medication n=9	2	2	2	3

Post-Surgery Symptoms. As shown in Table 13, the mean frequency of self-reported symptoms per patient following surgery was virtually identical for each of the four experimental groups. When patients in the "pre" groups were dichotomized on the basis of suggestibility and number of reported post-surgical symptoms, no significant relationship was found between these variables (Table 14).

TABLE 13

Means and Standard Deviations for Post-Surgery Symptoms

	paternalistic treatment	egalitarian treatment
"Pre" testing	3.44 (2.65)	3.00 (1.91)
"Post" testing	2.07 (1.59)	2.71 (2.91)

TABLE 14

Number of Patients in the "Pre" Groups With High (7-11) or Low (6-0) Suggestibility Scores, and With High (5-17) or Low (0-4) Number of Post-Operative Symptoms

	paternalistic treatment		egalitarian treatment	
Suggestibility:	high n=5	low n=4	high n=7	low n=5
High number of symptoms n=11	2	2	4	3
Low number of symptoms n=10	3	2	3	2

Correlational Analyses

The relations demonstrated in the preceding analyses between symptoms, suggestibility, and transference were also evident in the correlations (Table 15). In the paternalistic treatment condition suggestibility and transference were related ($r = .59$) significantly for both "pre" and "post" groups. As would be expected from the preceding analyses, suggestibility correlated significantly ($r = -.59$) with symptom scores for the "pre" group, which had received suggestions prior to surgery. These correlations reflect the high transference scores and low symptom scores in the paternalistic treatment condition (Tables 5 and 10). Although transference scores were significantly related to suggestibility, they were uncorrelated with symptom scores for both the "pre" and "post" groups.

TABLE 15

Pearson Correlation Coefficients, Paternalistic Treatment Condition

Group (Pre/post-testing)		Sugg.	Anx 1	Anx 2	Anx 3	Anx 4	Surgery Symptoms	Physician Transferences	Nurse Transferences	Post-Surg. Symptoms	Meds
Pre[†††]	Sugg.	—	.24	-.01	-.44	.12[†]	-.59*	.59*	.27	-.27	.35
Post[††]		—	-.31	-.35	.40	.37	.40	.59*	.69***	.32	.20
Pre	Anx 1		—	-.19	-.21	.51[†]	-.52	.32	.55*	.41	.15
Post			--	.14	-.40	-.28	-.15	.10	-.07	-.04	-.01
Pre	Anx 2			—	.11	.44[†]	.25	.10	.20	.18	-.43
Post				—	.05	.27	-.27	-.69***	-.41	-.26	-.20
Pre	Anx 3				--	.05[†]	.28	-.11	.15	-.08	-.32
Post					—	.58*	.25	-.07	.15	.24	.18
Pre	Anx 4					—	-.29[†]	.62[†]	.78**[†]	.14	.51
Post						—	-.17	-.08	-.05	-.10	.37
Pre	Surgery						—	-.33	-.20	.38	.29
Post	Symptoms						--	-.01	.11	-.23	.31
Pre	Physician							—	.63**	-.45	-.15
Post	Transference							—	.64**	-.32	.20
Pre	Nurse								--	-.18	.05
Post	Transference								--	-.26	.35

*p < .05
**p < .02
***p < .01

[†]n= 9
[††]n=14
[†††]n=13

"Anx 1" = anxiety ratings at time of first visit to office
"Anx 2" = anxiety ratings at time of arrival for surgery
"Anx 3" = anxiety ratings immediately following surgery
"Anx 4" = anxiety ratings at time of post-surgery check-up

The transference scores for the physician and nurses were significantly (r = .63, .64, and .68) related in all of the treatment groups, except the "pre" egalitarian condition, where it approached significance (r = .40).

The significant correlations found in the paternalistic treatment condition between symptom scores, suggestibility, and transference scores were not obtained in the egalitarian treatment condition (Table 16). This reinforces the previous evidence that patients' acceptance of a paternalistic relationship is critical. Such a finding is consistent with the theoretical view that when medical patients are treated in an egalitarian manner, their behavior is determined to a relatively greater extent by personality variables rather than by the suggestions of medical personnel.

As shown in Tables 15 and 16, virtually no significant intercorrelations were obtained among anxiety ratings. The reasons for these low correlations are not clear; in addition, several significant correlations were observed, for which no clear explanations were formulated: (a) In the "pre" paternalistic treatment condition, anxiety ratings 1 and 4 were positively correlated (r = .55 and .78) with the transference scores for nurses; however, these same variables were unrelated in the "post" paternalistic condition. (b) Physician transference scores were unrelated to any anxiety ratings except in the "post" paternalistic and

TABLE 16

Pearson Correlation Coefficients, Egalitarian Treatment Condition

Group (Pre/post-testing)		Sugg.	Anx 1	Anx 2	Anx 3	Anx 4†	Surgery Symptoms	Physician Transferences	Nurse Transferences	Post-surg. Symptoms	Meds
Pre††	Sugg.	--	.00	.06	-.25	.12	-.16	.06	-.22	.46	-.05
Post†††		--	-.36	-.09	-.12	.32	.20	-.04	-.11	.02	-.11
Pre	Anx 1		--	.35	.34	.00	.23	.16	.16	.36	.10
Post			--	.67***	.31	.20	-.15	.40	.30	.30	.32
Pre	Anx 2			--	.29	-.18	.26	.59**	.00	.04	.28
Post				--	.20	.30	-.07	-.15	-.10	-.23	.40
Pre	Anx 3				--	-.24	.00	.20	-.18	.17	.39
Post					--	.12	.28	.07	.17	.03	-.12
Pre	Anx 4†					--	.57	-.05	.00	.44	.25
Post						--	.32	.25	.11	.30	-.28
Pre	Surgery						--	.35	.34	.12	-.28
Post	Symptoms						--	.04	-.21	-.16	.27
Pre	Physician							--	.40	.01	.18
Post	Transference							--	.68***	-.38	-.06
Pre	Nurse								--	.18	.48
Post	Transference								--	.41	.35

** $p < .02$
*** $p < .01$

† n=12
†† n=14
††† n=15

"pre" egalitarian conditions where they were related to anxiety$_2$ with correlations of -.69 and .59, respectively. (c) There was only one significant inter-correlation between anxiety ratings. This was observed between Anx$_1$ and Anx$_2$ in the "post" egalitarian condition (r = .67). (d) In the "pre" paternalistic condition, suggestibility and symptom scores were negatively correlated (r = -.59), whereas in the "post" condition, these same variables were positively correlated (r = .40). The present data were not sufficient to permit an analysis of these findings.

It is important to keep in mind the differences in treatment for patients in the "pre" and "post" conditions, because these differences may well account for many of the results which remain unexplained in addition to those which were explicable. Patients in the "pre" condition spent time with the physician prior to surgery receiving suggestions (and of necessity, more attention) in contrast to patients in the "post" condition. These latter patients, who were tested several days post-surgery, when stress and anxiety variables were allegedly low, apparently experienced surgery differently, they may have been motivated differently in filling out questionnaires and giving anxiety ratings, and may have subjectively experienced the suggestibility scale quite differently than patients in the "pre" group. While the former seem more likely to have experienced a regressive transference and suggestibility II, including

some degree of dissociation, patients in the "post" group were probably at hypersuggestibility level I, with little or no dissociation.

Item Analysis of Suggestibility Scale

Table 17 presents the percent passing and point-biserial correlations for each test in the scale of suggestibility.

TABLE 17

Order of Presentation, Point-biserial Correlations* and Percent of Patients Passing Each Test

Items	point-biserial correlation	Percent Passing Tests: paternalistic treatment	Percent Passing Tests: egalitarian treatment
1. Right leg warm	.66	78	60
2. Left knee cool	.54	100	77
3. Light brighter	.56	89	80
4. Ear ringing	.55	63	44
5. Ammonia	.55	30	24
6. Feather	.46	15	17
7. Tingling fingers	.58	78	60
8. Itching hand	.54	38	20
9. Hand numb	.68	97	67
10. Test analgesia	.57	100	87
11. Cough	.47	16	10

*Correlation between passing a test and total score minus that test.

One test on this scale of suggestibility, the hand analgesia, is also found in a laboratory study by Reyher, Wilson, and Hughes (in press). It is striking to note that in the laboratory setting the pass rate for that test was 49%, whereas in this medical setting it was passed by 100% of those in the paternalistic treatment condition and 87% in the egalitarian condition. The reasons for the dramatically higher pass rate for this test in the present study may be due to procedural differences between the two studies, differences in motivation, and/or overall differences in suggestibility between patients and laboratory subjects. A pain stimulus with a standard intensity, such as electric shock, might prove to be a more accurate means of assessing responses to the analgesia suggestion.

CHAPTER IV

DISCUSSION

A consistant pattern of results emerged quite clearly: (1) when the physician treated patients in a paternalistic manner, significant relationships were found between transference scores, suggestibility, and symptom scores, depending in some instances on whether the group was tested prior to or after surgery; (2) these systematic relationships were found in the paternalistic treatment groups, but were not found in the egalitarian treatment condition; (3) by comparison to the paternalistic treatment condition, patients in the egalitarian condition had lower suggestibility scores and lower transference scores; (4) high-suggestible patients in either the paternalistic or egalitarian treatment condition who were given suggestions prior to surgery had a smaller proportion of high sympton scores than did low suggestible patients; (5) patients who were given pre-surgical suggestions in a paternalistic manner had fewer objectively identifiable indications of physiological distress than patients given the same suggestions in an egalitarian manner; (6) contrary to expectations, anxiety ratings were generally uncorrelated with any other variable.

In order to evaluate the potential implications of such findings it is worthwhile considering the possible meanings of the scores, ratings, and statements which were obtained from patients. The Regressive Transference Scale, for example, was originally intended to evaluate the extent to which patients felt taken care of, protected, and secure, in the hands of another individual who is seen as "larger than life," (i.e., described in terms of hyperbole and dramatic statements). This is consistent with Freud's initial psychoanalytic formulation of transference (Thompson, 1950). However, the statements which received a transference rating of 1 or 2, such as compliments or mild expressions of trust in the physician (see Appendix B), might also be described as security operations (Sullivan, 1953). That is, such statements are frequently generated by the prospect of lowered self-esteem in an interpersonal encounter. One class of security operations (placation) includes being complimentary or agreeable with others (Reyher, 1977; 1979). Security operations are commonly used in all interpersonal encounters, and they may occur independently of, or concurrently with, a regressive transference. Sheehan (1971) has reported that subjects who were highly suggestible were more attentive to implicit intentions and wishes of the hypnotist, than were low suggestible subjects. This heightened concern with the intentions of the hypnotist may in part represent a regressive transference and/or placating security

operations generated by heightened strivings for approval. That is, placation may either be one indicator of a regressive transference or one type of security operation. In the present study, both a regressive transference and security operations were probably engendered by guilt related to having an abortion and/or the prospect of not coping effectively with the pain and anxiety related to the surgical procedure.

It should be noted that the highest transference scores were found in the same treatment group (Paternalistic) which also had the highest suggestibility scores, and that transference and suggestibility scores were significantly correlated. A concomitant of a regressive transference is the suspension of critical, active modes of information processing in favor of a more passive-receptive mode. This state has also been used to describe the condition of highly suggestible persons (Bowers, 1976, 1977; Reyher, Wilson & Hughes, in press). Thus, persons who are highly hynotizable and who show evidence of a regressive transference, are more likely to respond to suggestions in terms of hypersuggestibility, level II (Reyher, 1977). This state would be that described as an "archaic involvement" by Shor (1959, 1962). It should be noted that Freud (1973) regarded hypnosis as a regressive transference akin to falling in love.

The relatively consistent relationships between variables in the paternalistic condition, and the reduction in indications of shock for patients in that group, represent what McGlashan, Evans & Orne (1969) referred to as "specific effects." That is, the suggestions have an impact beyond what could be accounted for by relaxation or expectation alone. According to McGlashan, Evans & Orne (1969), it is this group of individuals which has the ability to produce analgesia of sufficient effectiveness to block out surgical pain. On the other hand, the effects of suggestions in the egalitarian mode are comparable to what would be obtained by simple relaxation instructions (i.e., "placebo effects") which McGlashan, Evans & Orne (1969) found positively affected high more than low hypnotizable subjects, although even the former were not affected as profoundly as when they were in a "deep" hypnotic state.

Low transference scores were generally associated with low suggestibility scores. These patients would benefit from "placebo effects" (McGlashan, Evans & Orne, 1969) such as feelings of calmness associated with relaxation; thus, the responses of these patients would be similar to laboratory subjects who receive "waking suggestions" (Barber & Calverly, 1964; Evans, 1967; Hilgard & Tart, 1966; Wilson, 1974); that is, they can experience various suggestions, but not with the same intensity or profound

involvement usually related to hypersuggestibility II and its activation of early childhood perceptions of omnipotent parents. Suggestibility scores for patients in the egalitarian condition have little relation to the loosening of ego controls and passive dependency normally associated with hypersuggestibility, level II. Rather, security operations, such as a wish to be co-operative with the physician, and the wish to be a good patient, are the likely basis of these individuals' behavior.

In practical terms, the present results have immediate applications to the treatment of medical patients by psychologists, physicians, or nurses. Patients in a short-term medical crisis such as the anticipation of surgery or the experience of a transient, severe pain are rendered unable momentarily to function independently of others. Their (temporarily) heightened dependency strivings and feelings of insufficiency motivate them to seek the reassurance and security of authority figures. These external sources of benign control compensate for the temporary insufficiency of ego functions during the crisis. Hypersuggestibility I and II in these patients is, to a large extent, a function of their degree of dependency strivings and of the extent to which the physician assumes a paternalistic, i.e. a caring, protective, and guiding role. It is important to notice that symptoms of surgical shock were less frequent for patients who were given paternalistic suggestions prior

to surgery, than for patients who were given egalitarian suggestions prior to surgery. That is, individuals who showed the greatest evidence of dependency on the physician and/or a need for the physician's approval had fewer indications of surgical shock.

The consistent differences in results between paternalistic and egalitarian modes of treatment attest to the potent psychological and physiological effects of verbal and non-verbal behavior in a medical setting. One difference in these treatment modalities was the much greater frequency of physical touch by the physician in the paternalistic treatment condition. Significant differences in behavioral and physiological responses to touch vs. no touch conditions have been obtained in a recent study in another medical setting (Whitcher & Fisher, 1979).

The failure to find the predicted relationships between measures of anxiety and other variables remains enigmatic. Virtually no intercorrelations were obtained among anxiety ratings; furthermore, the few significant correlations between anxiety ratings and other dependent variables occurred in a pattern which did not permit elucidation of these relationships. In addition to the rationale in the previous section, an additional explanation for these puzzling findings is summarized as follows: patient anxiety varied in different ways across time, depending on such factors as feelings of guilt, the defensive operations

particular patients used in responding to guilt and anxiety, and the degree of isolation and rejection patients anticipated from their families.

This explanation is based on interviews with the nurses following the end of the study. The nurses reported independently that guilt regarding the abortion, and a patient's manner of responding to her guilt, seemed to play an important role in determining the patient's degree of anxiety both prior to, and following surgery. Patients who appeared to have few religious or moral objections to abortions, and who also had understanding and supportive families usually seemed at least moderately anxious prior to surgery; however, this anxiety was typically related to the anticipation of discomfort, and such patients were observed by the nurses to have consistently low anxiety ratings following surgery, unless previously unconscious affect and perceptions emerged during surgery, which was sometimes the case. However, most patients were perceived by the nurses as having varying degrees of guilt, which was often accompanied by higher anxiety ratings if the guilt was expressed directly; on the other hand, patients who gave unusually low anxiety ratings on their first visits to the office could either be individuals who had previously succeeded in coping with their conflicts and fears regarding the abortion, or individuals with rigid defenses against their anxiety and guilt. Because these latter patients were considered to

have as much, or more difficulty remaining relaxed during surgery as patients with higher anxiety ratings, nurses often suggested that they resolve some of their current interpersonal difficulties related to the abortion, and/or referred them to their priest or minister, and/or to a counselor who was affiliated with the office.

Thus, the patient's anxiety at a given time was seen by the nurses to be determined by a combination of objective anxiety regarding pain, interpersonal anxiety related to fear of rejection, individual personality variables, and guilt related to moral and religious beliefs. These explanations by the nurses cannot be substantiated in a systematic way, since no data regarding the relations between anxiety, guilt, and other variables were obtained systematically. However, the nurses offered these same analyses independently. Their surprising amount of sensitivity to patients' variations in objective anxiety, guilt, and fear of rejection apparently reflected the fact that they had worked with a relatively large number of abortion patients, and perhaps more importantly, that they came to know all of their patients quite well, so that they could check early perceptions of patients against later behavior. Thus, they were apparently able to develop hypotheses regarding frequently observed behavior in patients, which enabled them to make fairly valid assessments of that behavior.

An additional explanation for the general lack of intercorrelations between anxiety ratings and for the puzzling pattern of relations between anxiety ratings and other variables was based on other statements made independently by the nurses. The experimenter attempted, at the end of the study, to discover any discrepancies between the instructions given to them by the experimenter regarding their participation in the research, and their post-research description of what they had actually done. They stated that they had been able to gather the data in the manner and sequence which had been prescribed, with the exception of anxiety ratings. In each case, as instructed, they formulated their own assessment of the patient's anxiety prior to requesting the subjective report from the patient; however, due to the very busy schedule in the office, they were sometimes unable to complete these anxiety assessments at exactly the same time for each patient. Thus, for example, $anxiety_2$ ratings were sometimes obtained almost immediately upon the patient's arrival at the office; in other instances, they were not obtained until the patient had sat in the waiting room for a half hour, then had been taken by a different nurse to a treatment room where she may have waited for another 15 minutes. Such variations in procedure could plausibly account for variations in anxiety and hostility on the part of the patient, whose response to her own negative feelings might range from a direct expression of affect, to

an increase in security operations (e.g., telling the nurse or doctor how good they were). Similarly, anxiety$_3$ ratings were usually obtained within a few minutes after surgery; however, nurses were sometimes obliged to leave the patient for several minutes at the end of the surgical procedure, to respond to other demands. Such a situation could very understandably influence the patient's anxiety as well as her feelings toward the physician and nurse, independently of the experimental manipulations.

Further investigations should focus on surgery procedures where guilt is not as likely to be a confounding variable, as in the present research, to assess more adequately the nature and extent of patient anxiety. Further investigations should also attempt to determine whether any sexual feelings were aroused in the context of the transference relationship, since such feelings might be associated either with fantasies of seduction or with areas of conflict. Both sexes could also be included in the physician-patient dyad, to determine whether sex differences are related to dependency, security operations, and suggestibility. A recent investigation by Whitcher & Fisher (1979) did study sex differences in patient reactions to touch, but used female nurses only. Furthermore, there was no assessment of regressive transference or suggestibility in that investigation.

Another area in which the present findings require further investigation is the extent to which patients feel involved (that is, experience dissociation) in response to virtual suggestions. A comparison of the subjective impact of suggestions to patients' transference scores would help to clarify the relation between regressive transference and security operations on the one hand, and hypersuggestibility, levels I and II on the other hand.

APPENDIX A

Suggestibility Scale

APPENDIX A

Suggestibility Scale

Subject Name_____ Date_____ Subject_____

Experimenter Name_____

Relaxation Instructions

1. Close eyes
2. Check areas of tension
3. Deep breath
4. Arms tension
5. Hand on back - Breathe 3 sec. x 2
6. Drop hand
7. Instructions - Eyes closed - Raise hand

Virtual Suggestions

1.	Temperature - R hip - R leg warmer	☐ YES	☐ NO
2.	Temperature - L knee - L leg cooler	☐ YES	☐ NO
3.	Forehead - light - brighter	☐ YES	☐ NO
4.	Ear lobe - touch - ringing	☐ YES	☐ NO
5.	Smell - ammonia	☐ YES	☐ NO
6.	Feather - touch - L hand	☐ YES	☐ NO
7.	Pinch - L hand - fingers - tingle	☐ YES	☐ NO
8.	Talc - hand - itch	☐ YES	☐ NO

9. L Shoulder - hand - itch ☐ YES ☐ NO

   A. If yes--pin prick - compare ? difference ☐ YES ☐ NO

   B. If no--pin prick - compare ? difference ☐ YES ☐ NO

10. Raise and lower arms - need to cough ☐ YES ☐ NO

APPENDIX B

Degree of Regressive Transference Scale

APPENDIX B

Degree of Regressive Transference Scale

Score		Statements by Patient
+4	(a)	Words such as "father," "mother," or "God-like."
	(b)	Statements that the doctor or nurse can do anything.
	(c)	Statements that the patient felt regressed; e.g., "I felt like a little kid."
+3	(a)	An experienced transfer of ego functions; e.g., "I couldn't have done it without him/her; I was in his hands;" other statements that the doctor's or nurse's presence was decisive, or that he/she had special power.
	(b)	Statements worded in superlatives or hyperbole; e.g., "He's the greatest;" "She's fantastic;" "the best care possible;" "I have never felt safer;" "I was extremely reassured."
+2	(a)	An experience of being safe; being cared for, or reassured.
	(b)	Expressions of trust and confidence in the doctor; e.g., "He made me relax."
+1	(a)	Statements complimenting the doctor's competence; e.g., "He did a good job;" or "He did it well."
	(b)	Mildly positive statements; e.g., "He/she is nice;" etc.
	(c)	Descriptions of a positive event, e.g., "He smiled;" or "The nurse held my hand."
0		In response to questions regarding the patient's degree of confidence in the doctor, or questions regarding the patient's level of anxiety during the procedure, the patient appears to be responding to demand characteristics, but does not reveal any affect. For example, the patient responds simply "yes" or "no" without further elaboration.

Score		Statements by Patient
-1	(a)	Mildly negative statements; e.g., "Things didn't go very well."
	(b)	Statements that the patient felt apprehensive, worried, tense, or uneasy regarding the medical procedure.
	(c)	Descriptions of negative events; e.g., "The doctor frowned;" or "The nurse was very quiet," or descriptions of pain without any effective assistance from the nurse or doctor.
-2	(a)	Statements that the patient felt strong anxiety or fear.
	(b)	Statements that the patient was uncertain about the doctor's involvement and care; e.g., "He seemed to be in a rush."
-3		Questioning of the doctor's competence and ability to take care of the patient.
-4		Open criticism and hostility toward the doctor.

APPENDIX C

Patients' Post-Operative Questionnaire

APPENDIX C

Patients' Post-Operative Questionnaire

_ _ _ _ _ _

We would appreciate it if you take the time to respond to the following questions. Because each questionnaire is identified by a number only, your responses are anonymous.

If you have any questions, please feel free to ask one of the nurses. You may write on the back of the page if necessary.

I. Were there times during the procedure when you were worried about your welfare (i.e., when you were anxious about how the abortion would go for you)? If "yes," please explain.

II. Were there times during the procedure when you felt no worries, or when you felt especially reassured and well taken care of? If "yes," please explain.

III. Was there anything Dr. Stack did or said that might have made you feel worried during the procedure? If "yes," please explain.

IV. Was there anything Dr. Stack did or said that might have made you feel safe and reassured during the procedure? If "yes," please explain.

V. Was there anything the nurses did or said that might have made you feel either worried, or safe and reassured? If "yes," please explain.

APPENDIX D

Examples of Scores for Physiological Symptoms or Pain

APPENDIX D

Examples of Scores for Physiological Symptoms or Pain

Score	1	2	3	4	5
Behavior or Symptom	brief wincing	grimace	jump	nausea	atropine required
	"like mild or moderate menstrual cramps"	"hurts"	continuous moaning	diaphoresis	
	"like a pulling sensation	pulling away	crying	lowering of pulse	
	"slight"	"like a poke"	resisting	hyperventilation	
	frown	erratic breathing	"Ow!"		
	"like a pinch"	"I'll be glad when this is over"	"Ouch!"		
	"hot"	"Ah"	"Stop!"		
	nervous	tensing of entire body	"like hard menstrual cramps"		
	uncomfortable	slight moan	crying out loudly		
	slight tensing		"Hurts like hell!"		
			"like stitches"		

APPENDIX E

Patient Medication Log

APPENDIX E

Patient Medication Log

Patient #_____

Patient I.D. #_____

Dear Patient:

You are asked to keep a record of any pain medications you take (including aspirin) from the time you leave Dr. Stack's office until you return for your check-up about a week from now. Bring this form when you return for your check-up. Use reverse side of page if necessary.

Please record, each day, how much and approximately what time of day you took any pain medication; also, please describe how you were feeling at the time you took the medication. For example, if you felt sad, depressed, or relieved, or happy, please make a note of this.

In addition to making a record of pain medications, please make a note each day of how you felt, in general, during that day. For example, describe whether you felt generally happy, generally sad, or anxious, etc.

Keeping this daily record is very important in helping us to provide you and other patients with high-quality medical care. Because it is so important, if you have any questions, please phone in to the office and ask the nurse.

* * * * * * * *

DAY 1

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 2

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 3

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 4

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 5

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 6

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 7

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 8

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 9

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

DAY 10

Medication taken	Quantity	Approx. time	How I was feeling

How I have felt today, in general:

APPENDIX F

Post-Operative Follow-Up Questionnaire

APPENDIX F

Post-Operative Follow-Up Questionnaire

Please complete the following questionnaire as accurately as possible. If you have any difficulty completing it, please ask one of the nurses for assistance.

During the past several days, since leaving Dr. Stack's Office, have you experienced any of the following? Write "yes" or "no" for each item:

1. headache _____
2. excessive thirst _____
3. nervousness _____
4. soreness of the tongue _____
5. earache _____
6. tension _____
7. dizziness _____
8. difficulty concentrating _____
9. pain in the neck _____
10. coughing _____
11. shortness of breath _____
12. pain in the chest _____
13. palpitation of the heart _____
14. fear _____
15. swelling _____
16. vomiting _____
17. diarrhea _____
18. constipation _____

19. abdominal pain _____

20. frequent urination _____

21. difficult urination _____

22. anxious _____

23. worried _____

24. pain in the joints _____

25. muscle pain _____

26. backache _____

27. Put an asterisk (*) beside each of the above items which you may have also experienced during the past several weeks before the abortion procedure

28. Are there any old symptoms which you have had previously, which have returned in the past several days Yes___ No___
(If yes, describe):

_____

_____

_____

Patient #_____

Patient I.D. #_____

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