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N.L. 339 (Rev. 8/80)
MASTER'S THESIS

THE ANTECEDENTS AND CONSEQUENCES OF REFLECTION
IN THE INITIAL INTERVIEW

SHEILA D. BROWN
(ALVIN R. MAHRER)

THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES
OF THE UNIVERSITY OF OTTAWA

OTTAWA, ONTARIO
JULY, 1981

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ACKNOWLEDGEMENTS

This paper was prepared under the supervision of Alvin R. Mahrer, Ph.D., of the School of Psychology of the University of Ottawa. The writer is also indebted to Donald Boulet, Ph.D. Gilles Chagnon, M.A., and Gloria Fellers, Ph.D., of the School of Psychology, for their consultation and criticism in the analysis of the data.

In addition, the writer would like to thank Gary Durak, Patricia Gervaize, Rhoda Loeb, Heather McAlear, Catherine Pink, Allan Rollie, Stephanie Sawyer and Marvin Zemmel, all graduate students on Dr. Mahrer's research team, who helped with the data collection. Dialogue with Lynn Hollander was also much appreciated.
CURRICULUM STUDIORUM

Sheila D. (Goodine) Brown was born February 13, 1947, in Fredericton, New Brunswick. She received her Bachelor of Arts degree in English Literature from Carleton University, Ottawa, Ontario, in 1969. She received her Honours degree in Psychology from the University of Ottawa, Ottawa, Ontario, in 1978.
ABSTRACT

This study was designed to investigate the immediate antecedents and consequences of reflection in the initial psychotherapy interview. Two verbatim transcripts of initial interviews conducted by Carl Rogers with patients "Mike" and "Cathy" were used as subjects. A system of patient and therapist categories was applied to each interchange in the dialogue by a team of judges. The first hypothesis, which proposed the non-selective use of reflective statements by the therapist, was accepted. Rogers showed no preference in reflecting one patient category more than another. The second hypothesis, which proposed patient self-exploration as the immediate consequence of therapist reflection, was rejected. Instead, reflections tended to result in pulling the patient's attention onto the therapist, highlighting the therapeutic interaction rather than the patient's tendency to self-explore.
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INTRODUCTION

The purpose of this study is to examine the actual in-therapy use of reflection, by an exemplar of that technique, in the initial interview. Two sets of questions are central:

(a) When does the therapist use reflection? That is, what kinds of client statements precede the therapist's use of reflection? Does the therapist tend to reflect when the patient makes certain kinds of statements rather than other kinds? Does the therapist use reflection selectively or non-selectively?

(b) What are the effects of reflection? That is, after the therapist reflects, what does the patient tend to do? What are the immediate consequences of the therapist's reflections?

This study then, concerns itself with the immediate antecedents and consequences of reflection, without reference to the long-range goals or cumulative effects of this technique. In view of the likelihood that the indications for, and the effects of reflection may vary with different phases of therapy, the focus of interest is therefore limited to the initial interview.

Reflections themselves have been studied from two main vantage points: (a) as a clinical technique especially with a client-centered theory of psychotherapy and (b) as a conditioned reinforcer, from the perspective of a learning
theory approach to psychotherapy. The question of how a reflection may serve as a reward or reinforcement brings into the foreground the matter of theoretical frameworks. Accordingly, in the present research, the theoretical rationale for deriving hypotheses will be from a client-centered perspective, the school in which reflection as a bona fide technique has its roots.

Even though this is the case, client-centered research has not studied reflections per se, but rather empathy. While reflections may make manifest the therapist's empathic attitude, Rogers (1957) asserts that attitudes cannot be directly perceived, and that it is the therapist's words and behaviours that the client perceives. For the purposes of research then, it is the operation itself that is observable and not the attitude behind it. The present study seeks to avoid much of the confusion involved with an attitude construct such as empathy in empirical research. Kurz and Grummon (1972) drew attention to this difficulty with their conclusion that empathy is a multifactor construct that has never been adequately measured. They correlated six different empathy measures with each other, with a measure of therapy process (depth of self-exploration) and with several outcome measures. For the most part, the empathy measures were uncorrelated with each other, and unrelated to outcome. Kurz and Grummon questioned whether anyone has ever really been able to measure
empathy successfully, since their results indicated that previous research had been measuring several different variables employing a common label.

Again, the focus of the present research variables is on reflection, which can be seen from some vantage points as an operational component of empathy. However, reflection has become an extensively used technique by counsellors and psychotherapists outside the client-centered approach (Patterson, 1980). Therefore, the interest here is in reflection in general as well as in its client-centered role as transmitter of empathy. Similarly, the focus here is on reflection as a general class, rather than on such finer-grained aspects (Beier, 1951; Brammer & Shostrom, 1968) as how reflections vary in content, depth, or accuracy.

The first chapter will review the theoretical and empirical literature pertinent to the antecedents and consequences of reflection. A second chapter will present the experimental design, procedures, and statistical analyses used. A third chapter will present the results, and the fourth chapter will be a discussion of findings with summary and conclusions.
CHAPTER I
REVIEW OF THE LITERATURE

This chapter is divided into five sections. The first presents reflection within a client-centered theory of personality and psychotherapy. The second presents reflection within the research literature in terms of its varying definitions. The third section reviews the theoretical and empirical literature germane to the antecedents of reflection in the initial interview. The fourth section deals with the consequences of reflection in a similar manner. The fifth section presents a summary and statement of the hypotheses.

Reflection Within Client Centered Theory

In order to draw meaningful hypotheses regarding the antecedents and consequences of reflection in the initial interview, this technique must be understood within the context of a client-centered theory of personality and psychotherapy.

Client-centered theory postulates one motivational force within the individual, under which all others may be subsumed. This is the inherent tendency to self-actualize, or grow and develop in ways which enhance the individual organism and its capacities. The striving is toward autonomy rather than
heteronomy, or control by external agencies (Rogers & Meador, 1973). This natural tendency interfaces with the environment in ways that may thwart it. The child finds that the significant others in his life impose 'conditions of worth' or standards of behaviour with which he must comply in order to retain their love. Some of these conditions of worth become assimilated into the child's self-concept and define it in part. To retain a sense of self-worth, he may then evaluate his experience solely against these external yardsticks, without reference to his own organismic valuing process. However, the original organismic urge is experienced at the visceral level, so that an incongruence develops between the child's organismic needs and his needs for self-regard (Rogers, 1959). He then begins to perceive his experience selectively, so that some of it is distorted or denied to awareness altogether. The rigidity of perception in these areas hinders growth change and adaptation.

When the self-concept becomes structured in ways which are incongruent with organismic experiencing, neurosis occurs (Rogers, 1959, p. 192). At this point, a person may benefit from the therapeutic relationship. The central hypothesis of client-centered therapy states that if the necessary and sufficient conditions exist in the attitude of the therapist, namely genuineness; empathic understanding, and unconditional
positive regard, then constructive personality change will occur in the client (Rogers, 1957). Rogers summarizes the therapeutic process thusly:

"In a relationship in which the individual receives unconditional positive regard, he may risk allowing into awareness and accurately symbolizing previously distorted or denied experiences. In an atmosphere of non-judgmental understanding, he may begin to allow previously denied organismic urges to be a part of his concept of self. Thus, the process of therapy is a process in which, ideally, the individual exchanges his conditions of worth for a trust and valuing of the wisdom of his developing organism in its entirety" (Rogers & Meador, 1973, p. 131).

This empathic understanding is the quality in the therapeutic relationship which is possibly the most potent factor in bringing about personality change (Rogers, 1975). When truly empathic, the therapist immerses himself in the client's phenomenal world to the point where the therapist's own experiencing provides him with the referents necessary to communicate that accurate understanding to the client. For Rogers, this is the necessary and sufficient work of therapy. All techniques should be geared toward "making it clear that the counselor is thinking and feeling and exploring with his client" (Rogers, 1951, p. 31).

It is generally held in client-centered therapy that this is made clear through the technique of reflection (Brammer & Shostrom, 1968; Rogers, 1942, 1975). A brief and
general definition is expressed as:

"... the attempt by the counselor to paraphrase in fresh words the essential attitudes (not so much the content) expressed by the client. The counselor attempts to mirror the client's attitudes for his better self-understanding and to show the client that he is being understood by the counselor" (Brammer & Shostrom, 1977, p. 182).

In summary, the client-centered therapeutic relationship provides the necessary and sufficient conditions to dispel the conditions of worth which have caused the patient's split between his self-concept and his organismic experiencing. Knowing he is accepted unconditionally, he can self-explor in an empathic relationship, and reclaim previously distorted and denied parts of his experiencing. In this way, he recon-stitutes his self-actualizing process. For Rogers, reflection is a technical channel for empathy, the attitude which cha- racterized the client-centered therapeutic relationship. In general, client-centered therapists transduce their empathic understanding into reflective statements.

The Meanings of Reflection

Client-centered research has studied levels of empathy rather than the reflective technique itself. Therefore most of this body of research is indirectly related to the present research questions. Other researchers though, have directly
examined reflection from their understanding of client-centered theory, producing a variety of concepts all labelled 'reflection.' It is necessary to clarify these various meanings of reflection.

Reflection may be grasped as one way of operationalizing empathy. The difficulty here is that statements of low and high empathy may be qualitatively and not just quantitatively different in that the therapist's statement may contain a high level of inference, or it may have little or none at all.

Which then are the reflections? The lower and middle levels of Carkhuff's (1969) empathy scale may be thought of as partial or complete reflections. At the highest level of empathy, "the helper's responses add significantly to the feeling and meaning of the expressions of the helpee ..." (p. 175).

At the highest level of empathy, it would seem that inference may be substantial. On this basis, Mowrer (1953) considers that the higher levels of empathy are less different from interpretations than they appear to be. "While the client-centered therapist eschews interpretation, by (reflection) he is continually making inferences and thus going beyond, slightly or greatly, what the patient himself says" (p. 54). Ultimately, according to Mowrer, client-centered reflections even have the same purpose as interpretations,
namely, the lifting of repressions and the attaining of insights. Still, Rogers' (1951, pp. 208-9) position is that interpretations are not offered, and that reflection instead makes the client feel accepted and not evaluated. While this may be the case, to Mowrer the tentativeness with which the client-centered therapist offers deeper felt meanings does not alter the contention that they are similar to interpretations.

If indeed the higher levels of empathy alter the nature of client-centered reflections so that they are tantamount to interpretations, it can be seen that high and low levels of empathy might well have different therapeutic antecedents and consequences. For example, Truax' (1966) study revealed that some of Rogers' most empathic responses are preceded by insightful statements from the client. Also, when the consequences of reflection and interpretation have been compared empirically, both similarities and differences have been found. For example, interpretations may be more effective in lifting repressions (Keet, 1948) and in encouraging self-exploration (Auerswald, 1974), although the opposite effects have also been reported (Bergman, 1951; Hekmat, 1971). McCarron and Appel (1971) found that patient and therapist levels of autonomic arousal are higher with interpretations than with reflections.
Within the client-centered framework then, the meaning of reflection seems somewhat unclear. It appears to be confounded with the meaning of interpretation and may vary with the different levels of empathy. From the client-centered point of view, a reflection is by definition a reflection of feeling, whether this feeling has been overtly stated or vaguely implied. A system of content analysis which uses a traditional definition is that of Clara Hill (1978) where reflection is a "repeating or rephrasing of the client's statement which must contain reference to stated or implied feelings. May be based on previous statements, nonverbal behaviour, or knowledge of the total situation. May be phrased either tentatively or as a statement" (p. 467).

Some disadvantages follow from this definition: (a) The therapist may well be doing something different when he observes a statement of feeling than when he intuits an implied one. (b) The therapist is using different data when he repeats or rephrases a client's immediate statement, (whether of feeling, thinking, sensing or any other kind of patient process) than when he uses previous statements or a knowledge of the total situation in formulating his response. Again these differences can be seen as significant along a level of inference continuum (Figure 1.1). It may be predicted that such a confounding with interpretation could
Figure 1.1 Dimensions along which reflection is commonly defined.
cause difficulty for raters and reduce inter-rater reliability (Hill, Thames & Rardin, 1979).

Broader definitions which do not limit reflections simply to feelings, but include reflection of other patient processes, may be so all-inclusive as to further the confounding with interpretations. Stiles' (1979) definition is an example:

"Reflection concerns the other's experience in the other's frame of reference, focused on the other. The intent of reflection is to express the other's experience (thought, feeling, action, perception, intention, etc.) as the other sees it (i.e., in the other's frame of reference). However, the speaker may use different words or even go deeper than the other has gone in expressing an idea. Hence not only restatements but also summaries and clarifications, and even deep or tentative articulations of the other's feelings are scored as reflection, provided they seek to express those feelings as the other views them" (p. 53).

The clinical and analogue research literatures approach the definition of reflection in a host of different ways, which can be grouped according to whether reflection is primarily of feeling and not of other content (Hackney & Nye, 1973; Highlen & Baccus, 1977; Hill & Gormally, 1977), or whether the mirroring of affective and other content as well constitute reflection (Frank & Sweetland, 1962; Hekmat, 1971; Porter, 1942; Powell, 1968). Also, some definitions include inferences the therapist makes about underlying
emotional states and other non-verbalized material such as previously reported content (Hill, Thames & Rardin, 1979; Strupp, 1955), and some definitions exclude therapist responses which attempt to mirror underlying, implied, or otherwise unverbalized aspects of the patient's message (Merbaum, 1963; Merbaum & Southwell, 1965; Porter, 1942; Waskow, 1962).

Two continua emerge, along which reflection is commonly defined. These are: (a) the level of inference acceptable and (b) the kind of patient process that is reflected. Figure 1.1 illustrates the dimensions along which definitions of reflection vary.

The quadrants of the resulting graph in Figure 1.1 may be used as a way to describe the various definitions found in the literature. A client-centered definition stresses feelings almost exclusively, whether directly stated or vaguely implied. It is therefore contained by quadrants 1 and 4 of Figure 1.1. The clinical research uses either a client-centered definition (i.e., Hill, Thames & Rardin, 1979), or a broad, somewhat confounded one that occupies all four quadrants of Figure 1.1 (i.e., Stiles, 1979; Strupp, 1955). The analogue research literature, less tied to a client-centered school of psychotherapy, is divided amongst type 1 definitions (e.g., Highlen & Baccus, 1977; Merbaum & Southwell,
1965), type 1, 2 definitions (e.g., Hekmat, 1971; Powell, 1968; Waskow, 1962), and type 1, 4 definitions (e.g., Barnabei, Cormier & Nye, 1974). In the light of these meanings of reflection, it will be necessary to select one appropriate for the present research questions and hypotheses. This point will be discussed in Chapter II.

The Antecedents of Reflection in the Initial Interview

The first part of this section reviews the client-centered theoretical rationale from which hypotheses about the antecedents of reflection can be drawn. The second section reviews the empirical studies which bear on the research questions.

The Perspective of a Client-Centered Approach

Within the client-centered theory of personality development, one of the effects of internalizing the 'conditions of worth' into the self-concept is the compromising of the self-actualizing tendency. The negative result may be that the child begins to perceive his experience selectively, in accordance with these externally imposed conditions (Rogers in Koch, 1959).

As has been previously stated, the necessary and sufficient conditions characterize the client-centered therapeutic
relationship, that is they are to be consistently present. Ideally, the therapist's genuineness is total, his positive regard unconditional, his empathic attitude, constant. To the extent that these conditions are consistently present, the therapeutic relationship is enhanced and positive personality change can take place (Rogers, 1957). In other words, the therapeutic relationship permits the dissolution of the conditions of worth, and the client gradually learns to experience freely rather than selectively (Rogers, 1958).

Within the client-centered approach, reflection is an operational component of the important "therapeutic conditions." As such, Rogers (1951) holds that such statements occur on a consistently non-selective basis. In his 1956 debate with Skinner, he was philosophically against control through selective reinforcement. This is to say, the client-centered therapist is held to use reflections non-selectively, rather than following certain kinds of patient statements. The following quote from Rogers (1942) is an unequivocal statement regarding his consistent use of reflection on a non-selective basis:

"This principle (of reflection) holds, no matter what the type of emotionalized attitude ... negative attitudes of hostility, discouragement, and fear, positive attitudes of affection and courage and self-confidence, or ambivalent and contradictory attitudes. The approach is sound whether the client's feelings are directed toward himself, toward others, or toward the counselor and the counseling situation" (p. 173).
Where the counselling situation is the initial interview, it is for Rogers, like any other interview in terms of the therapist's role as reflector of the client's attitudes (Rogers, 1942; Rogers & Meador in Corsini, 1973). Accordingly, client-centered theory seems to suggest that reflections in the initial interview, as in subsequent ones, will be used on a non-selective basis, with no especial antecedent patient conditions or statements.

**Empirical Research**

There is little research which examines specifically when reflections are used. Some studies merely tabulate frequencies for certain types of responses and shed little light on the manner in which those responses are used.

Using a definition which is limited to the reflection of the patient's affect, and applying it to an initial interview, Hill, Thames and Rardin (1979) found only 18% of Rogers' responses were reflections, although 15% were unclassifiable. Interpretations accounted for 7% of responses, a frequency higher than is usually imputed to Rogers when the definition of reflection subsumes high inference statements. For example, Stiles (1979) used a definition which included summaries, clarifications, and even deep or tentative articulations of the client's feelings. He found such responses to account for 50% of those made by client-centered therapists,
Rogers among them. Strupp (1955) also used a broad definition and attained an even higher response rate of reflections among client-centered therapists (75.5%).

When Strupp (1957) used a 'level of inference' scale in conjunction with his categories in order to help make sense out of the data employing these broad therapist response categories, he found that Rogers was significantly more inferential in the initial interview than in subsequent ones with Mary Jane Tilden, even though he is consistent across interviews in the frequency with which he uses reflection. Not only does this confirm the previously discussed confounding of reflection with interpretation, but also that reflections are consistently used in client-centered initial interviews, although perhaps in a somewhat different way as compared with its use in subsequent interviews.

These results indicate the extent to which client-centered therapists use reflections, but shed little light on the question of whether reflections are used non-selectively. It is still not clear whether the therapist chooses to reflect on the basis of some contingencies.

No studies were found which examined the antecedents of reflection in the initial interview of actual psychotherapy, with experienced therapists. The only study which approximates these conditions was done by Truax (1966), although the study was sharply criticized by Lieberman (1969) regarding statistical
assumptions and other methodological aspects. Truax did
not study the antecedents of reflection per se, but rather
those of therapist responses at various levels of empathy,
throughout a case study. Truax found that Rogers did indeed
respond differentially and selectively to certain classes of
patient statements. He examined the hypothesis that empathy,
warmth and directiveness are offered throughout therapy in a
manner not contingent upon the patient's behaviour, that is,
non-selectively. In an examination of verbatim excerpts of
a single case seen by Rogers, Truax found that Rogers respon-
ded with more warmth and empathy, and less directiveness,
to certain classes of patient statements, and with less
empathy under other patient conditions.

According to Truax (1966), Rogers seems not to respond
differentially to patient behaviours described in the study
as blocking, anxiety, negative versus positive feeling
expression, or catharsis. No statistically significant
relationships were found between therapist empathy, of which
reflection may be considered an operational component, and
these classes of antecedent patient behaviour; learning of
discriminations about self and feelings; clarity or lack of
ambiguity; expressions of insight; verbal expression that
resembles therapist verbal style; expressions of problem
orientation. Truax concludes that Rogers rewards self-explo-
ration and insight with empathic responses, and is less empathic
when his patient is ambiguous. Although Lieberman (1969) is highly critical of Truax' work, a limited case can be made for the idea that the technical implementations of the empathic attitude might be contingent to some degree.

Summary

The clinical theoretical literature on the antecedents of reflection in the initial interview is rather scarce, but may be summarized in order to generate expectations for the present research. The empirical literature is particularly sparse, but contains some suggestion that certain classes of patient statements tend to precede therapist reflections more often than others. Client-centered literature does not address itself directly to the antecedents of reflection, nor to the client conditions under which reflections ought to be effective. Rather, reflection is considered by client-centered therapists to be a conveyor of the facilitating conditions of therapy. On this basis, they claim to use the technique often and non-selectively. Within the client-centered framework, reflections may be expected to occur with no especial antecedent patient conditions or statements in the initial interview.

The Consequences of Reflection in the Initial Interview

The first part of this section reviews the client-centered theoretical rationale from which hypotheses about
the consequences of reflection may be drawn. The second section reviews the empirical studies which bear on the research questions. The last section briefly summarizes the first two.

The Perspective of a Client-Centered Approach

In client-centered therapy, the essential framework within which personality change occurs, is held to be the therapeutic relationship (Rogers, 1957, 1970, 1975). The therapist's non-evaluative understanding, communicated through sensitive reflections, enables the client to explore his world freely and without fear of recrimination. On this basis, reflections are held to enhance the relationship. The result is the client's increased ability to self-explore.

In support of this idea, Barton (1974) asserts that reflective statements of the "you really feel ..." variety have the persistent effect of focusing both therapist and client upon the client's self. Rogers (1970) and Brammer and Shostrom (1968) point out how this involvement of the therapist with the patient's self is to help the patient feel deeply understood. Mowrer (1953, p. 544) supports this view by stating that reflection is particularly useful in establishing rapport within the relationship, especially in the early stages (p. 565). This point has special implications for the initial interview, which may be regarded as rather
critical as far as the establishment of rapport is concerned.

Rogers (1970, 1975) holds that reflection should lead the patient to engage in self-exploration; indeed, from the perspective of client-centered therapy, reflection and patient self-exploration are important means-ends relationships. Rogers (1970) claims that the communication of empathic understanding releases the patient to tell the therapist more about his world. Accurate reflection enables the client to feel understood, and he then, "finds himself revealing material he has never communicated before, and in the process, he discovers a previously unknown element in himself" (1975, p. 6). To Rogers, this is the first step in altering the self-concept which makes behaviour change possible, and in 1958 he spelled out the seven strands of patient process wherein the patient expands his capacity to self-explore and hence reach higher levels of personality integration. This progress is possible because the client experiences the therapist's reflection of his attitudes as non-threatening, according to Rogers, and also, "in its very objectification of the essence of what has been expressed, tends also to draw the client's attention to the many things which have not been said" (1951, p. 92). In this way, the self-exploration process is held to be self-perpetuating. In client-centered therapy, perhaps the most desired and effective consequence
of proper reflection by the therapist, is the patient's increased tendency to talk about his self (Rogers, 1975).

In the same vein, Brammer and Shostrom (1968) say that reflections encourage the patient (1) to express his feelings, (2) to own them as part of his self, (3) to confront himself (4) and to gain insight into himself. These are aspects of the self-exploration process conceived by Rogers, and all of them may be manifested in the patient's increased tendency to talk about his self.

To summarize what the clinical literature suggests, the immediate and long-term consequences of reflection are two-phased. Through the mediating effect of an enhanced therapeutic relationship, the net consequence of reflective statements is an increased tendency for the patient to self-explore.

Empirical Research

From a research perspective, reflection has chiefly been studied as an aspect of the more general class of empathy. Here the research is both ample and consistent in that empathic statements tend to be followed by patient intra-personal self-exploration (Bergin & Garfield, 1971; Bergin & Strupp, 1972; Kurz & Grummon, 1972; Truax & Carkhuff, 1965; Truax & Mitchell, 1971).
In Rogers' (1967) study of schizophrenic patients, it emerged that the deeper the level of the therapist's communicated empathic understanding, the more the patient exhibits a deeper level of self-experiencing and self-exploration. In that same research project, Rogers says, "In most cases, patient progress goes hand in hand with effective reflection, that is to say, with the communication of accurate empathy" (p. 500).

In Truax' (1966) study, he demonstrated that empathy is antecedent to behaviour change, or that empathic responses have very real reinforcement effects, and as such, have consequences in terms of patient behaviour. Of the five classes of patient behaviour to which Rogers selectively responded, four showed increases over time in therapy. Patient ambiguity decreased. In other words, as empathic therapy progressed, patients tended to increase responses which contained (a) discriminations about self and feelings (b) expressions of insight (c) similarity to therapist's verbal style, and (d) expressions of problem orientation. Except for the tendency to model after the therapist's verbal style, the other consequences might all be seen as aspects of self-exploration. These results are important insofar as reflection may be considered an operational component of empathic understanding.
The bulk of analogue and quasi-therapy research is based on the premise that self-exploration is an appropriate in-therapy patient behaviour. The hypotheses put forward are in terms of which therapeutic techniques, reflection among them, bring the most yield in patient self-references. Generally, a verbal conditioning paradigm has been used (Adams & Frye, 1964; Auerswald, 1974; Barnabei, Cormier & Nye, 1974; Kennedy & Zimmer, 1968; Merbaum, 1963, Merbaum & Southwell, 1965; Rogers, 1963) where self-references are reinforced with experimenter reflections. While other therapeutic techniques such as probes and interpretations have at times been found to be more potent reinforcers of self-references than reflections (Adams & Frye, 1967; Hill & Gormally, 1977), the results regarding the effects of reflection on the patient's tendency to talk about himself, have been equivocal. Some studies report that reflection is followed by increases in self-discussion (Hekmat, 1971; Highlen & Baccus, 1977; Hoffnung, 1979; Kennedy & Zimmer, 1968; Merbaum, 1963; Merbaum & Southwell, 1965; Powell, 1968). Others however, find no change or even some decrease in that kind of effect (Adams & Frye, 1964; Auerswald, 1974; Barnabei, Cormier & Nye, 1974; Hill & Gormally, 1977). Waskow (1962) found reflections of content to increase such self-references, while reflection of feeling did not act as a reinforcer. She concluded that
the conditioning of verbal self-references was not as easily achieved as the verbal conditioning literature would indicate. Hekmat (1971) says reflection is most effective when used as an intermittent reinforcer. In any case, these analogue studies do not yet yield any consistent answer as to the relationship between reflection and self-exploration.

Even though constructs such as reflection and self-exploration have traditions upholding their relevance to the therapeutic process, it is still not necessarily justifiable to generalize to actual psychotherapy, findings from analogue-type research. While the justification for studying such constructs emerges from observations of what typically goes on in psychotherapy, these are not synthetic constructs borne of laboratory findings, and are probably not best investigated outside the natural psychotherapy setting (Raimy, 1948).

Also, even though the vast majority of analogue studies involve initial contacts between subject and experimenter, the lack of consistent results does not illuminate the consequences of reflection in the initial interview.

In one of the rare studies of the consequences of reflection by experienced psychotherapists with real patients in actual psychotherapy, Bergman (1951) found that self-exploration was heightened, especially as compared with the consequences of other therapeutic operations such as
interpretation, structuring, and requests for clarification. These latter techniques were actually linked with patient tendency to abandon self-exploration. Bergman examined specifically the patient-therapist interchange initiated by the patient's request for evaluation, selected from 246 interviews conducted by client-centered therapists. While he found reflection to be the only therapeutic operation to be followed more often by self-exploration than can be accounted for by chance, this interesting finding may or may not be generalizeable to types of patient-therapist exchange other than those initiated by the patient's request for evaluation.

Frank and Sweetland (1962) studied the effects of reflection in more general therapeutic circumstances. Using a modification of Snyder's (1945) category system, with a type 1, 2 definition of reflection (see Figure 1.1) they obtained data from 40 interviews, conducted by 4 therapists with 10 subjects. Clarifications, wherein "the therapist summarizes a complete area of confused emotionality in one or two careful sentences" (P. 137) were seen as a totally different category of therapist response from reflection, and had quite different effects. From the present perspective, inference level is seen as the differentiating factor. Frank and Sweetland reported that reflections did not result in self-exploration or insight responses at levels significantly
different from chance, whereas clarifications did. However, reflections had the immediate effect of reducing patient uncertainty, while clarifications did not.

It is difficult to assess whether these results square with those of other empirical investigations. Truax (1966) for example, did not clearly specify what the low empathy responses actually were, that resulted in a decrease in patient ambiguity. Perhaps they were simple restatements and reflections, in which case the results would be in accord with those of Frank and Sweetland (1962). That tie however, is merely a conjectural one. The Bergman (1951) study may be linked with that of Frank and Sweetland (1962) with more certitude, by adjusting for definitional differences. Bergman's definition of reflection is relatively broad, and encompasses many responses that Frank and Sweetland would call clarifications, and from the vantage of the present research, contain appreciable levels of inference. The resulting overlap between reflections and clarifications in terms of their effects is then to be expected. While it seems clear that clarifications encourage patient self-exploration, it is far less clear whether or not reflections have this effect.

Summary

The expectation that reflections enhance the relationship, resulting in patient self-exploration, is consistently held by
Rogers and client-centered therapists in general. Their research with empathic statements yields findings which support the theory.

When empathy is operationalized as reflection, research results are much more ambiguous. Analogue research findings are split on the issue as to whether reflections reinforce self-exploration.

Only two studies examine the consequences of reflection in actual psychotherapy, and neither is limited to the initial interview. When the operational definition of reflection contains high levels of inference, self-exploration tends to result. When the definition contains little possibility of inference, this effect seems not to hold. Only one study acknowledges a consequence of reflection other than self-exploration. The paucity of research with actual therapy renders these conclusions somewhat tenuous.

The research literature generates expectations for both support and negation of the idea that reflections result in self-exploration. There is some suggestion that reflection might have consequences other than the primary one of patient self-exploration. From client-centered theory, it is expected that reflections, by promoting good rapport, will result in patient self-exploration.
Summary and Hypotheses

Statement of the Problem

The strategy of the present study is to examine when the therapist uses reflection, and the effects of reflection, within the context of an initial psychotherapy session conducted by an experienced client-centered therapist.

If statistically significant antecedents and consequences are found, it may be possible to determine whether reflections result in different kinds of consequences, depending on the antecedents.

1. What are the antecedents of reflection in the initial interview? Does the therapist tend to reflect selectively, that is, following certain kinds of patient statements more than others? Does the therapist use reflection non-selectively, that is, independently of the kind of patient antecedent statement.

2. What are the consequences of reflection in the initial interview? That is, following therapist reflections, what does the patient tend to do? What are the immediate effects of reflection?

An interesting corollary question, though of lesser importance, is whether these effects hold independently of specific antecedents.
Expectations Concerning the Research Questions

1. In a rather controversial study, Truax found that Rogers does respond selectively to certain kinds of patient statements. Other empirical research sheds little light on the issue, particularly regarding the antecedents of reflection per se. However, client-centered theory is firm in its claim that reflections are used on a non-selective basis. Accordingly, it is hypothesized that:

   \( H_0: \) The author will use reflection non-selectively.
   \( H_1: \) No class of patient statement will emerge as a significant antecedent to the therapist's reflective statements.

2. While empathy has been shown to be linked with patient self-exploration, clinical research on reflection per se yields no consistent answer to the question of whether reflections result in such self-exploration. Analogue research is split on whether reflections condition self-references. The study of psychotherapy sessions also yields mixed expectations as to whether reflections do indeed encourage self-exploration, depending on the scope of the operational definition used. However, client-centered theory is firm in its claim that reflections are used non-selectively, and that they enhance the relationship with the consequence of heightened patient self-exploration. It is hypothesized that:
A prominent effect or consequence of reflection is that the patient will tend to talk more about and describe his self. If there is sufficient data to warrant analysis of a corollary hypothesis, it is expected that the self-exploratory consequence of reflection will hold, independently of the kind of antecedent patient statement.
CHAPTER II

METHOD

This chapter is divided into four sections: subjects, instruments, procedure, and data analysis. Each section will begin with a description of the selections made for the present research, and will be followed by a discussion of alternatives, with rationale for the selection made. The method and hypotheses will be summarized briefly.

Subjects

Two published, verbatim initial interviews were selected, each of which seemed to contain a sufficient number of reflections to permit statistical analysis. The therapist is Carl Rogers in the following interviews. The descriptions of the patients were gleaned from a careful reading of the transcripts themselves, as other published documentation is not readily available.


Cathy - from Three Approaches to Psychotherapy, II (Santa Anna, Cal., Psychological Films, 1976).

Mike is an American male adolescent, a university student, living with his mother, siblings and a stepfather. Mike's presenting problem relates to his personal confusion
over a career choice and his need for a goal. This difficulty is complicated by a conflict-ridden relationship with his stepfather who wants Mike to become a mechanic in the military. Mike feels hostile and rebellious about this, yet still cannot decide on something he wants to pursue for himself. Mike had a previous stepfather after his real father, but he has been living with the present one since grade three.

Cathy is a nurse in her early thirties, with two children. Previous to the interview she had been separated from her husband for four years, then widowed within the previous year. The death of her husband made her feel more alone than when she was simply separated from him, and she is now more acutely aware that she is afraid of forming new relationships with men. Her problem, as she sees it, is that she wishes to stay withdrawn in order to protect herself from more hurt, yet this tactic cuts her off from the joys of a full life.

Experimental Subjects vs. Psychotherapy Patients

Gelso (1979) observes within psychotherapy research, a polarization of views on what constitutes an acceptable methodology. The poles are laboratory experiments and field studies which, according to Gelso, have traditionally
been seen as mutually exclusive along a rigor-relevance dimension. With the experimental analogue, the investigator has near total control over the scheduling of experimental stimuli, and internal validity is high. On the other hand, the main strength of the naturalistic or field study is external validity (Kiesler, 1971), because it allows for the observation of behaviours within their natural settings, with little interference from methodological artifice.

The consequences of a specific therapeutic technique have often been studied using an analogue approach, or artificial manipulation of response variables. The experimenter uses the technique as the independent variable in a quasi-therapy setting, according to a predetermined formula, often not contingent upon patient behaviour (e.g., Hekmat, 1971; Hoffnung, 1969; Kennedy & Zimmer, 1968). While analogue research sheds some light on what may be the effects of therapeutic techniques, it is far less suited to the analysis of the contingencies which prompt their use by experienced therapists in real therapy sessions.

In order to address the research question of the immediate antecedents of reflection, it is necessary that these take place within the specific natural circumstances under which the therapist reflects. Similarly, the field setting allows for direct observation of the immediate consequences of reflections. These kinds of observations of the process of
psychotherapy are typically done using a method of content analysis with verbatim transcripts of live sessions as the data source (Kiesler, 1973).

An added benefit of naturalistic designs is that they permit the option of observing clinicians who are well-known, who publish their ideas, and who are examplars of specific methods and techniques. By virtue of such direct observation, the congruence between what therapists declare in their writings, and what happens in clinical practice, can be assessed. This option has been exercised by Hill, Thames, and Rardin (1979), Stiles (1979), Stoten and Goos (1974), Strupp (1957), Truax (1966) and others.

On the basis of these considerations, the present study uses published interview material from actual psychotherapy with real patients as subjects, conducted by an exemplar of the reflective technique.

**Group Designs vs. Single Case**

Group designs have been held as the most valid way to confirm generalizeable laws (Kiesler, 1971). However, these designs have frustrated psychotherapy researchers because profound individual change can be obscured in group designs (Thoresen & Anton, 1974).

There is a long history and current expansion of single case or N of 1 research strategies. They have particular
dignity within behaviouristic contexts wherein rigorous experimental designs enable cause and effect linkages to be inferred from results. Gelsó (1979) acknowledges that we can now do useful N of 1 studies of non-behavioural therapy through the use of repeated measures designs, which contain correlational and experimental components. Causal inferences can thus be made of the behaviour studied, which go beyond the merely correlational correspondence in most field designs. At the same time, external validity is not sacrificed for laboratory rigor.

It is feasible then, to design research based on session data from one therapist with one patient, observing the specific antecedents and consequences of repeated incidents of therapist reflections. The present study elects to use the intensive single case design with each of two patients, for purposes of comparison.

Source of Data

Medium of interview material. While it is acknowledged that the non-verbal aspects of communication are lost without the use of audio and videotape, the standard use of typescripts is nevertheless the case due to its availability. While the "Cathy" interview is available on film, the "Mike" interview is not. For these reasons, the verbatim typescript was selected as the medium of interview material.
Choice of therapist. While any therapist who uses
reflection could feasibly be studied, the present research
elects to use a recognized expert. It is acknowledged that
many exist among client-centered therapists, but clearly,
Carl Rogers is the most recognized of these, as the actual
originator of client-centered theory and perhaps of the
reflective technique itself. He has been profoundly influ-
ential through his writings in the area, and examples of
his therapy sessions are published and available for both
teaching and research purposes. As the client-centered
therapist with the highest profile both as a theorist and
as a therapist, Rogers was selected for the present study.

Excerpts vs. whole sessions. Traditionally, content
analysis research has used whole sessions (Dollard & Auld,
1959; Matarazzo, 1962; Siegman & Pope, 1965; Snyder, 1945).
Of Roger's published verbatim transcripts many are only
excerpts of whole sessions, which do not in themselves have
adequate numbers of interchanges to permit statistical ana-
lysis. Also, these excerpts have been extracted from whole
sessions for teaching purposes, and not in accordance with
considerations appropriate to research methodology. Mintz
and Luborsky (1971) rated four-minute segments from sessions
early in therapy, on a variety of process variables. In
many ways these brief segments were adequate for process
research, according to the factor analyses. However, Mintz
& Luborsky found that empathy, of which reflection is a component, was not reliably rateable from excerpts as compared with whole sessions.

There is an added important advantage to using entire sessions with few patients, as opposed to short excerpts with many patients. It allows for going to the actual transcript for clinical material, which may help in the discussion of findings. The data from a content analysis of the patient's in-therapy behaviour, constitute a viable form of patient description.

These considerations point to the use of entire sessions rather than excerpts for the present study.

Instruments

Content Analysis Considerations

The content analysis of the verbal aspects of psychotherapy interview material is accomplished by having judges place designated units of verbalization into predefined categories. This produces nominal data which are then suitable for statistical operations.

Unit of analysis. The unit selected is the "total response", or uninterrupted sequence of sentences uttered by patient or therapist. Each unit varies from a single word to an extensive paragraph, and has no particular syntactical characteristics requisite for scoring.
Snyder (1945) used the 'idea' as the basic unit of analysis, while others have used the sentence (e.g., Dollard & Auld, 1959). Both these unitizing procedures can result in confusion since ordinary human speech is less than syntactically rigorous and coherent. Another method is the 'total response' where the patient (P) statement and therapist (T) statement, are simply the P in the TPT interchange and the T in the PTP interchange. With the "total response", disagreement between judges as to units of analysis is virtually eliminated, and hence, inter-rater reliability is not lowered by this factor. The total response unit has been used by Lennard and Bernstein (1969), Rice and Wagstaff (1967), Siegman and Pope (1965) and Strupp (1960).

What constitutes antecedents and consequences? The number of statements that are considered to be antecedent to a reflection, is to some extent, an arbitrary research decision tied to the size and type of unit used. It is essential however, that the number of statements which constitute the antecedent of a reflection, agree with the definition of reflection being used.

For the purposes of the present research, a reflection is defined as referring primarily to the immediately preceding patient statement rather than to what was said 2 or 3 interchanges earlier. For this reason, the antecedent of a
reflection will consist only of the immediately preceding patient statement.

For consistency, the consequences of a reflection will consist simply of the patient statement immediately following that reflection. The antecedents and consequences of the "all other" category of therapist statement are defined similarly, each consisting of a single but entire patient statement.

Judges

It is uncommon that psychotherapy process studies use more than 2-4 judges, though inter-rater agreement is less likely to be spurious with a larger number of judges. The use of 13 judges by Frank and Sweetland (1962) allowed them to drop some judges whose ratings deviated excessively from expectancy and from that of a master judge (a composite scoring arrived at through agreement between the four senior research workers on the project). Some of the difficulty arose from the use of judges with widely varying degrees of clinical sophistication. Process research commonly uses undergraduate raters with little or no training in psychotherapy.

For the present research it is desirable that judges bring some in-therapy experience to bear on their ratings in
order to maximize the efficiency of the categories used. A large number of judges (6 or more) would also maximize this efficiency.

These considerations are met by the present research team consisting of two clinical psychologists and several graduate students in clinical psychology presently or recently involved in counselling and psychotherapy internships. For practical reasons, the exact number of judges depended on the complement of the research team at the time of data collection. For the "Mike" interview, 8 judges are used. For the "Cathy" interview, 10 judges are used.

**Therapist Categories**

The research questions call for a two-fold category system for therapist statements: (a) reflective statements, and (b) all others.

The discussion in Chapter I demonstrates the necessity for an operational definition of reflection which is not confounded with interpretation. It is notable that the overlap between reflection and interpretation has caused difficulty for other empirical investigators using actual transcript data from experienced psychotherapists (e.g., Hill, Thames & Rardin, 1979).
This study does not concern itself with the antecedents and consequences of interpretations, nor with those of empathic responses containing moderate to high levels of inference, but confines itself solely to those connected with reflective statements containing little or no inference. On this basis, a strictly client-centered definition is rejected.

For the purposes of the present study, the definition of reflection selected is a general one which includes the mirroring of both affective and other types of content in the patient's verbal message. It is also a definition which stresses what is verbalized in the patient's message, and considers inferences about what is not verbalized to fall more into the realm of interpretation. In large measure, the meaning of reflection is taken from the work of Porter (1942), Snyder (1945) and Seeman (1949). They held non-directive response categories to include restatement of content or problem, and clarification or recognition of feeling, with no attempt to interpret, or to offer advice, criticisms, or suggestions. This is the meaning of reflection for the purposes of the present study:

"The therapist's attention is preponderantly on the content or meaning of what the patient says, and especially on immediate patient statements rather than on what the patient said four or five
interchanges earlier. The key is that the therapist seeks to put into words what the patient is saying or meaning. In making such sense of what the patient is saying, the therapist may add a bit of what is implied or contained in the patient's words, but the dominant emphasis is on an appropriate restatement or rephrasing of the content or meaning in what the patient says. The therapist typically follows a model of: "This is what you seem to be saying (thinking, feeling, meaning) . . ."

In summary then, the definition of reflection used for the present study is not taken from just one school of thought, but is in general, representative of clinical research, analogue research, and theoretical areas of the literature. It is also a definition refined from the reviewing of research literature, in which the confounding of reflection and interpretation tended to obscure results. It is acknowledged, therefore, that the meaning of reflective statements is only roughly approximate to that used in a strictly client-centered framework. From Figure 1.1, the definition here is a 1, 2 type definition.

The only therapist categories necessary for data analysis, are "reflection" and "all other". The "all other" category includes any therapist intervention that is not a reflection. The following list of examples is taken from Kiesler's (1973) indexed review of prominent category systems: interpretation, structuring, request for information, self-disclosure, prompting, approval-permission, answering the patient's question,
laughter, simple acknowledgement, and request for repetition.

**Patient Categories**

The following considerations influenced the selection of categories:

1. With self-exploration as a major consequence of reflective statements by the therapist, a category is needed which provides for patient statements involving the patient's exploration of self.

2. Categories should be cordial to the client-centered approach. Rogers (1942), in referring to reflections said, "The approach is sound whether the client's feelings are directed toward himself, toward others, or toward the counselor and the counseling situation" (p. 173). This quotation provides an example of a set of categories harmonious with the client-centered approach.

3. Categories that are general in nature allow for generalizeability of findings beyond the client-centered domain.

4. The number of categories should be sufficiently small to allow for frequencies adequate for statistical operations.
These considerations are compatible with a threefold division of categories used by Seeman (1949) in one of the early client-centered studies of the process of psychotherapy using data from actual patients and therapists. He organized patient statements on the basis of attitude toward self, therapist, and other. This organization is congruent with a client-centered definition of reflection where only feelings and attitudes are reflected. The definition used in the present study includes other patient processes and calls for a slight modification of Seeman's categories. Patient categories could be organized on the basis of the predominance of the patient's attention, whether that be toward self, therapist, or other.

Other options for patient category systems are plentiful (Kiesler, 1973), yet are not especially suited to the present research goals. For example, this study does not examine patient experiencing (Truax, 1966), patient dynamics (Truax, 1966), patient free associations (Bordin, 1963), nor patient dreams (Hall & Van de Castle, 1966). On the basis of the above four considerations, the present research elects to use categories similar to those used by Seeman (1949). These categories are:

A. **Patient attends to therapist.** When the patient is judged as attending to, and relating predominantly with the therapist, patient statements are placed in this category. The patient
may be in opposition to or complying with the therapist, or he may be attending in a neutral way, as in clarifying something the therapist has said. Here are some examples:

"Just because you say I'm jealous doesn't mean it's true."

"Your fees are outrageous! You should be ashamed."

"Yeah, you're sure right about that."

"I see what you mean. You're good at knowing what's going on with people."

"Which occasion do you mean?"

B. Patient attends to self. When the patient is judged as attending to and relating predominantly with his own self, patient statements are placed in this category. The patient may describe himself, tell about the sort of problem he tends to have, how he sees himself, the kinds of relationships, feelings, thoughts and behaviours he has. He may provide factual information about his problems. For example:

"I've been more irritable lately."

"I don't want to get a job. I'd rather work at home in my own way."

"I love to buy things for the kids. I go overboard sometimes."

"I always wanted to be the hero, the one they cheered for."

"I often get a migraine if I allow myself to get underslept."

"I feel like a cornered rat."
C. Patient attends to external world. When the patient is judged as attending to and relating predominantly to figures, objects and situations outside the therapeutic context, patient statements are placed in this category. The patient may focus on a defined target, either describing it or virtually being in relationship with (as in talking to) that defined external target. Examples are:

"My uncle was 49 when he died, and I was there in that depressing hospital room full of relatives when it happened."

"There is always a lot of fighting in our house. No one gets along."

"You're always bugging me! Leave me alone and fix the damn thing yourself!"

"My grandfather is a kind, patient and gentle person. He's a historian and a gardener."

Summary

The therapeutic process can be translated into nominal data by a method of content analysis. Judges apply a set of therapist and patient response categories to units of dialogue. The unit of analysis selected is the "total response unit." Antecedents and consequences are defined as containing one such unit. Eight of ten judges used two therapist categories (reflection, all other) and three patient categories (patient attends to therapist, self, other).
Procedure for Judges and Categorizations

The judges met weekly for one hour as a group. The first two meetings consisted of acquaintance with and discussion of patient and therapist categories, and instructions to judges. These were:

When Categorizing Patient Statements

Study what the therapist just said. Try to make sense of what the patient says in the context of what the therapist just said earlier. Focus on what the patient says toward the end of the statement. Consider the end as more important than the beginning in assigning a category. The exception is when a prominent theme characterizes the first two thirds or so of what the patient says, and the end is practically neutral. Otherwise attend mainly to the last part of the patient statement. Classify each patient statement into one and only one category. If you feel that a second category may also apply, then decide between the two. Some categories may be used frequently, rarely, or not at all.

When Categorizing Therapist Statements

Study what the patient just said, and categorize what the therapist says in this context. If the therapist's previous statement was very short (e.g., a simple acknowledgment),
study the still earlier statement of the patient. Look for something predominating throughout the therapist statement, paying special attention to the last third of the statement. Classify each therapist statement into one and only one category. You need not make use of all possible categories.

Beginning with the second week, judges were given two pages of verbatim dialogue from the "Mike" interview (approximately 17-20 interchanges) to place into categories. These were taken in sequence until the interview was completed, then the "Cathy" interview was rated following the same procedure. This method was selected over longer intensive rating sessions in order to avoid error due to fatigue, and to minimize the effects of "set". With this in mind, judges were frequently reminded of the criteria for classification. It was reasoned that this procedure would aid in keeping each judge open-minded as opposed to set, without interfering with a judge's independence of decision.

The criterion for considering a statement rated was agreement among at least 5 of 8 judges for the "Mike" interview, and 7 of 10 judges for the "Cathy" interview. Statements that did not reach criterion were recoded according to the same procedure. Any statement which did not reach criterion after the second coding was deleted from the data analysis.
The number of deleted statements is reported in Chapter III.

Each judge had a set of ratings per interview. These sets were randomly paired and kappas calculated for the reporting of judges' reliability.

**Data Analysis**

**Reliability**

In order to measure the consistency of judges' ratings with nominal scales, it is common in process analysis research to measure per cent agreement between judges. However, the effects of chance render these indices spuriously high (Cohen, 1960; Tinsley & Weiss, 1977). Kendall's Tau has been recommended as more appropriately stringent (Dollard & Auld, 1959) as has the use of Kappa (Cohen, 1960; Tinsley & Weiss, 1977).

The use of Kappa makes it unnecessary to use rate-rerate measures of intra-judge reliability (Tinsley & Weiss, 1977), a measure which may be contaminated by the rater's recall of previous judgments. Also, the present data meet the assumptions on which Kappa is statistically based. For these reasons Kappa was selected as the reliability measure.

**Analysis of Results**

Content analysis yields nominal data which can be analyzed using an appropriate non-parametric statistic.
Most studies use chi square as a test of the hypothesis of chance agreement (e.g., Frank & Sweetland, 1962; Raimy, 1948; Stiles, 1979; Stoten & Goos, 1974). Yates' correction accompanies the use of chi square when some cells have frequencies of 10 or lower.

For each interview transcript the following analyses were performed:

1. a chi square comparing the distribution of the antecedents of reflections with the distribution of patient statements in the interview as a whole,

2. a chi square comparing the distribution of the consequences of reflections with the distribution of patient statements in the interview as a whole,

3. where cell frequencies were high enough, a chi square comparing the distribution of the consequences of reflection with the distribution of the consequences of "all other" interventions combined, for each class of patient antecedent.

Summary and Hypotheses

In order to specify the antecedents and consequences of reflection as it occurs in the initial interview of actual psychotherapy, observations should be made within the context of actual psychotherapy sessions, of a particular therapist
with particular patients. This points directly to a
naturalistic, single case design with repeated measures
of the response variable, reflection. The therapeutic
process can then be translated into nominal data through
the judges' application of a set of therapist and patient
response categories. Chi square can be computed over a
table of results, to determine which categories are used
significantly more or less often than can be accounted for
by chance. Such significance can be interpreted in the
light of the degree to which judges' ratings are demonstrated
to be reliable.

The hypotheses are:

$H_0_1$: Rogers will use reflection non-selectively.
No class of patient statement will emerge as a
significant antecedent of the therapist's
reflective statements.

$H_0_2$: A prominent effect of reflection is that the
the patient will self-explore.

Corollary to this hypothesis is the less formal expectation
that patient self-exploration will hold consistently as a
prominent effect of reflection, independently of the class
of antecedent to the reflection.
CHAPTER III
RESULTS

Reliability

This chapter is divided into two sections. The first deals with the reliability of the data. The second section deals with the data analysis of (1) the antecedents and (2) the consequences of reflection. The chapter ends with a brief summary.

Unclassifiable Data

A small number of statements did not reach rating criterion and were eliminated from the data. Where necessary, the antecedent and consequent statements associated with these deleted statements were also deleted from the data analysis. Table 3.1 illustrates the proportion of the total interview considered unclassifiable.

The number of unclassifiable statements is almost negligible as shown in Table 3.1. A higher agreement criterion for rating statements would have resulted in increased reliability coefficients, but with a consequent loss of data due to fewer statements reaching criterion. It was thought that less distortion would be introduced into the data analysis if the number of unclassifiable statements was kept to a
Table 3.1

UNCLASSIFIABLE DATA

<table>
<thead>
<tr>
<th></th>
<th>Unclassifiable patient statements</th>
<th>Unclassifiable therapist statements</th>
<th>Total statements</th>
<th>Proportion unclassifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Mike&quot;</td>
<td>2</td>
<td>0</td>
<td>277</td>
<td>.077</td>
</tr>
<tr>
<td>&quot;Cathy&quot;</td>
<td>6</td>
<td>0</td>
<td>492</td>
<td>.012</td>
</tr>
</tbody>
</table>
minimum, notwithstanding the associated lowering of reliability coefficients (Table 3.2).

**Inter-Judge Agreement**

Rating system reliability is represented by kappa coefficients, calculated on random pairs of judges for each interview (Table 3.2). Each coefficient represents the agreement between two judges after the effects of chance have been removed. Of the 4 pairs of judges rating the "Mike" interview, 2 pairs were used for the calculation of therapist category reliability (reflection, all others), and 2 pairs were used for the calculation of patient category reliability (therapist, self, other). Kappa coefficients associated with the "Cathy" interview were calculated similarly, with the added pair of judges being used for patient categories.

When obtained agreement equals chance agreement, kappa (k) is zero. Greater than chance agreement results in positive values of k, less than chance agreement leads to negative values. The upper limit of k is 1.00, occurring only when there is perfect agreement between judges (Cohen, 1960). The coefficients in Table 3.2 can now be seen as representing mediocre reliability, and interpretation of findings should be considered in this light.
Table 3.2
KAPPA COEFFICIENTS FOR THERAPIST AND PATIENT CATEGORIES, FOR EACH INTERVIEW

<table>
<thead>
<tr>
<th></th>
<th>&quot;Mike&quot;</th>
<th>&quot;Cathy&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist categories</td>
<td>0.56</td>
<td>0.56</td>
</tr>
<tr>
<td></td>
<td>0.73</td>
<td>0.66</td>
</tr>
<tr>
<td>Patient categories</td>
<td>0.59</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>0.51</td>
<td>0.82</td>
</tr>
<tr>
<td>$\bar{x} = 0.60$</td>
<td></td>
<td>$\bar{x} = 0.67$</td>
</tr>
</tbody>
</table>
Data Analysis

The main strategy of the data analysis was to test the hypotheses for the two transcripts separately, and then compare results to see if they are confirmed. The single case rationale is methodologically upheld; individual differences will not be obscured by pooling the data. At the same time, it can be observed to what extent the therapist's behaviour varies with two different patients and to what extent the behaviour of two different patients varies with the same therapist (reflection).

Interviews were selected with the expectation that Rogers would use reflections with high frequency. Sufficient numbers of reflections are necessary in order to test the hypotheses statistically.

In the "Mike" interview, approximately half of Rogers' interventions are reflections (Table 3.3). In the "Cathy" interview, reflection is used with considerably less frequency than is generally associated with Rogers.

Antecedents of Reflection in the Initial Interview

The data are arranged to answer the guiding question: When does the therapist use reflection? It was hypothesized that Rogers uses reflection non-selectively, that is, that there will be no significant tendency to reflect immediately
Table 3.3
HOW REFLECTIONS ARE DISTRIBUTED IN EACH INTERVIEW

<table>
<thead>
<tr>
<th></th>
<th>First half</th>
<th>Second half</th>
<th>Total reflections</th>
<th>Total therapist statements</th>
<th>Proportion reflections</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Mike&quot;</td>
<td>32</td>
<td>39</td>
<td>71</td>
<td>139</td>
<td>.511</td>
</tr>
<tr>
<td>&quot;Cathy&quot;</td>
<td>20</td>
<td>13</td>
<td>33</td>
<td>246</td>
<td>.134</td>
</tr>
</tbody>
</table>
following one class of patient statement more than another.

This hypothesis was tested by comparing the distribution of patient antecedents of therapist reflections, to the distribution of patient statements in the interview as a whole. The ratio of a class of patient statements to the total of patient statements constitutes the proportion in which the same class of antecedents of reflection can be expected to occur, if there is no significant difference between expected and observed frequencies. The magnitude of the discrepancy between these two distributions can be expressed through chi square.

In Table 3.4 the chi square total is not significant for 2 df. Therefore, results support the hypothesis that no class of patient statement is a significant antecedent of reflection. Rogers uses reflection non-selectively in the "Mike" interview.

From Table 3.5, the chi square total for the antecedents of reflection is not significant. In the "Cathy" interview, the hypothesis that no class of patient statement is a significant antecedent of reflection, is supported. In both the "Mike" and "Cathy" interviews, Rogers appears to use reflection in a non-selective manner.
Table 3.4

THE ANTECEDENTS OF REFLECTION - "MIKE" INTERVIEW

<table>
<thead>
<tr>
<th>Patient Categories</th>
<th>Therapist</th>
<th>Self</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patient statements n=137</td>
<td>59</td>
<td>25</td>
<td>53</td>
</tr>
<tr>
<td>Proportion of total patient statements</td>
<td>.43</td>
<td>.18</td>
<td>.39</td>
</tr>
<tr>
<td>Patient antecedents of reflection n=71</td>
<td>26</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>Expected frequencies for antecedents of reflection</td>
<td>30.53</td>
<td>12.78</td>
<td>.2769</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class of Patient Antecedent of Reflection</th>
<th>Observed Frequency O</th>
<th>Expected Frequency E</th>
<th>$\frac{(O-E)^2}{E}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist</td>
<td>26.00</td>
<td>30.53</td>
<td>.67</td>
</tr>
<tr>
<td>Self</td>
<td>14.00</td>
<td>12.78</td>
<td>.12</td>
</tr>
<tr>
<td>Other</td>
<td>31.00</td>
<td>27.69</td>
<td>.40</td>
</tr>
</tbody>
</table>

$\chi^2=1.19$
Table 3.5
THE ANTECEDENTS OF REFLECTION - "CATHY" INTERVIEW

<table>
<thead>
<tr>
<th>Patient Categories</th>
<th>Therapist</th>
<th>Self</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patient statements</td>
<td>65</td>
<td>137</td>
<td>37</td>
</tr>
<tr>
<td>Proportion of total patient statements</td>
<td>.27</td>
<td>.57</td>
<td>.16</td>
</tr>
<tr>
<td>Patient antecedents of reflection n=32</td>
<td>10</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>Expected frequencies for antecedents of reflection</td>
<td>8.64</td>
<td>18.24</td>
<td>5.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class of Patient antecedent of Reflection</th>
<th>O</th>
<th>O Frequency</th>
<th>E</th>
<th>(O-E)^2/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist</td>
<td>10</td>
<td>9.5</td>
<td>8.64</td>
<td>.09</td>
</tr>
<tr>
<td>Self</td>
<td>19</td>
<td>18.5</td>
<td>18.24</td>
<td>.00</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3.5</td>
<td>5.12</td>
<td>.51</td>
</tr>
</tbody>
</table>

\[ x^2 = .60 \]
Consequences of Reflection in the Initial Interview

The data are arranged to answer the guiding question: What are the immediate consequences of reflection? What class of patient statement tends immediately to follow the therapist's reflections? Again, chi square analysis is appropriate to testing the hypothesis that the patient will exhibit a significant tendency to self-explore following therapist reflection. Expected frequencies were derived in the same way as they were for the antecedents of reflection (Table 3.4 and 3.5).

For the analysis of the "Mike" interview (Table 3.6), the chi square total is not significant and lends no support to the hypothesis that therapist reflections are followed by patient self-exploration.

If there are significant consequences of reflection that are linked to specific antecedents, these can be found by dividing the consequences of all therapist statements into groups according to patient antecedent. For each class of patient antecedent, the consequences of therapist reflection can be compared with the consequences of "all other" therapist interventions combined. Table 3.7 illustrates how these data can be arrayed.

When an antecedent condition was 'patient attends to therapist', chi square analysis revealed no significant
Table 3.6
THE CONSEQUENCES OF REFLECTION - "MIKE" INTERVIEW

<table>
<thead>
<tr>
<th></th>
<th>Patient Categories</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Therapist</td>
<td>Self</td>
<td>Other</td>
</tr>
<tr>
<td>All patient statements</td>
<td>59</td>
<td>25</td>
<td>53</td>
</tr>
<tr>
<td>n=137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of total</td>
<td>.43</td>
<td>.18</td>
<td>.39</td>
</tr>
<tr>
<td>patient statements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient consequences of</td>
<td>33</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>reflection n=71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected frequencies for</td>
<td>30.53</td>
<td>12.78</td>
<td>27.69</td>
</tr>
<tr>
<td>consequences of reflection</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Class of Patient Consequence of Reflection  | O     | E     | \((O-E)^2/E\)

| Therapist    | 32.00 | 30.53 | .07   |
| Self         | 12.00 | 12.78 | .05   |
| Other        | 26.00 | 27.69 | .10   |

\(\chi^2=.22\)
Table 3.7

RAW DATA FOR CONSEQUENCES OF REFLECTION
UNDER DIFFERENT ANTECEDENT CONDITIONS - "MNE".

<table>
<thead>
<tr>
<th>Patient antecedent</th>
<th>Therapist statement</th>
<th>Patient Consequence</th>
<th>Therapist</th>
<th>Self</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attends to therapist</td>
<td>reflects</td>
<td>13</td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>all other</td>
<td>18</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Attends to self</td>
<td>reflects</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>all other</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Attends to other</td>
<td>reflects</td>
<td>14</td>
<td>3</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>all other</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
difference in patient consequences whether the therapist has intervened with a reflection or has done 'all other' (Table 3.8). The idea that therapist reflections are immediately followed by patient self-exploration is not supported by these data, when the antecedent condition was 'patient attends to therapist.'

When the antecedent condition was 'patient attends to self,' cell frequencies for the "Mike" interview were too low to permit statistical analysis (Table 3.7).

When the antecedent condition was 'patient attends to other,' again several cell frequencies were less than 5 (Table 3.7) rendering statistical analysis of consequences unwarranted. However, a modification of this analysis was calculated (Table 3.8) by eliminating the cells in which the consequence was 'patient attends to self.' This procedure is defensible because the two cells involved contain very low, yet identical frequencies. Their elimination allows for the comparison of the two other patient consequences (patient attends to therapist, patient attends to other) when the antecedent condition is 'patient attends to other.' Chi square analysis shows that these two distributions are significantly different (Table 3.8). The cells which contribute most heavily to the chi square total are the ones associated with the patient consequence 'patient attends to therapist.' Reflections appear to lead the patient to attend to the therapist significantly
Table 3.8

CHI SQUARE CALCULATION OF DIFFERENTIAL
CONSEQUENCES OF REFLECTION - "MIKE"

<table>
<thead>
<tr>
<th>Antecedent condition:</th>
<th>Yates</th>
<th>O</th>
<th>Corrected</th>
<th>O-E</th>
<th>(O-E)^2 / E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient attends to therapist</td>
<td></td>
<td>13.5</td>
<td>.36</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.5</td>
<td>-.74</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.5</td>
<td>.87</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>17.5</td>
<td>-.36</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.5</td>
<td>.74</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.5</td>
<td>-.87</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>χ²=2.88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Antecedent condition:</th>
<th>Yates</th>
<th>O</th>
<th>Corrected</th>
<th>O-E</th>
<th>(O-E)^2 / E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient attends to other</td>
<td></td>
<td>13.5</td>
<td>4.41</td>
<td>2.14*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.5</td>
<td>-4.41</td>
<td>1.22</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5</td>
<td>-4.41</td>
<td>2.81*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16.5</td>
<td>4.41</td>
<td>1.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>χ²=7.78* p&lt;.01</td>
</tr>
</tbody>
</table>
more than do 'all other' therapist statements. When the patient has been attending to 'other,' then, a consequence of reflection appears to be that the patient engages in relating to the therapist.

The following tables refer to the consequences of reflection in the "Cathy" interview. The rationale for each analysis and for deriving expected frequencies is identical with that used in the "Mike" interview.

Chi square analysis of the consequences of reflection for the "Cathy" interview demonstrates a highly significant tendency for the patient to relate to the therapist following reflections. These results are in distinct opposition to the hypothesis that the main immediate consequence of therapist reflection is that the patient will self-explore (Table 3.9).

When the consequences of reflection in the "Cathy" interview were examined in relation to their specific antecedents, cell frequencies (Table 3.10) were high enough to warrant chi square analysis for two antecedent conditions (patient attends to therapist, patient attends to self), but not for the third antecedent condition (patient attends to something external). When the antecedent condition was 'patient attends to therapist,' there were no occasions when the consequence of any therapist statement fell into the class of 'patient attends to something external.' Therefore, a 2x2 chi square analysis was calculated (Table 3.11).
Table 3.9

THE CONSEQUENCES OF REFLECTION - "CATHY" INTERVIEW

<table>
<thead>
<tr>
<th>Patient Categories</th>
<th>Therapist</th>
<th>Self</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patient statements n=239</td>
<td>65</td>
<td>137</td>
<td>37</td>
</tr>
<tr>
<td>Proportion of total patient statements</td>
<td>.27</td>
<td>.57</td>
<td>.16</td>
</tr>
<tr>
<td>Patient consequences of reflection n=32</td>
<td>18</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Expected frequencies</td>
<td>8.64</td>
<td>18.24</td>
<td>5.12</td>
</tr>
</tbody>
</table>

Class of Patient
Consequence of Reflection

<table>
<thead>
<tr>
<th>Class of Patient</th>
<th>( O )</th>
<th>( O_{frequency} )</th>
<th>( E )</th>
<th>( (O-E)^2/E )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapist</td>
<td>18</td>
<td>17.5</td>
<td>8.64</td>
<td>9.09*</td>
</tr>
<tr>
<td>Self</td>
<td>12</td>
<td>12.5</td>
<td>18.24</td>
<td>1.81</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2.5</td>
<td>5.12</td>
<td>1.34</td>
</tr>
</tbody>
</table>

\( \chi^2=12.24** \) \( p<.01 \)
Table 3.10

RAW DATA FOR CONSEQUENCES OF REFLECTION
UNDER DIFFERENT ANTECEDENT CONDITIONS - "CATHY"

<table>
<thead>
<tr>
<th>Patient antecedent</th>
<th>Therapist statement</th>
<th>Patient Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Therapist</td>
</tr>
<tr>
<td>Attends to therapist</td>
<td>reflects</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>all other</td>
<td>20</td>
</tr>
<tr>
<td>Attends to self</td>
<td>reflects</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>all other</td>
<td>18</td>
</tr>
<tr>
<td>Attends to other</td>
<td>reflects</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>all other</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3.11
CHI SQUARE CALCULATION OF DIFFERENTIAL CONSEQUENCES OF REFLECTION - "CATHY"

<table>
<thead>
<tr>
<th>Antecedent condition: Patient attends to therapist</th>
<th>Yates</th>
<th>O</th>
<th>Corrected</th>
<th>O-E</th>
<th>(O-E)^2/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>3.16</td>
<td></td>
<td></td>
<td></td>
<td>2.3 *</td>
</tr>
<tr>
<td>1.5</td>
<td>-3.16</td>
<td></td>
<td></td>
<td></td>
<td>2.13*</td>
</tr>
<tr>
<td>20.5</td>
<td>-3.16</td>
<td></td>
<td></td>
<td></td>
<td>.42</td>
</tr>
<tr>
<td>28.5</td>
<td>3.16</td>
<td></td>
<td></td>
<td></td>
<td>.39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>( \chi^2=5.24 \ p&lt;.05 )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Antecedent condition: Patient attends to self</th>
<th>Yates</th>
<th>O</th>
<th>Corrected</th>
<th>O-E</th>
<th>(O-E)^2/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
<td>5.06*</td>
</tr>
<tr>
<td>10.5</td>
<td>-3.57</td>
<td></td>
<td></td>
<td></td>
<td>.91</td>
</tr>
<tr>
<td>1.5</td>
<td>-.43</td>
<td></td>
<td></td>
<td></td>
<td>.09</td>
</tr>
<tr>
<td>18.5</td>
<td>-4.50</td>
<td></td>
<td></td>
<td></td>
<td>.88</td>
</tr>
<tr>
<td>84.5</td>
<td>3.58</td>
<td></td>
<td></td>
<td></td>
<td>.16</td>
</tr>
<tr>
<td>11.5</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
</tr>
</tbody>
</table>

\( \chi^2=7.12* \ p<.05 \)
From Table 3.11 it can be seen that when the antecedent condition was 'patient attends to therapist' the significant chi square total is almost totally comprised of the quantities representing the consequences of reflection. The consequences of "all other" interventions contribute negligibly. In other words, when the patient has been attending to the therapist, and the therapist then reflects, the patient exhibits a definite tendency to attend further to the therapist, and a definite tendency not to self-explore. These results are contrary to the idea that the immediate consequence of therapist reflections is patient self-exploration, when the antecedent condition is 'patient attends to therapist.' When the patient has been attending to the therapist, then, a consequence of reflection appears to be that the patient engages in relating to the therapist.

The one cell which contributes substantially to the significant chi square total is the first one. This indicates that when the patient has been attending to her self, and the therapist then reflects, the patient tends to turn her attention toward the therapist. These results further disconfirm the hypothesis that patient self-exploration is the immediate consequence of therapist reflection. When the antecedent condition is 'patient attends to self,' a consequence of reflection appears to be that the patient engages in relating to the therapist.
Summary of Results

Results for both interviews support the first hypothesis that Rogers uses reflection non-selectively, that is, that no class of patient antecedent emerges as a significant antecedent of reflection in the initial interview. However, Rogers does use reflection considerably more often with Mike than he does with Cathy.

Results tend to disconfirm the second hypothesis that the immediate consequence of reflections is patient self-exploration. Analysis of the "Mike" interview showed that no overall consequences of reflection emerged. In the "Cathy" interview, therapist reflections had a significant overall tendency to be followed by the patient's turning her attention toward the therapist.

These were the major findings. In addition, the effects of reflection were analyzed in the light of specific patient antecedent conditions. When Mike was attending to something external and the therapist then reflected, Mike showed a significant tendency to respond by relating to the therapist. Other differential analyses for this interview had non-significant results. When Cathy was attending to the therapist, and the therapist then reflected, Cathy continued to relate to the therapist. When she was attending to and discussing herself, and the therapist then reflected, again Cathy tended to
respond by engaging in relationship to the therapist with a symmetrical reduction in self-exploration.

When interviews are compared, both fail to support the hypothesis that therapist reflections are followed by patient self-exploration in the initial interview. Rather the tendency in both interviews was for reflections to pull the patient into relationship with the therapist.
CHAPTER IV
DISCUSSION AND CONCLUSIONS

The purpose of the present study was to investigate the antecedents and consequences of the therapist's reflective statements. In this chapter, the hypotheses and findings will be discussed, along with their implications. In the first section, these points will be discussed in regard to the antecedents of reflection. In the second section, the consequences of reflection will be discussed.

It is important to note that the findings and implications are limited to (a) the use of reflection in general (rather than confined to the strict meaning of reflection within solely the client-centered framework), (b) the immediate antecedents and consequences of reflection (rather than those that could conceivably occur at other points in the interview), and (c) the initial interview.

It is also important to interpret the results in the light of the degree of reliability of the data. From Table 3.2 it can seen that the mean reliability coefficients are .60 and .67 for the two interviews. While these indices do not appear impressive, they reflect some of the difficulties common to psychotherapy research. Hill, Thames and Rardin's (1979) study illustrates this point. Considerable disagreement among judges was resolved by group discussion of problem
statements, a questionable procedure which introduces the difficulties of agreement by consensus. Conceivably, the various factors associated with group process, such as a dominant individual, could prejudice the ratings. After this procedure, agreement was much higher, yielding kappa coefficients ranging from .68 to .73. The researchers regarded these indices as 'relatively high' (Hill, Thames & Rardin, 1973). With the more stringent rating procedure used in the present study, the kappa coefficients of Table 3.2 are acceptable for this type of research.

The Antecedents of Reflection in the Initial Interview

From the data in Table 3.4 and 3.5 the patient antecedents of reflection are distributed similarly to patient statements in the interview as a whole. It appears that Rogers does not use reflection on a selective basis in the "Mike" interview nor in the "Cathy" interview. The present results support Rogers' theory (e.g., 1951, 1957) and confirm that he is non-selective in his use of reflective statements.

The results of this study are not easily interpretable within a reinforcement theory of reflection. The analogue research discussed in the review of the literature is divided as to whether reflections reinforce self-references, but the present results indicate that this is not the way in which
reflections are used by the foremost proponent of that
technique. Rogers' claim that empathy is not used as a
reinforcer is supported above Skinner's suggestions to the
contrary (Rogers & Skinner, 1956). Truax (1966) attempted
to test whether Rogers used empathy in a way consistent
with reinforcement theory, finding that Rogers selected
patient self-explorations to "reward" with high empathy
statements. The findings of the present research do not
support the notion that Rogers uses reflection as a rein-
forcer.

The present findings may be interpreted within client-
centered theory and support Rogers' formulation that reflec-
tions are appropriate whether the client is focused on the
therapist, his self, or something external (1942). Ideally,
there are no lapses in the therapist's capacity to be empathic
(Rogers, 1957). Insofar as this facilitating condition is
met, the patient experiences a sense of being deeply under-
stood, which is not contingent upon any evaluation by the
therapist (Rogers, 1957). Since the therapist's empathic
attitude is generally transduced into reflective statements,
these are likewise available on a continuous basis, and are
provided without reference to the type of statement the
patient makes.

A close look at the two interviews (Table 3.3) however,
shows that while Rogers is consistent and non-selective in
his use of reflections across two interviews, he reflects 50% of the time with Mike and only 13% of the time with Cathy. Rogers is generally known to use reflections frequently (Stiles, 1979; Strupp, 1955), and he does so with Mike but not Cathy. An interesting adjunct to this line of observation is indicated from Table 3.3. While Rogers reflected with comparable frequency for both halves of each interview, there was a tendency for Rogers to increase his frequency of reflecting when dealing with Mike, and to decrease the frequency in the second half of the interview with Cathy.

These differences will be explained by referring to patient variables. Another explanation for the wide variation in the frequency of reflection between the two interviews is some change in the therapist over the intervening three decades. Rogers (1975) admits that he 'winced' at the term 'reflection' for years after it became hackneyed and caricatured, and he avoided the term in his writings. It is somewhat strained though, to suggest that he began to use reflection less often as on the recent interview with Cathy, because the technique was misunderstood. Patient variables present a more obvious line of reasoning.

Tables 3.7 and 3.10 may be seen as presenting in-therapy descriptions of patient behaviour. Mike was most often focused on the therapist and engaging in relationship with him (43%).
He showed almost as great a tendency to focus on external things, persons and events (39%) with a concomitant lack of tendency to discuss himself (18%). Cathy's in-therapy behaviour was entirely different. Her main focus was on herself, in discussing her feelings, problems and ways of being (57%). The therapist was a considerably lesser focus (27%) as was the external world (16%).

The differences in Mike's and Cathy's response styles may be seen in terms of the extent to which the focus is or is not on the self. Rogers' more frequent use of reflection with a patient who does not tend to refer to his self is quite in keeping with the purpose of reflection within client-centered theory. The goal of reflection, as of client-centered therapy, is to resolve the patient's split between his self-concept and his experiencing (Rogers, 1957, 1973). According to Barton (1974) reflections have the persistent effect of focusing both therapist and client upon the client's self. With Mike, who tends not to focus on his self, Rogers' high frequency of reflection is in keeping with client-centered therapeutic goals. With Cathy, the focus is already predominantly on herself, leaving the therapist with the option of reflecting less often.

In summary, the findings support Rogers' contention that reflection is used on a consistently non-selective basis. However, while Rogers reflects the different domains of the client's attentional focus without preference, he exhibits
a tendency to use reflections more often with a patient who self-explores infrequently, and less often with a patient who frequently discusses herself. It is suggested that studies examine experienced psychotherapists with an eye toward identifying the generality of these findings.

The Consequences of Reflection in the Initial Interview

The data given in Tables 3.6 through 3.11 lead to a rejection of the hypothesis that the immediate consequence of the therapist's reflections is patient self-exploration. Under no circumstances illuminated by the analyses, did reflections tend to be followed by patient self-exploration over other patient categories.

Again these results are not easily interpretable within a reinforcement theory of reflection. The discussion on antecedents stressed that Rogers does not reinforce any particular category of patient statement. While the verbal conditioning studies reviewed in Chapter I are split on whether reflections can in fact condition self-references, the present data reveal no demonstrable tendency for reflections to condition self-discussion.

As hinted at by Frank and Sweetland (1962) and Truax (1966), however, the data illuminate a consequence of reflection other than that of self-exploration. While no overall consequences of reflection emerged in the "Mike" interview (Table
3.6), the data from the "Cathy" interview indicate a surprising turn not expected from the review of empirical studies (Table 3.9). Following reflections, Cathy showed a highly significant overall tendency to turn her attention toward the therapist, and engage in relating to the therapist.

These results are in accord with Frank and Sweetland's (1962) findings that reflections are not especially followed by patient self-exploration. The results of the "Cathy" interview go further however, in that a significantly demonstrable effect of reflection is that the patient's attention is diverted back onto the therapist.

These were the major findings regarding the consequences of reflection. Some additional analyses were performed with the idea of illuminating the consequences of reflection under the three different patient antecedent conditions. In general, these analyses (Tables 3.7, 3.8, 3.10, 3.11) support the major finding that reflections may immediately result in pulling the patient into relationship with the therapist, rather than encouraging immediate self-exploration.

Specifically in the "Mike" interview, reflections resulted in the patient's focusing on the therapist, when the patient had been attending to something external (Table 3.7, 3.8). In the "Cathy" interview, the patient followed reflections by focusing on the therapist, when she had previously been attending to herself, or when she was already engaged in relating to the therapist (Tables 3.10, 3.11).
The differential effects of reflection with each patient under other antecedent conditions (Tables 3.7, 3.8, 3.10, 3.11) were insignificant.

The results can be summarized by saying that reflections have the persistent effect of pulling the patient into relationship with the therapist, and no immediate consequences in terms of patient self-exploration.

In the context of client-centered therapy, the findings may well be interpreted as aspects of the therapeutic relationship. It may be that patient uncertainty (Frank & Sweetland, 1962) or patient ambiguity (Truax, 1966) is somehow reduced in the therapeutic interaction following reflections, as these studies suggest. Possibly some other aspect of rapport (Mowrer, 1953) is a persistent issue following reflections. The actual nature of the therapeutic interaction following reflections is beyond the scope of this study, but provides fruitful ground for future research.

In the light of criticisms of reflection as not leading to heightened self-exploration, one of the most common rebuttals is that the particular reflections were not quite good enough, even when the therapy was carried out by the deans of client-centered therapy (Rogers et al., 1967). Although that may of course be true, the net result is a locking-in of the notion that proper reflections will indeed lead to self-exploration by the patient. However, another interpretation would seem appropriate - that with some therapists and some patients, even
good and proper reflections have a pronounced consequence of pulling the patient into relationship with the therapist, and a symmetrical reduction of any tendency to explore one's self.

In commenting upon criticisms to the effectiveness of reflective statements, Rogers (1967) likewise emphasizes the importance of the therapist being a particular way: "When it plays any real function, this kind of response is not a reflection of feeling, but an honest groping attempt on the part of the therapist to understand fully, sensitively, and accurately the internal world of meaning, thought, experience, and feeling, of his client. When it has these qualities it is effective and definitely moves the therapeutic interaction forward (p. 515). The present findings support the idea that reflections highlight the therapeutic interaction, and only secondarily, if at all, have any direct effect on the patient's self-exploration.

Summary and Conclusions

The present study was designed to investigate the antecedents and consequences of reflection in the initial interview.

The first chapter presented a client-centered theoretical rationale for the formulation of hypotheses, stressing the necessity of a clear definition of reflection. Empirical studies that contribute to expectations regarding the antecedents
and consequences of reflections were reviewed and the hypotheses stated.

In the second chapter, the experimental design was presented with discussion of the research considerations. The third chapter presented the results of the data analysis.

The first hypothesis, which proposed the non-selective use of reflective statements by the therapist, was accepted.

The second hypothesis, which proposed self-exploration as the immediate patient consequence of therapist reflection, was rejected. For the "Mike" interview, no significant overall consequence of reflection emerged. However, the "Cathy" interview demonstrated that a significant overall effect of reflection was to focus the patient onto the therapist, rather than on exploration of self.

This major finding was supported by additional analyses of both interviews, which attempted to reveal any differential consequences of reflective statements. Of the additional analyses which had significant results, all demonstrated the same effect of reflection. Under certain specific conditions antecedent to reflections, both "Mike" and "Cathy" exhibited a tendency to turn their attention toward the relationship with the therapist, with a symmetrical reduction in any tendency to self-explore.

It was concluded that reflections, as operational components of the therapist's ongoing empathic attitude, are provided on a regular and non-selective basis in the initial interview.
It was also concluded that reflections have the immediate effect of highlighting the therapeutic interaction, and little, if any, direct influence on the patient's tendency to self-exploré, again with the initial interview.

Reflections appear to have important practical implications for the initial interview, when rapport is being established. The therapeutic relationship may be brought into focus by the use of the reflective technique.

The nature of the therapeutic interaction following reflections is beyond the scope of this study, but presents a cogent question for future investigation.
REFERENCES


Mintz, Jim & Luborsky, Lester. "Segments versus whole sessions: which is the better unit for psychotherapy process research?" Journal of Abnormal Psychology, 1971, 78(2), 180-191.


A process conception of psychotherapy. American Psychologist, 1958, 13, 142-149.


Siegman, A.W. & Pore, B. An empirical scale for the measurement of therapist specificity in the initial psychiatric interview. Psychological Reports, 1962, 11, 515-520.


Waskow, Irene E. Reinforcement in a therapy-like situation through selective responding to feelings or content. In Stollak et al. (eds.). Psychotherapy research: selected readings. op. cit.