TESTING HYPOTHESES: THE APPROACH OF THE MOUNT ZION PSYCHOTHERAPY RESEARCH GROUP

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Introduction

In this chapter we shall describe our approach to research on the therapeutic process. We shall present our hypotheses about therapy and describe how we went about testing them. We shall, in addition, describe some of our studies in order to illustrate specific methods and findings.

Our hypotheses, as will be seen, were derived from psychoanalytic theory, and they were first tested on psychoanalyses. However, the hypotheses and the methods for testing them may be applied equally well to other kinds of therapy. Indeed, several members of our research group, including Saul Rosenberg, George Silberschatz, John Curtis, and Thomas Kelly, have been applying certain of our hypotheses and methods to a number of brief psychotherapies carried out on a variety of patients by a variety of therapists. Moreover, our research strategy, while used by us to test our theoretical ideas, may be used by other investigators to test different theoretical ideas.

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^{1.} These studies are being carried out as part of two research projects. The first, titled "Role of the Therapist in Brief Psychotherapy," is codirected by Saul Rosenberg and George Silberschatz, and is supported in part by NIMH Grant No. MH34052. The second, titled "Process and Outcome of Psychotherapy with Older Adults," is codirected by George Silberschatz and John Curtis, and is supported in part by NIMH Grant No. MH35230.

Features of Our Research Approach

Our approach to psychotherapy research has the following distinctive features: First, we test fundamental propositions about the motivation and behavior of the patient in psychotherapy. Second, we study therapeutic processes which are immediately relevant to practice. Third, in investigating each individual case, we conduct a number of different studies (that is, studies of different processes) which, taken together, are designed to cast light on our hypotheses. Fourth, we use highly individualized (i.e., case-specific) measures of the variables pertinent to our hypotheses.

Our research follows a course which has been used successfully in other scientific fields (Kuhn, 1970), but which has seldom been used in investigations of psychotherapy (Sampson & Wallerstein, 1972). This course is to test hypotheses or theories which purport to account for significant data pertinent to the field. In our work, we test certain competing hypotheses (or theories) about therapy against each other.

In testing the explanatory power of two competing theories, we take the following steps. First, we infer, by reasoning from theory, those situations in which one theory predicts a particular finding and the competing theory predicts a different finding. Then we devise procedures to obtain reliable and objective findings by which we may determine which theory is in better accord with observation.

Because the hypotheses we are testing were devised to explain how the patient behaves and how the therapist may influence the patient, our research on these hypotheses is relevant to practice. Indeed, each of our studies is concerned with events which are familiar and meaningful to the therapist. These events take place in the everyday practice of psychodynamically oriented therapies, they are recurrent, and they are readily observable by the practitioner.

One of our studies, for example, is concerned with the familiar observation that the patient in therapy often makes a powerful implicit or explicit unconscious demand (pull) on the therapist to respond to him[†] in some particular way. The patient may, for example, demand that the therapist give affection, approval or praise, guidance or advice, scolding or punishment, an argument, rejection, special treatment, or condescending action. In studying such an event, we asked ourselves: What major theories have been offered to account for the patient making such a demand or pull on the therapist? What principles are contained in these theories to guide the therapist in his response? How, according to such theories, is the patient likely to respond if the therapist does accede (or does not accede) to the demand?

Psychoanalytic theory offers two explanations for the patient's making such a demand. According to one explanation, the patient, in making such a demand on the therapist, may be attempting to gratify an unconscious wish. The therapist, according to this theory, should not accede to the patient's demand. If the therapist does not accede, the unconscious wish will be frustrated, and hence intensified. Moreover, the patient's conflict with the wish will become intensified, and hence more interpretable.

According to the other explanation, the patient, in making a demand on the therapist to respond in a particular way, may be testing a frightening unconscious belief or expectation in relation to the therapist. The patient may, for example, demand guidance from the therapist in order to test the frightening belief that the therapist (like a parent

[†]Note: The pronoun he is used in a generic sense only; sexist language is not intended.—Editor.

in childhood) wishes to run his life. The patient, in this example, unconsciously will hope that the therapist will not accede to the demand, and so help the patient to disconfirm the frightening belief. The patient may then be reassured if the therapist does not accede to the demand, and he may become less anxious and more productive in the therapy.

From the above it is evident that the two explanations of the patient's making a demand, as described above, make different predictions about how the patient will react if the therapist does not accede to the patient's demand. According to the first explanation, the patient will become more tense; according to the second, the patient will become more relaxed. (We shall, later in this chapter, present research based on the fact that the two explanations make different predictions about how the patient will react to the same behavior on the part of the therapist.)

The therapy events we are studying are, as in the above example, observable and recurrent. They may be identified reliably by independent judges. Moreover, hypotheses about them may be investigated by replicable methods.

We test our hypotheses on one case at a time, and by use of case-specific measures of the variables which we are investigating. The use of case-specific measures is time consuming but, in our opinion, essential. Indeed, as will be seen, our testing our general propositions about therapy requires us to coordinate theoretical terms with measures specific to each individual case.

Data and Coding

Our primary data consists of both process notes and the verbatim transcripts of psychotherapies and psychoanalyses. In some of our researches, we carry out pilot studies using process notes, then conduct more definitive studies on verbatim transcripts. In others (for example, in studies tracing changes in a patient over an extended sweep of hours), we use process notes data to describe the changes, then verify these changes in samples of transcripts. In certain studies (such as those which use measures of nonverbal cues as, for example, clinical judgments of anxiety), we use audiotapes of segments of therapy sessions.

The primary data are transformed into measures of pertinent variables by procedures which require varying degrees and types of clinical inference. Correspondingly, three kinds of coders or judges have been used. Graduate students in psychology have been used to score or rate such measures as the Gottschalk–Gleser Anxiety Scales (Gottschalk, 1974a, 1974b; Gottschalk & Gleser, 1969), the Mahl measures of speech disruption (Kasl & Mahl, 1965; Mahl, 1956, 1959a, 1959b), and the Experiencing Scale (Gendlin, 1961; Klein, Mathieu, Gendlin, & Kiesler, 1970). Experienced clinicians of varying psychodynamic orientations have been used to judge segments of verbatim transcripts for such variables as the patient's boldness in tackling problems; the patient's relaxation, freedom, and flexibility; and the patient's degree of insight. Finally, we have used clinicians familiar with the application of particular concepts to the understanding of therapy to rate or judge clinical material in terms of these concepts. For example, clinicians familiar with the concept of unconscious testing of the therapist are used to identify instances of such testing, and to rate how effectively the therapist has responded to the patient's tests.

Alternative Theories

Our hypotheses about the therapeutic process were developed by Joseph Weiss. Weiss, in developing these hypotheses, was guided in a general way by concepts about mental functioning evolved by Freud in his late theorizing. Weiss elaborated these concepts, and made them into clinical hypotheses, by studying their application to case material. Because Weiss developed the hypotheses in relation to case material, the hypotheses are readily linked to observation, and therefore testable.

Clinical hypotheses derived from Freud's late theory provide different explanations of certain therapeutic processes than do clinical hypotheses derived from Freud's early theory. Moreover, they lead to different predictions about the behavior of the patient in certain situations. It is, therefore, possible to test one set of hypotheses against another. Indeed our research is designed to test the power and accuracy of certain hypotheses (derived by Weiss) from Freud's late theory against certain corresponding hypotheses derived from Freud's early theory.²

Freud's Early and His Late Theories

We shall introduce these alternative hypotheses by presenting a brief summary of certain contrasts between Freud's early and late theories.³

Freud's early theory presents a relatively simple view both of unconscious motivation and the unconscious regulation of mental life. According to the early theory, unconscious motivation consists of impulses and defenses. The impulses, which seek immediate gratification, interact dynamically with each other and with the defenses opposing them, and by these interactions determine behavior.

Unconscious mental life, according to the early theory, is regulated automatically by indications of pleasure and pain. Wishful impulses automatically seek gratification in accordance with the pleasure principle, uninfluenced by thoughts, anticipations, beliefs, or reality. The unconscious mind automatically turns away from unpleasure. Moreover, defenses, once instituted, are regulated automatically by indications of pleasure and pain.

Freud's late theory includes his early views both about unconscious motivation and about unconscious automatic regulation. However, his late theory adds significantly to the earlier conceptions. Freud's late theory assumes that a person unconsciously not only seeks certain immediate gratifications, but also is guided by certain motivations which serve purposes other than gratification. For example, a person may be motivated unconsciously to repeat a traumatic childhood experience in order to master it (Freud, 1920). A person may remain ill out of an unconscious sense of guilt and a need to suffer (Freud, 1923). He may pursue certain long-term goals, or develop and maintain cer-

^{2.} Freud changed his ideas almost continuously throughout his life, and his work does not exist as a discrete early theory and late theory. Moreover, he retained most of his early concepts throughout his theorizing, and some of his important later concepts appear implicitly or peripherally or in weak form in his early writings. Nonetheless, the distinction made here between his early and late theories is a valid and useful one, for his late theories introduce and develop concepts which have significant new implications for a theory of the mind as well as for a theory of therapy.

^{3.} A comprehensive account of the contrast between Freud's early and late theories is presented by Joseph Weiss in a book in preparation by Weiss, Sampson, and the Mount Zion Psychotherapy Research Group (to be published by The Guilford Press in 1986). A more abbreviated account is available to the reader in Bulletins #4 and #5 of the Mount Zion Psychotherapy Research Group, available through the authors.

tain attitudes or traits of character, on the basis of unconscious identifications with lost love objects (Freud, 1923). Moreover, as we shall discuss in the next section, a person may be guided unconsciously by certain beliefs acquired in the traumas of childhood, and by the feelings of fear, anxiety, and guilt which stem from such beliefs.

Freud's late theory assumes that unconscious mental life is regulated not merely by indications of pleasure and pain. Parts of unconscious mental life (in particular, parts of the unconscious ego, including the repressions) may be regulated, not automatically, but by the person's higher mental functions, and the person's assessments, by these functions, of danger and safety. Thus Freud wrote:

The ego's constructive function consists in *interpolating* between the demand made by an instinct and the action that satisfies it, the activity of thought which, after taking its bearings in the present and assessing earlier experiences, endeavors, by means of experimental actions to calculate the consequences of the course of action proposed. In this way the ego comes to a decision on whether the attempt to obtain satisfaction is to be carried out or postponed or whether it may not be necessary for the demand by the instinct to be suppressed altogether as being dangerous.

Just as the id is directed exclusively to obtaining pleasure, so the ego is governed by considerations of safety... The ego has set itself the task of self-preservation... It makes use of the sensations of anxiety as a signal to give a warning of danger that threatens its integrity. (1940, p. 199, italics ours)

Pathogenic Beliefs and Psychopathology

Freud's early theory assumes that the neurotic symptom is a gratification of an unconscious infantile wishful impulse which has been disguised and distorted by the ego. Freud's late theory, while including this view, assumes that infantile fears stemming from grim and frightening unconscious beliefs may play a crucial role in the development and maintenance of psychopathology. For example, the pathogenic belief in castration as a punishment for sexuality may, according to Freud, cause the person to institute repressions and indeed to develop symptoms. A person, in Freud's late theory, may develop a symptom in order to remove him from a situation of danger predicted by a pathogenic belief (Freud, 1926).

According to our concept about pathogenic beliefs (which is derived from Freud's late theory), such beliefs are acquired from traumatic experiences in childhood by normal processes of thought, albeit thought which necessarily reflects the child's limited perspective, and which may be distorted by infantile omnipotence or by projection. A patient may develop a grim, unconscious belief from an early pathogenic relationship with a parent, especially if, as is not unusual, the parent, by his behavior, encourages the development of such a belief. Such a belief (like the belief in castration) may be a reasonable intellectual achievement for a child, but nonetheless be inaccurate objectively.

For example, a patient had observed, in early childhood, that when he offered his mother a chance to take care of him, she would become cheerful, and that when he was strong and challenging, she would become upset and on occasion would complain that he was "killing her." The patient's memory that his mother told him he was killing her was probably accurate, for during his analysis he observed that when his own son challenged his mother, she would complain to his son in such terms.

The patient, as a result of his early experience with his mother, acquired the pathogenic belief that he was responsible for her happiness and unhappiness. He believed that if he

were to become independent of her, he would hurt her, and if he were to remain dependent on her, he would keep her happy. As a consequence of this belief, the patient became intensely worried about his mother, especially when she complained that he was neglecting her. Indeed, he became so worried about her that he repressed his wish to become independent. Moreover, he even repressed his image of his mother as weak and helpless. At the beginning of his analysis he reported that during his childhood his mother had been strong and resourceful, and that he had enjoyed letting her take care of him.

The patient in the example had inferred a connection between his struggle to become independent of his mother and her becoming upset. Moreover, his inference was probably based on certain accurate observations. Nonetheless, the belief he acquired, though a reasonable intellectual achievement for a child, was objectively inaccurate.

The patient had greatly exaggerated his effect on his mother. The patient, of course, in his reasoning about his relationship to his mother, was severely handicapped by his limited perspective. He had no prior relationships by which he could evaluate his relationship to his mother, nor did he, like the older child or adult, have access to knowledge about how one person is likely to affect another.

According to our views, which are derived from Freud's late theory, a patient's symptoms and inhibitions may stem either from the pathogenic belief that he will damage a parent, by disobeying what he believes to be the parent's wish that he fail or suffer, or from the pathogenic belief that he will damage the parent by not suffering or failing like the parent had suffered and failed. A patient who is hampered by the first kind of belief may attempt to remove himself from the danger of guilt by torturing himself, as he believes unconsciously the parent wanted him to torture himself. A person who is hampered by the second kind of pathogenic belief may attempt to remove himself from the danger of guilt by handicapping himself, or torturing himself, as he unconsciously believes a parent handicapped himself, or tortured himself.

The patient in the example presented above remained dependent on his mother and so attempted, by complying with what he believed were her wishes, to protect himself from guilt.

Some Implications for Therapy

An important difference between Freud's early theory and his late theory concerns the patient's attitudes toward his symptoms.

In Freud's early theory, the patient has no unconscious wish to overcome his symptoms. They are sources of unconscious gratification, so that the patient is strongly motivated to maintain them. In his late theory, however, Freud assumes that a patient may wish unconsciously to overcome his problems, and indeed that he may repeat traumatic experiences in order to master them (1920). Freud, in certain later works, also implied an unconscious wish for mastery by his concept that the ego may develop an alliance with the analyst in order to subdue (master) certain uncontrolled parts of the id (1937).

We, following Freud's later theorizing, assume that the patient has a strong unconscious wish to overcome his problems. Indeed, the idea that a patient would like to master his problems follows from the assumption that his problems may arise from grim, unconscious beliefs acquired in trauma. If (as the early theory assumes) a person's symptoms unconsciously are highly gratifying, he would presumably want, unconsciously, to keep them. If, however (as in Freud's late theory and as we believe),

they are unconsciously distressing and if they stem from horrifying and constricting unconscious ideas, a patient would presumably wish, unconsciously, to overcome them.

According to our observations, the patient does wish to overcome his problems. Moreover, he may work to overcome them, by attempting, unconsciously, to change the pathogenic beliefs which underlie them. Indeed, he may work to change these beliefs by testing them, in his relationship to the therapist.

The patient described previously, who had remained dependent on his mother (and later other authorities) because he believed his independence would hurt her, tested this belief in relation to the therapist in a variety of ways and over an extended period of time. For example, he behaved independently with the therapist, not in order to hurt him by his independence but in order to assure himself that he would not hurt him by his independence as he believed he had hurt his mother. A patient, by such testing, hopes to overcome the contricting beliefs which impede him from pursuing certain important goals.

A patient's testing is ordinarily carried out unconsciously, for a patient who is attempting by his testing to disconfirm a particular pathogenic belief cannot be aware of his testing the belief if the belief is unconscious. For example, the patient just described did not remember that he had believed that his independence had been hurtful to his mother until he had assured himself, through repeated testing of the therapist, that his independence did not harm the therapist.

The Need for a Case-Specific Research Approach

The preceding clinical example illustrates why we test our hypotheses on one case at a time, with measures specific to the individual case. In order to investigate propositions about the patient's attempts, by testing the therapist, to disconfirm certain pathogenic beliefs, we must determine the specific beliefs the patient is attempting to disconfirm, the specific tests he is undertaking to disconfirm these beliefs, and the kinds of reactions to these tests by the therapist which will tend to support or disconfirm these beliefs. If we did not link theory to observation in a case-specific way as described above, we would fail to capture the essential features of the processes we are studying.

For example, the patient who believed his mother was hurt by his independence once tested the therapist by coming late to a session, and was relieved when the therapist remained neutral and thus did not seem to feel especially concerned about his coming late. The patient inferred that the therapist, unlike his mother, was not threatened by his independence, and did not wish to run his life. Another patient, who suffered from the pathogenic belief (based on certain childhood experiences) that his parents would permit him to be self-destructive, also tested his therapist by coming late to a session. This patient was troubled by the therapist's failure to refer to his lateness. He inferred that the therapist, like his parents, would permit him to be self-destructive. This patient then unconsciously tested his belief further by missing the next session, and he was relieved when the therapist began to investigate his behavior.

We should also note that in order for judges to make reliable and accurate judgments about such phenomena as a patient's testing of the therapist, the pathogenic beliefs which the patient is attempting to disconfirm by such testing, and the meaning to the patient of the therapist's responses, the judges must be conversant with the clinical application of the concepts of pathogenic beliefs and of testing.

Testing the Therapist Versus Seeking Gratification: An Empirical Study of Two Theories

We shall now briefly report a study of the familiar event which we described earlier. It is the patient's making a powerful implicit or explicit demand (or pull) that the therapist respond to him in some particular way. For example, a patient, as described by Freud in his paper on transference love (1915), may declare his or her love for the analyst and demands some form of reciprocation from him. According to Freud's early theory, a patient, in making such a transference demand, is seeking to gratify an imperious unconscious wish without regard to reality. He or she is seeking "to put his passions into action without taking any account of the real situation . . . " (1912, p. 108). The patient's behavior is also a resistance, for the patient in demanding love is inevitably repeating rather than remembering an infantile experience with a parent.

The analyst, in response to the patient's demand, should, according to Freud's early theory, frustrate it by maintaining a neutral attitude of investigation. The analyst, by such an attitude, attempts to prevent the patient from succeeding 'in acting out, in repeating in real life, what she ought only to have remembered . . . '' (1915, p. 166).

How does a patient respond when the analyst does not reciprocate his transference demands? According to Freud's early theory, the patient's unconscious transference wishes are frustrated, his unconscious longings are intensified, and his unconscious conflicts between impulses and defenses are intensified. The patient may, therefore, appear to be in greater conflict, or he may appear to be much more defensive.

The investigators in the Menninger Psychotherapy Research Project (1968), apparently guided by the early theory, predicted that "... patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects" (Sargent, Horwitz, Wallerstein, & Appelbaum, 1968, p. 85, italics ours).

Concepts derived from Freud's late theory provide a different explanation of the patient's behavior, a different rationale for the therapist's response, and a different prediction of how the patient will respond when the analyst does not accede to a transference demand.

According to these concepts, a patient, in making a powerful pull or demand in the transference, may unconsciously be carrying out a trial action designed to test an unconscious pathogenic belief. For example, a patient may invite the analyst to reciprocate her professed love, in order to test, in relation to the analyst, a frightening unconscious belief that if she were affectionate or felt a sexual interest in a parental figure, she might seduce him. Such a patient does not want to seduce the analyst, and hopes therefore that the analyst does not give signs of reciprocating her affection. The therapist, in not acceding to a patient's demand for love, may be taking a step toward helping the patient to disconfirm her frightening unconscious belief that she will seduce him. The therapist, in not acceding, would then be reassuring the patient rather than frustrating her.

A patient, according to this theory, should feel unconsciously pleased rather than frustrated by the therapist's not yielding to his demand. He should feel more confident in the therapy and the therapist; he should feel more relaxed; and he should show reduced defensiveness and increased freedom and boldness in exploring his problems.

Because the two theories differ in their predictions about how a patient responds in a particular situation, it is possible to test empirically which theory better fits observa-

tion. We shall refer to the first theory, based on Freud's early concepts, as Theory A; and the second theory, derived from Freud's late concepts, as Theory B.

Silberschatz (1978) carried out a research study (on the first 100 sessions of a recorded analysis) to test the two theories. His research was carried out in three stages: (1) He identified a number of transference demands which the patient made on the therapist and which were conceptualized in one way by Theory A and in another way by Theory B. These transference demands were conceptualized by judges familiar with the clinical use of Theory A as behaviors in which the patient attempted unconsciously to gratify a key (important) wish in relation to the therapist. They were conceptualized by judges familiar with the clinical use of Theory B as behaviors in which the patient was unconsciously making a key test of the therapist. (2) Silberschatz then obtained ratings from Theory A judges about whether, and to what extent, the therapist, in each instance, frustrated the patient's demands, and from Theory B judges about whether, and to what extent, the therapist, in each instance, passed each of the patient's tests (i.e., responded in a way which would tend to disconfirm the patient's pathogenic belief). (3) Silberschatz then used a new group of judges to obtain measures of the patient's behavior before and after the analyst's responses. His purpose was to determine which theory best predicted the patient's reactions to the analyst's behaviors.

The first stage of Silberschatz's research (the identification of crucial transference demands which met the criteria of both Theory A and Theory B as described above) was carried out in three steps. The first step was the selection from the verbatim transcripts of the first 100 sessions (by nine judges who were graduate students in clinical psychology) of a pool of transference pulls or demands. (Each of the first 100 hours was read by two judges independently.) The result of this first step was a pool of 87 transference demands. Typescripts of the 87 segments containing the demands were then prepared. The segments included in each instance the patient's transference demands and the analyst's response (which in some instances was silence).

In the second step, five judges familiar with the clinical application of Theory A and four judges familiar with the clinical application of Theory B each independently rated the analyst's response to each of the patient's transference demands. Theory A judges, using a 7-point scale, rated the extent to which the analyst, in each instance, had frustrated the patient's demand. Interrater reliabilities were satisfactory: r_{11} was .35 and r_{kk} was .74.⁴ Theory B judges, using a 7-point scale, rated the extent to which the analyst, for each instance, passed the test. Reliabilities were again satisfactory: r_{11} was .47; r_{kk} was .78.

A third step was used to select those instances which met the *stringent criteria of both theories*. A new group of three Theory A judges read a short case formulation which was in accord with Theory A and which had been prepared by the treating analyst and a senior colleague of his who was familiar with the case. The three new Theory A judges then identified which of the pool of 87 transference demands represented attempts by the patient to gratify a *central or key unconscious wish* (in contrast to a peripheral or unim-

^{4.} Reliability data for these ratings—as well as for all of the other measures—are in terms of the intraclass correlation (Ebel, 1951; Guilford, 1954) using the residual mean square as the error term (i.e., mean differences in judges' ratings are not regarded as error). Two figures are reported: r_{11} = the estimated reliability of the average judges, and r_{kk} = the estimated reliability of the mean of K judges' ratings. For an overview of the various methods of computing interrater reliability, see Tinsley and Weiss (1975); or for a more comprehensive treatment of reliability theory, see Cronbach $et\ al.\ (1972)$.

portant one). They identified reliably 59 such demands. Similarly, a new group of three Theory B judges read a short case formulation prepared by senior clinicians familiar with the case and with the clinical use of Theory B, including the concept of unconscious testing. The Theory B judges then identified (reliably) which of the pool of 87 demands represented attempts by the patient to carry out a *central or key test* (in contrast to a peripheral or unimportant one). They identified 49 such demands. There were 34 demands identified by *both* groups of judges as instances to which their respective theories applied. The 34 demands were used for further data analyses.

An example of such a demand, along with the rating of the therapist's intervention by each group of judges, follows:

Patient: (3 minute silence) Thinking back on your question just a little while ago, I think probably my, after initially reacting when I was talking in here, then I thought back on the remark about my stirring up things and I think probably my first inclination was to think, now which way did you mean it, did you mean it as something I shouldn't do or is it all right for me to do it? (pause) And perhaps one reason why I get feeling sort of panicked when I have nothing to say is that I feel you'll feel very impatient that I'm not saying anything, or even disapprove. (silence)

Analyst: When you think I'll be impatient or disapprove if you don't say anything, what do you imagine would happen then?

Rating the Analyst's Intervention

Theory A judges interpreted the patient's behavior as an implicit demand for the analyst's reassurance and approval. They considered this demand to be a derivative of the patient's unconscious wish for the analyst's love. They believed that the analyst's intervention was neutral and investigatory, and that it frustrated the patient's unconscious wish. Each of the five Theory A judges rated the analyst's intervention 6.0 on a scale ranging from 0 (the analyst gratifies the patient's wish) to 6 (the analyst frustrates the patient's wish). This scale is presented in Table 17-1.

Theory B judges interpreted the patient's behavior as an unconscious test of whether the analyst wished to tell her what to do, and to regulate her behavior by his approval or disapproval. They considered her behavior to be a test of her pathogenic belief that her parents wanted to control her, and that they would be threatened and upset if she were autonomous. The Theory B judges believed that the analyst's intervention was neutral and investigatory, and that it tended to disconfirm the patient's belief that the analyst, like her parents, would want to control her. The analyst's intervention, in their opinion, thus "passed" the patient's test. The four Theory B judges gave the analyst's intervention a mean rating of 5.8 on a scale ranging from 0 (clear-cut failing of patient's test) to 6 (clear-cut passing of patient's test). This scale is presented in Table 17-2.

Patient Measures

In order to compare the patient's behavior before and after the analyst's intervention, each pre- and postintervention segment of patient behavior was scored on several different measures. Moreover, each of the measures was scored by a different group of judges. These segments, which were approximately 6 minutes of patient speech, were each presented in *random order*, without any *context*, and with the judges unaware of whether the segment was a preintervention segment or a postintervention segment. In addition, all judges were unaware of the aims of the research.

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The measures included the following:

The Experiencing Scale, a 7-point scale, is designed to evaluate the quality of a patient's involvement in psychotherapy. Four raters, after receiving standardized training, used this scale to score all of the pre- and posttransference-demand segments. The interjudge reliability was .88.

The Boldness Scale (see Table 17-3), developed by Joseph Caston, is a 5-point rating scale that assesses the degree to which the patient is able to confront or elaborate "non-trivial material"; that is, the extent to which the patient boldly tackles issues or retreats from them. Following a brief training period, two judges rated all of the segments with an interjudge reliability of .64.

The Relaxation Scale (see Table 17-4), designed by E. Mayer, F. Sampson, and A. Bronstein, measures the patient's degree of freedom and relaxation in the psychoanalytic session. At the high end of the scale, the patient is able to associate freely, easily, and flexibly; to be playful with ideas and to explore the connections between her thoughts in an uninhibited, spontaneous manner. At the low end of the scale, the patient is defensive, constricted, or narrow in her associations; she is halting, timid, or bothered by her train of thoughts; in general, she seems tense, rigid, tight, or grim. Three judges applied the scale to all of the segments with an interjudge reliability of .72.

The patient's emotions were categorized according to an affect classification system developed by Dahl (Dahl, 1978; Dahl & Stengel, 1978). We used four of his affect categories (love, satisfaction, anxiety, and fear). Two undergraduates who underwent extensive training with Dahl scored all of the segments with reliabilities ranging from .63 to .94.

The results of the Silberschatz study are summarized in TAble 17-5. All seven correlations are in the direction predicted by Theory B and opposite to the direction predicted by Theory A. Four of these seven correlations are statistically significant.

These results indicate that when the analyst did not accede to the patient's transference pull or demand, the patient tended to become more relaxed, free, more positive in her feelings toward others, less anxious, less fearful, and bolder in tackling her problems.

These results lend support to the Theory B hypotheses about testing the therapist. The patient, according to these hypotheses, may, by making a demand on the therapist, be unconsciously testing a frightening pathogenic belief. He may be tempting the therapist to accede to a demand to which the patient unconsciously does not want the therapist to accede. If the patient tests in this way, he would experience the therapist's acceding to the demand as tending to confirm the belief, and he would experience the therapist's not acceding to the demand as tending to disconfirm the belief. Moreover, to the extent that the patient experiences the therapist as helping him to disconfirm the pathogenic belief, he may feel reassured and he may work more productively on his problems.

The results of the study provide no support for the Theory A hypothesis that the patient, in making a transference demand, is almost invariably attempting to gratify an unconscious wish. These results, of course, cannot rule out the possible applicability of Theory A hypotheses to other cases, or to other parts of the case studied. The results, however, do rule out the hypothesis that all transference demands are explainable by Theory A, and they lend support to the Theory B hypothesis that such demands may be made by the patient in order to test the therapist.

Scale
Boldness
17-3
Table

1	2			L
	1	•	Ħ	n
Patient manifests clear- cut anxious retreat or inhibition, or clear-cut dissatisfaction about her handling of the material.	Patient manifests a mild to moderate degree of anxious retreat or inhibition, or shows some indication of dissatisfaction about her own handling of the material.	Patient manifests ambiguous trends, or lukewarm attempts to deal with the issues.	Patient manifests moderate boldness or interest in tackling the material.	Patient manifests moderate boldness or interested tackling of terest in tackling the issues, or plunges ahead even if material or distressing.

Table 17-4 The Relaxation-Constriction Rating Scale

ro	Patient is relaxed, free, unconstricted, spontane- ous (relatively more so than in 4).
4	Patient is somewhat free, spontaneous, re- laxed, undefensive.
3	Patient is just about as constricted and tense as she is free and relaxed.
2	Patient seems somewhat constricted, defensive, tense, etc. (relatively less so than in 1).
1	Patient seems uncomfortable, beleaguered, driven, defensive, constricted, tense, tight.

Table 17-5	Correlations	Between	Ratings	of the	
Therapist's Be					
ures for Segments Identified as Both Key Frustrations					
and Key Test	s(N=34)		-		

	Results Obtained	Predicted by Theory A	Predicted by Theory B
Experiencing	+ .23	_	+
Boldness	$+.41^{a}$	_	+
Relaxation	$+.35^{a}$	_	+
Love	$+.36^{a}$	_	+
Satisfaction	+.15	_	+
Fear	31	+	
Anxiety	34^{a}	+	_

 $^{^{}a}p$ < .05, two-tailed test.

Process and Outcome

The Silberschatz study demonstrates a lawful relationship between a therapeutic process and an *immediate* outcome. The patient, according to this study, would, following a passed test, make immediate progress. She would become less anxious, more positive toward others, bolder in tackling her problems, and at the same time more relaxed, freer, and more flexible in working to solve her problems.

This finding suggests the possibility (which is consistent with our theoretical views) that if the therapist, in a given case, generally passes the patient's tests, the patient will be likely to have a successful outcome, and that if the therapist generally fails the patient's tests, the patient will likely have an unsuccessful outcome. Saul Rosenberg, George Silberschatz, and John Curtis have designed studies to test this hypothesis on a series of brief psychotherapies (Rosenberg & Silberschatz, 1982; Silberschatz & Curtis, 1982). They are determining, by reliable measures, whether the therapist in each case generally passes the patient's tests, generally fails the patient's tests, or is in between. They are also in each case studying the success of treatment at the end of therapy, at 3 months following termination, and at 1 year following termination. They are, in their studies of therapy outcome, using a variety of familiar measures, as well as some new measures. Their findings will cast light on the relation between a therapist's passing the patient's tests and the long-term outcome of the treatment.

Another Test of Alternative Theories

We shall now present in summary fashion another study we carried out on the first 100 sessions of the same case, Mrs. C. This study is intended to cast light on the conditions under which a patient becomes conscious of some mental content (attitude, wish, memory, belief, etc.) which had previously been warded off by defenses. Does

he do so in accordance with hypotheses based on Freud's late theory (Theory B) or in accordance with hypotheses based on Freud's early theory (Theory A)?

This study may be introduced by a prototypical observation made by Weiss which he referred to as "crying at the happy ending":

A person who was watching a movie about a love story experienced little or no emotion when the lovers quarreled and left each other. He was moved, however, when, at the happy ending, they resolved their difficulties. He became happy, then experienced a brief but not unpleasant sense of sadness, and wept. (1952, p. 338; 1971, p. 462)

Weiss, in discussing this common experience, asked: Why does the moviegoer experience sadness at just the moment when he has become happy?

The moviegoer did not (as Theory A would assume) experience his sadness because it had become intensified and thus thrust its way into consciousness. Indeed, according to the early (thrust) theory, the sadness should have been more intense when the lovers separated, and it should have been weakest when, at the happy ending, the occasion for the sadness was eliminated. Yet the moviegoer did not experience sadness at the separation, but only after the happy ending.

Moreover, if the sadness, in spite of the defenses against it, had pushed its way to consciousness, its emergence would have resulted in conflict. The moviegoer in this case should have felt tense or anxious before and during the coming forth of his sadness, and he should, after it came forth, have remained in conflict with it. Yet the moviegoer was not anxious as his sadness became conscious, nor was he in conflict with it after it emerged.

It is evident that the repressed sadness did not thrust forth in search of gratification, for sadness is not intrinsically gratifying. Indeed, the coming to consciousness of sadness in the "crying at the happy ending" phenomenon is an example of the kind of process which Freud stated in *Beyond the Pleasure Principle* (1920) contradicts his earlier assumption that unconscious processes are regulated exclusively by the search for pleasure. As you will recall, Freud stated in that work that people repeat, both in life and in analysis, *experiences which cannot at any time have been pleasurable*. These are experiences of trauma rather than of gratification.

Weiss offered the following explanation of why the moviegoer experienced his sadness at just the moment when he became happy: The moviegoer was saddened by the lovers quarreling and separating from each other. However, he had felt endangered by his sadness then (perhaps because it reminded him of his own sadness) and so repressed it (or suppressed it). Later, at the happy ending, he stopped being endangered by his sadness, and so could experience it safely. Since he no longer needed to repress the sadness, he lifted the repression opposing its emergence, made the sadness conscious, and gained relief from the effort he had been making to keep it repressed.

In summary, the crying at the happy ending phenomenon is most readily explained by concepts which assume: first, that a person has a capacity to lift his defenses and to experience a mental content such as sadness which had been warded off; second, that a person is likely to lift his defenses against a repressed content when he decides unconsciously that it is safe for him to experience the content; third, that he may bring forth the content not in order to gratify it, but rather to resolve his conflict with it.

Clinical Application of the Late Theory

In subsequent studies carried out on the process notes of analyses, Weiss sought to investigate how, and under what circumstances, the analytic patient becomes conscious of repressed mental contents, especially if such contents are not interpreted. He found that the analytic patient (and the patient in psychotherapy) behaves much as the moviegoer in the preceding example. The patient generally maintains the repression of a particular warded off mental content until he unconsciously decides that he may experience it safely, then he lifts his defenses and makes it conscious.

An example will illustrate this phenomenon:

A woman patient had decided to terminate her analysis, which was then in its fourth year. She cited the progress she had made and stated that she was ready to work on her own. The analyst, after an initial futile investigation of her decision to terminate, told her that she did not understand her decision to stop and that she should continue treatment until she did understand it. After a few sessions of protest, the patient decided to continue. She then brought forth a new (and long forgotten) childhood memory in which she felt rejected by her mother. (Indeed, she had assumed, as the result of an experience with her mother, that her mother wanted her to die.) The memory made her intensely sad, and she wept freely while telling it.

This is a direct example, from an analysis, of crying at the happy ending. It shows that a deeply repressed sadness, a sadness repressed for many years, may become conscious in the same way as the moviegoer's sadness became conscious. The patient, according to Weiss, threatened to terminate in order to test the analyst. She wanted to find out whether the analyst would reject her as she had assumed (whether or not correctly) that her mother had rejected her. When the analyst did not do so, she was unconsciously pleased and reassured. She then brought forth a powerful new unconscious memory and the sadness associated with it.

Thus the patient brought forth her repressed sadness when the analyst, as she experienced it, did not reject her. She became, as a result of the analyst's acceptance, a little less sad. She began, moreover, to disconfirm her pathogenic belief that she was inherently rejectable. Then she brought forth the sadness when she unconsciously began to assume that it was not her fault that her mother rejected her. She could then safely experience it. Paradoxically, the intense sadness and feeling of rejection which the patient brought forth reflected a *reduced* fear of rejection and *reduced* feelings of sadness.

The clinical intuitions which have been associated with Freud's early theory are deeply ingrained in much clinical thinking, outside psychoanalysis as well as within it. Indeed it is commonly assumed that if a person begins to experience a mental content, or begins to express that content prominently in his behavior, it is because that content has become more powerful. If a person, according to this view, experiences intense, formerly repressed sadness—and especially if he does so without interpretation—it is because the sadness has become more intense relative to the strength of the defenses opposing its expression.

The hypothesis based on Freud's later theory, as illustrated by crying at the happy ending, modifies our understanding of such phenomena, and thereby modifies our clinical intuitions. It proposes that a person may experience repressed sadness (or other

unconscious contents) with greater intensity not because the sadness or other content has become more powerful in relation to the person's defenses, but instead because the person has become less endangered by the sadness, has decided unconsciously that he may experience it safely, and has lifted his defenses and allowed himself to experience it.

The patient in therapy or analysis, according to Theory B (derived from Freud's late theory), behaves like the moviegoer. He generally maintains the repression of a particular warded-off mental content until he unconsciously decides that he may experience it safely, then lifts his defenses and makes it conscious. Moreover, he works unconsciously by testing the analyst to create conditions which make it safe for him to experience the content. If Theory B is correct, we should expect to find:

- 1. That patients in analyses (or in certain psychotherapies) regularly become aware of mental contents which they had previously warded off by defenses, even when these contents have not been interpreted.
- 2. That patients may become aware of such previously warded off contents without much anxiety, for they do not, in most circumstances, decide to lift their defenses and make the contents warded off by them conscious until they have to a considerable extent unconsciously overcome their fears of being endangered by the contents.
- 3. That patients may not come into powerful conflict with previously repressed contents when these contents become conscious—for patients generally do not make the contents conscious until they judge that it is safe to experience them.
- 4. That patients need not isolate the previously repressed contents once they emerge into consciousness (or otherwise defend against awareness of their meaning). This is because patients generally do not make repressed contents conscious until they decide that they may safely face them.

In contrast, in Freud's early theory (Theory A), a repressed mental content which is not interpreted ordinarily remains unconscious unless the content is intensified. According to Theory A, a repressed content which is intensified may push more powerfully toward consciousness, and evoke intensified defensive efforts. If it is intensified enough, it may emerge to consciousness in a relatively undisguised form, in which case the patient continues after its emergence to be in conflict with it, to feel anxious about it, and to attempt to rerepress it. If, however, the repressed content becomes conscious in a sufficiently disguised compromise formation, the patient may not experience further conflict with it, but, since its import is disguised, the patient does not understand the significance of the newly emerged content, and does not use the content to understand himself better until its significance has been interpreted.

The Research Study

Suzanne Gassner and her associates carried out a research study (Gassner, Sampson, Weiss, & Brumer, 1982) of how warded-off contents become conscious in the first 100 sessions of the Mrs. C. case. The method used by Gassner was originally devised by Professor Leonard Horowitz of Stanford University in conjunction with several other members of our research group (Horowitz, Sampson, Siegelman, Wolfson, & Weiss, 1975). In the present study, this method was improved, and was applied to a new case. The purpose of Gassner's study was to determine, as our hypotheses would lead us

to anticipate, (1) whether a patient during analysis may become conscious of previously unconscious contents which have not been interpreted, (2) whether he may become conscious of them without feeling anxious about them, and (3) whether he may use his knowledge of them to advance his understanding of himself.

The first step in this study was to identify a pool of *new* contents or themes within the 100 sessions; that is, contents which had not been described by the patient earlier. In carrying out this step, Gassner identified all of the new themes appearing in hours 41 to 100.

The second step required psychoanalytic clinicians to judge, on the basis of their own formulations of Mrs. C. (derived from reading the process notes of the first 10 sessions of her analysis), which of this pool of new themes had, at the beginning of her analysis, been unacceptable to the patient, and hence warded off. We used 19 psychoanalytic clinicians for this judgment. The judges rated each new theme on a 5-point scale. A rating of "5" reflected the judge's strong belief that the new theme had previously been unconscious.

In presenting the statements of the new themes to the judges (for judgment as to whether they had been previously warded off), we omitted any cues as to whether or not the patient was anxious or conflicted when the themes first emerged. Our purpose was to avoid biasing the judgment by such cues.

Findings and Discussion Thirteen of the 100 statements received a mean scale score of "4" or greater—that is, there was substantial agreement between judges that these 13 statements had been previously unconscious. These statements were designated as "judged previously warded off."

Did our method *actually* yield *clinically meaningful* warded off contents? We believe so. The patient herself, the treating analyst and, finally, a research group working independently from the judges, all concluded from their own independent perspectives that the statements judged as warded off had indeed been previously warded off, and, moreover, that they were of central significance to the patient.

The evidence that the patient judged the statements to contain warded off themes is the following: Seven of the 100 new themes were introduced by the patient with phrases acknowledging her own awareness of facing a previously warded off content. Examples of such phrases are: "I've never let myself before think or feel such and such" or "I can't believe I'm saying that . . . " We did not provide the judges with these cues. That is, we had deleted these prefatory comments. Nonetheless, the judges gave these seven statements—which the patient herself identified as previously warded off—a mean rating of approximately "4."

The treating analyst also thought that the statements which our 19 judges identified as previously warded off had indeed been warded off earlier. The treating analyst independently completed the same judgment task as our 19 judges. He rated as highly warded off 11 of the 13 statements which the judges had identified as warded off. Moreover, he considered the statements to which our judges had given the highest ratings as so revealing that he asked us to disguise their contents for purposes of publication.

Finally, our research group, working independently of the judges, on the basis of its own case formulation, evaluated the statements identified by the 19 judges as previously unconscious. The research group agreed with the judges that these new themes expressed significant, previously unconscious impulses or previously unconscious painful childhood memories and ideas.

Thus, three converging lines of evidence gave us confidence that our method—which is, after all, a variant of the usual clinical method of identifying unconscious contents—did identify clinically meaningful and significant previously unconscious contents.

Our next finding (which required us to read every statement which the analyst made prior to the emergence of the new themes) was that the analyst had not made any interpretations, prior to their coming forth, which were in any way related to 12 of the 13 statements containing themes judged highly warded off.

Thus, we demonstrated that a number of clinically meaningful unconscious contents became conscious in the latter part of the first 100 hours of Mrs. C.'s analysis, and they did so without prior interpretation.

Did the patient experience much anxiety or conflict as these contents emerged? To determine this we used three different measurements of anxiety or conflict: Mahl's speech disturbance ratio; the Gottschalk-Gleser anxiety scale; and clinical ratings of anxiety by experienced clinicians.

The following example illustrates the application of these anxiety measures to a brief segment of patient speech:

(silence) And I was just thinking too about the fact that, sometimes when I'm really pushing him to be angry at me and even if we're having a kind of fight where I'm wanting to hurt him physically, he's never—I've, I've sometimes sort of been afraid, well, he is stronger than me and he could hurt me. I've been sort of afraid of it. But I think I'm much more, I fee—, I feel some kind of a pleasure out of the fact that he is much stronger and I like something to happen so I'm made aware of it, very immediately aware of the fact that he's much stronger and, and even though I might be frustrated at this sometimes, if he can just hold me and I can't even move, there's, I think there's something I like very much about that.

This segment of patient speech was scored just below the patient's mean anxiety score for all random segments on Mahl's Speech Disturbance Ratio, and similarly on the Gottschalk-Gleser Anxiety Scale. The segment was rated slightly lower by the experienced clinical judges listening to audio tapes; specifically, about one standard deviation below the mean anxiety rating for all random segments.

We compared the anxiety level on each of these three measures when highly warded off contents emerged, with the anxiety level accompanying the appearance of randomly selected statements. The patient was significantly *less anxious* on the Mahl score when warded off contents emerged than when random statements emerged; the other two measures of anxiety showed no differences in anxiety level in the two circumstances.

Thus the patient became conscious of a number of clinically meaningful unconscious contents, without interpretation, and without evidence of intensified anxiety or conflict.

Finally, we used the Experiencing Scale to determine whether the patient permitted herself fully to experience the previously warded off contents which she was bringing forth. This scale measures the degree to which the patient is experiencing the mental contents which she is discussing. [We may illustrate the application of the Experiencing Scale to case material by noting how the brief segment of patient speech reported above was scored. The segment received a Mode Experiencing Score of 3.25 (mean for all random segments is 3.0, standard deviation .79), and a Peak Experiencing Score of 3.75 (mean for all random segments is 3.61, standard deviation is .75). The segment was thus scored just slightly above the mean for all random segments on the two Experiencing Scale measures.]

The patient's material (speech, associations), when previously warded-off contents

emerged, was rated significantly higher on the Experiencing Scale than her material when randomly selected statements were made. This means that the patient was more involved with the feelings she was associating with the warded-off contents than she was at randomly selected times.

This combination of results is in agreement with predictions based on Theory B hypotheses. The patient, according to these hypotheses, maintained her defenses against certain mental contents until she unconsciously judged that she could safely experience these contents. She then made these contents conscious, and worked with the contents to increase her understanding and control over her mental life. These ideas readily account for our findings that the patient regularly became aware of previously warded off contents which had not been interpreted; that she was not anxious when she became aware of these contents; and that she experienced these contents vividly rather than attempting to isolate them or rerepress them.

In contrast, the combination of findings is not in agreement with predictions based on Theory A hypotheses. Indeed, Theory A hypotheses cannot readily account for these results. Theory A hypotheses could explain the patient's becoming aware of uninterpreted warded-off contents by the idea that these contents had become intensified and so thrust their way into awareness. However, if the contents became conscious, because of their thrust, the patient would either be anxious when these contents came into awareness, or, if the contents were sufficiently disguised or isolated, she would be calm, but she would not experience the contents vividly and would not work with them to further her self-understanding and self-control. In contrast to these expectations, Mrs. C. was not particularly anxious when previously warded-off contents came into awareness, she experienced these contents vividly, and she worked with these contents.

We conclude that Theory A hypotheses *cannot* provide a complete explanation for how unconscious mental life is regulated. Further research is needed to test whether Theory B hypotheses can provide a complete explanation, or whether a combined A plus B Theory, or yet some other theory, best accounts for the pertinent observations.

Concluding Remarks

We have described and illustrated a research approach based on a distinctive set of hypotheses about the behavior of the patient in psychotherapy, and how that behavior is affected by the therapist. We have tested certain of these hypotheses by reliable, rigorous, and case-specific methods. Because these hypotheses purport to offer a comprehensive account of psychotherapy, further research on their accuracy and power may cast considerable light on how therapy works, or fails to work.

Members of our research group are carrying out such studies at this time. They are studying both long-term therapies and brief therapies; therapies both with the young adult patient typically seen in community clinics or private practice, and with middle-aged and elderly patients; and therapies with patients varying in pathology from the well-functioning neurotic to the more seriously disturbed and even borderline or psychotic patient.

Our hypotheses and methods may be applied to the study of treatment carried out by therapists of any theoretical orientation,⁵ and most of our own research is being car-

^{5.} For example, we may study a patient's testing of the therapist, whether and to what extent the therapist's response passes the test, and how the patient responds to a passed or failed test, regardless of whether the therapist conceptualizes the patient's behavior or his own in these terms.

ried out on cases treated by therapists who are not members of our research group, and who are unfamiliar with its ideas.

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