CLIENT EXPRESSION OF HOSTILITY IN PSYCHOTHERAPY

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

1986

ABSTRACT

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The importance of the expression of hostility by clients in psychotherapy has been accepted by most if not all schools of psychotherapy. Beginning with Freud, hostility has been considered to be one of the most important issues with which the client must deal. However, there has been little consistent empirical evidence to support the efficacy of hostility expression in therapy.

Subjects in the present study were comprised of forty non-student adult clients who were engaged in psychotherapy at a university-based outpatient teaching clinic. Clients filled out the Symptom Checklist and therapists rated clients on the Hopkins Psychiatric Ratings Scale after the intake and final therapy sessions. Both groups also filled out a post-therapy questionnaire. Raters scored typescripts of the first, middle, and final sessions for overt, covert, and inward hostility.

Results indicated that males and females did not differ significantly from one another in their mean expressions of

overt and covert hostility outward. Women were significantly higher than men on the expression of hostility inward at the beginning of therapy. The two groups did not differ significantly at middle or final stages. For all three hostility variables, men and women differed in the manner in which hostility expression was related to other variables. Inward hostility was significantly related to global pathology at the beginning of treatment for women, but not men. For men, but not women, the expression of hostility inward at the end of treatment was significantly related to therapist ratings of pathology. For women, but not men, depression was significantly related to initial expressions of hostility inward. There was also some support for the prediction that client ratings of success would be related to a drop in hostility outward over time. The complex results were discussed and areas of future research were suggested.

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to Dr. Norman Abeles for his direction and expertise in chairing my dissertation committee. His support and encouragement throughout the development and completion of this study were invaluable. I would also like to thank Dr. Robert Caldwell, Dr. Bertram Karon, and Dr. Ralph Levine for serving on my committee.

I would also like to extend my appreciation to George Ankuta, Tim Eaton, and Wendy Sabbath for their help in the difficult and often arduous task of rating the therapy transcripts. Thanks are also extended to Dr. Kenneth Salzman for his assistance with the computer and statistical analyses. Finally, I would like to thank Helen Moore for her work in typing the therapy transcripts and final drafts of this dissertation.

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INTRODUCTION

The importance of the expression of hostility by clients during the course of psychotherapy has traditionally been accepted by most if not all schools of psychotherapy. Hostility has been considered to be one of the most significant areas of conflict with which the client or patient must deal. As Fromm-Reichmann (1950) stated, "Every mental patient will have to express a marked degree of hostility in the course of his treatment" (p. 22). Therapists and counselors generally accept the notion that the expression of hostility by the client should be permitted and even encouraged in therapy (Gamsky & Farwell, 1966). Bandura, Lipsher, and Miller, (1960) reflected the general consensus in the literature when they stated that, "a minimal condition for the resolution of a patient's conflicts would seem to be that the patient's conflictive feelings are permitted to occur in the therapy situation" (p. 1).

Theoretical Implications

The basis for the notion that it is important for the client to express his or her anger in psychotherapy comes in large part from the concept of catharsis. The word catharsis comes from the Greek word katharsis which

essentially means to clean or purify and has become part of the philosophy and belief system of Western civilization. As Berkowitz (1962) points out, "The idea of a hostility catharsis is surely one of the most widely accepted doctrines in the folklore of both the man in the street and the social scientist" (p. 11). However, different authors have meant different things by catharsis.

Freud and Breuer used the term catharsis to refer to the sudden remembering of forgotten memories and the subsequent expression of the emotions attached to them. The psychoanalytic concept of catharsis assumed that emotions are stored up and then discharged. Freud and Breuer believed that catharsis resulted in a release of emotional reserves of anger and repressed psychic energy, which in turn led to a feeling of relief. In his later writings, Freud (1956) wrote that the usefulness of catharsis was limited, although he felt that it was useful with certain kinds of hysterical symptoms. Psychoanalysts, nevertheless, still view catharsis as possessing a potentially useful role in psychoanalysis (Nichols & Zax, 1977).

For some, the catharsis hypothesis assumes that aggressive behavior reduces the internal aggressive drive. Theorists such as Dollard believe that acts of aggression lead to a reduction in the instigation to commit further acts of aggression (Dollard, Doob, Miller, Mowrer, & Sears, 1939). According to these authors, "One of the earliest lessons human beings learn as a result of social living is

to suppress and retain their overtly aggressive reactions" (p. 2). For clients who are undercontrolled in the expression of hostility in their daily lives they hypothesized that catharsis in therapy is thus of value. However, Dollard later revised his beliefs regarding the efficacy of catharsis, stating that simply revealing one's perceived sins and mistakes does not necessarily lead to improvement. Rather, it is the therapist's acceptance, reassurance and forgiveness that leads to a decreased sense of isolation and increased hope for reward. Should the expression of feelings be followed by criticism, relief will not be experienced by the client or patient (Dollard & Miller, 1950).

Learning theorists such as Bandura (1961) point to the usefulness of the expression of hostility for overinhibited clients. They believe that the expression of hostility without the subsequent punishment or withdrawal by the therapist leads to the extinction of guilt and anxiety. Furthermore, they assume that the extinction effects generalize to thoughts concerning related topics as well as to verbal and physical behaviors.

Other behaviorists have also demonstrated interest in cathartic expression. Ullman and Krasner (1965), for example, wrote that "interview-induced emotional responses, including abreaction and emotive imagery" (p. 51) are among the methods of change which can be used in successful behavior modification. Joseph Wolpe also believes catharsis

to be a useful tool in the treatment of neurotic disorders (Wolpe & Lazarus, 1966). His position is that abreaction is effective in its use of the counterconditioning of anxiety. Similarly, Shoben (1960) supported the use of catharsis in therapy, stating that "catharsis will be effective when it involves (a) the symbolic reinstatement of the repressed cues for anxiety, (b) within the context of a warm, permissive, nonjudgemental social relationship" (p. 73). Under those circumstances Shoben believes that counterconditioning takes place, whereby the patient learns to react in a non-anxious fashion to the original stimuli.

Among other theorists who deal with emotion in psychotherapy is Wilhelm Reich (1949, 1960). He stressed the necessity of sustained catharsis over the course of therapy, as opposed to individual, intense abreactions.

Still other theorists aim to promote inner changes within the client by means of emotional expression. In client-centered therapy (Rogers, 1951), the therapist listens to the patient in an empathic, accepting manner in order to help the client talk more freely about his or her own inner feelings. As part of this tradition, theorists such as Gendlin (1969) believe intense emotional focusing by the client to be indicative of effective therapy sessions. Janov's primal therapy (1970) also makes use of catharsis and intense ventilations of emotions in order to break down client defenses.

REVIEW OF THE LITERATURE

Despite the pervasive belief that the expression of client hostility is of value, the research literature provides inadequate and at times contradictory evidence regarding that belief. As Warren and Kurlychek (1981) point out, "the effectiveness of cathartic methods of anger and aggression has not been substantiated by empirical investigators" (p. 137).

Empirical Findings

The effects of catharsis on aggression and behavior change have been studied by numerous social psychologists. These researchers have found that a wide range of behaviors which are considered to be cathartic actually lead to an increase rather than a decrease in aggressive behaviors.

Along these lines, Tavris (1982) in the book Anger: The Misunderstood Emotion, argues against the notion that the expression of anger is necessarily a positive experience for the person who expresses anger. She points out that suppressed anger can be unhealthy if not communicating these feelings leads to the continuation of the dissatisfying situation. However, she believes that the expression of angry feelings often makes things worse. According to Tavris, the situation in which anger is expressed affects the way one feels afterwards. She reports that studies show a drop in self-esteem and an increase in depression for people after they express anger. She believes that persons

with a strong need for approval feel guilty about expressing hostility and consequently don't find aggression to be cathartic. Berkowitz (1962) states that behaving aggressively towards another may make the aggressor feel better but may also create unfavorable attitudes toward the aggressor. Thus, the aggressor is quicker to behave aggressively towards that person in the future. Some authors also argue that arousal and aggression may actually increase as a result of rumination about annoying situations. As Willard Gaylin (1984) suggests in The Rage Within: Anger in Modern Life, "The problem with people who have pent up emotions is not their ability to express them, but their capacity to generate" (p. 93) excessive amounts of anger. He believes that the physiology associated with the generation of anger prepares the individual to respond in a way that is obsolete and inappropriate to modern day life.

The negative consequences of hostility expression can be seen for children at an early age, as well as for older persons. Tavris points out that allowing children to play aggressively actually increases aggression. For example, a number of studies provide evidence that direct or vicarious participation in aggression maintains and even may increase such behaviors in children (Bandura, Ross, & Ross, 1961, 1963a; DeRath, 1963; Feshbach, 1956; Mussen & Rutherford, 1961; Walters, Leat, & Mazei, 1963). Shooting real and toy guns has been shown to lead to an increase in aggression in both children (Mallick & McCandless, 1966) and college

students (Buss, Booker, & Buss, 1972). Warren and Kurlychek (1981) report several studies which find no support for the notion that watching or participating in aggressive sports leads to a reduction in aggression (Goldstein & Arms, 1971; Husman, 1955; Patterson, 1974; Quanty, 1976). Similarly, Mueller and Donnerstein (1983) found that arousal by either humorous or violent films facilitated aggressive behavior by subjects who had been previously angered. Still other studies have found an increase in aggressive behaviors after direct or vicarious participation in aggressive activity (Buss, 1961; Walters & Llewellyn Thomas, 1963).

A number of studies lend support for the notion that expression of hostility may at times be detrimental. Brown (1976), in a study of women coping with marital dissolution, found that expression of anger did not lead to heightened self-esteem or feeling better amongst female divorcees. She found that the women who let their anger out were not better off than those who did not. Similarly, Strauss (1974) reported that married couples who vent more verbal anger are also more physically abusive.

Ebbesson, Duncan, and Konecni (1975) studied the effects of verbal aggression on subsequent verbal aggression for angry subjects who had been laid off from their jobs and non-angry subjects who had left their jobs voluntarily. They found that giving a person the opportunity to verbally attack one of the potential causes of one's anger does not lead to a decrease in such responses and can actually lead

to an increase in such statements, even though that might lead to negative results. They concluded that while nonverbal aggression tends to reduce future nonverbal aggression, verbal aggression tends to increase future verbal aggression.

Ebbesson et al. (1975) also found that for non-angered subjects, an interview in which they made self-critical statements led to an increase in such statements, though for angered subjects the result was the opposite. They found that angry subjects derogated themselves less after having chastised themselves than after having chastised their supervisor or no one. Subjects who were already angry prior to the experiment were more hostile towards their supervisor and company after having said negative things about them.

Kahn (1960) found an increase in aggression for angered students after a display of anger situation in which hostile remarks were permitted and accepted. In a later study, he found that those subjects who had been verbally probed by an experimenter until they had expressed feelings of anger or annoyance regarding an earlier phase of the experiment disliked their annoyer significantly more than did controls (Kahn, 1966).

A number of studies have examined affect expression in analogue situations. In one review of eleven such studies, the effectiveness of catharsis in therapy-like situations was supported in seven studies, not supported in one study, and was found to be ambiguous in three studies (Nichols &

Zax, 1977). In another such review, Bohart (1980) discussed four studies that he and his associates had conducted. He concluded that the expression of anger does not necessarily lead to a reduction in anger and can actually lead to an increase in anger. He also concluded that cognitive factors and a feeling that one was understood by the counselor were crucial in determining whether or not affect expression would produce relief and tension reduction.

These social psychological studies cast some doubt on the catharsis hypothesis and the efficacy of the expression of hostility. Many indicate that rather than leading to a decrease in the aggressive drive, the expression of hostility can lead to an increase in the drive. In a recent examination of the catharsis hypothesis, Feshbach (1984) stated that "the notion of catharsis is in dispute" (p. 92) and that "the evidence for emotional expression as a cathartic mechanism is not impressive" (p. 98). Similarly, Pierce, Nichols, and Dubrin (1983) point out that there is no empirical evidence to substantiate the belief that the expression of powerful feelings is therapeutic. However, they do believe that the social psychology literature is "not directly relevant" (p. 240) to cathartic psychotherapy. They assert that the experiences of affect examined in these studies are quite different from the expression of affect which occurs within actual therapy sessions. Along these lines, Feshbach (1984) concluded that despite the relative

lack of evidence in support of the catharsis hypothesis, "it is premature to discard this hypothesized process" (p. 99).

Hostility Expression in Psychotherapy

Despite the negative findings reported in the social psychology literature, there is some support for the notion that expression of hostility by the client is positively associated with outcome. For example, Nichols (1974) found that patients in brief cathartic therapy who showed higher intensity of emotional discharge were significantly more successful than clients who showed lower levels of intensity. Truax (1971) also found that group therapy patients who were able to express their negative feelings tended to have more successful outcomes. In another group therapy study, Roether and Peters (1972) found that sex offenders' expression of hostility as rated by the therapist was positively related to outcome. Cabral, Best, and Paton (1975) also noted a consistent relationship between patients' perceptions of intense emotional expression and outcome in an exploratory study of group therapy. However, they found no relationship between amounts of abreaction and outcome.

Using client and therapist self reports, Saltzman, Luetgert, Roth, Creaser, and Howard (1976) found that the client's report of ability to experience affect towards the therapist was significantly and positively related to the therapist's assessments of degree of change and presenting problem resolution ($p<.01$), though the same was not true for

feelings not focused on the therapist. Lorr and McNair (1964) found that clients who saw themselves as acting in a hostile-controlling manner were significantly less likely to improve. Using therapist ratings of success, Green (1968) found no significant differences in the mean proportion of hostile expressions when comparing successful and partially successful student clients with unsuccessful and partially unsuccessful clients.

A number of studies have examined pre-therapy levels of hostility. For example, Mintz, Luborsky, and Auerbach (1971), in a factor-analytic study of ratings of psychotherapy sessions, found some support for a positive relationship between patient hostility to others and a success and satisfaction outcome criterion ($p<.05$). They suggest that patients who enter therapy with a greater ability to verbalize their feelings of hostility to others, especially if they are lower on distress and higher on health measures, tend to benefit more from therapy than those who have difficulty expressing their feelings. Women were found to be higher on hostility expressed to others than were men ($p<.02$). Because of this sex difference, the correlation between hostility to others and outcome reached only the $p<.10$ level as a predictor over and above sex.

Patterns of Hostility Expression in Therapy

Several authors have examined the pattern of hostility expression over the course of therapy. According to Snyder and Snyder (1961), while positive affect appears to increase

in the client throughout therapy, negative peaks in the middle and then goes down. Varble (1964), in a study of successful clients at a college counseling center found that there were changes in client initiated hostility throughout therapy, but that these changes were inconsistent. He found that successful clients who were initally high in amount of client initiated hostility had a significant decrease from beginning to middle stages and then increased from middle to end. He also found a non-significant trend for successful clients of staff to express hostility towards the therapist early in therapy, though the opposite was the case for clients of doctoral student interns.

Green (1968) did find a non-significant trend for hostility to increase during the middle phase of therapy and to decrease at the end. Crowder (1972) found that successful clients were more hostile-competitive and less passive-resistant in early interviews than were unsuccessful clients. Successful clients were also less passive-resistant in middle sessions than were their unsuccessful counterparts.

Another study which addressed the issue of patient hostility was performed by Tsiantis, Blackburn, and Lyketson (1981). In an examination of 24 schizophrenics and 16 depressed controls, they found that at the point of admission, the former were predominantly extra-punitive on measures taken from MMPI items while the latter were predominantly intro-punitive. Though the differences

disappeared by the fourth week, schizophrenics remained significantly more extra-punitive in direction. Tsiantis et al. found that both extra-punitiveness and intro-punitiveness decreased significantly over the eight weeks after admission, with the decrease in the latter being more dramatic over time than the decrease in the former. There was a non-significant trend for the predominance of extra-punitiveness over intro-punitiveness to increase over time. They report findings that extra-punitiveness was more stable than intro-punitiveness in schizophrenics. They relate these findings to similar ones which have been reported with depressives (Blackburn, 1974; Mayo, 1967). Tsiantis et al. also found that intro-punitiveness and extra-punitiveness significantly changed in the same direction as three measures of psychopathology over time and report that decrease in hostility is highly correlated with improvement in pathology. However, they did not find significant relationships between treatment outcome and admission levels of intro-punitiveness, extra-punitiveness, and direction of hostility. They thus concluded that response to chemotherapy was independent of hostility levels.

These studies suggest that patterns of hostility expression over the course of therapy may be quite complex. In some studies successful clients appear to have a continuous drop over therapy while in others hostility increases in middle stages and then decreases towards the

end. Important factors appear to be initial levels of hostility and pathology, success of therapy, and sex of the client.

Next we will consider the measurement of hostility with particular emphasis on the content analysis scales developed by Louis Gottschalk and Goldine Gleser (1969). These scales were utilized in the present study to assess the process of client expression of hostility within therapy. Later on, we will discuss the use of the hostility dimension of the SCL-90 (Derogatis, 1977) to measure levels of pre- and posttherapy hostility in the client.

GOTTSCHALK-GLESER HOSTILITY SCALES

In their review of psychotherapy change measures, Waskow and Parloff (1975) stated that the use of standard instruments would help the field of knowledge and pointed out that the need for a standard battery of tests has been expressed by many researchers over the years. Their goal was the use of standard measures in psychotherapy research so that there could be greater comparability of studies in the field. Kiesler (1975) recommended the use of content analysis scales which had been developed by Gottschalk and Gleser (1969). He stated that these scales are "clearly relevant" (p. 103) to the study of adult outpatient psychotherapy. More recently, Schofer, Balck, and Koch (1979) pointed out that one of the main reasons for the development of these scales was that Gottschalk "was looking for psychological instruments with which he could measure immediate and changing affects of patients in interview or psychotherapy sessions" (p. 857).

Gottschalk and his associates have been analyzing the content of human speech for over a quarter of a century. In addition to hostility inward, hostility outward and ambivalent hostility, psychological constructs for anxiety and social alienation-personal disorganization (the schizophrenic syndrome), hope, achievement strivings, and human relations have been focused upon. The underlying theoretical framework for these scales has been an eclectic one, utilizing psychoanalytic clinical theory, behavioral

and conditioning theory, and linquistic theory (Gottschalk, 1979).

Scoring Categories

There has been quite a bit of research on hostility expression using the Gottschalk and Gleser scales. The standard instructions which have been used for most of these studies direct the subject to "speak for five minutes about any interesting or dramatic personal life experiences" they have had (Gottschalk, Winget, & Gleser, 1969, p. 5). Typescripts of these statements are scored in three hostility categories: 1) Hostility Directed Outward, both overt and covert, 2) Hostility Directed Inward, and 3) Ambivalent Hostility. Hostility Directed Outward encompasses scores ranging from "denial of anger, through references to anger without an object, to hostility toward a situtation or infrahuman objects and finally to varying degrees of hostility towards human beings" (p. 62). Hostility Directed Inward measures "transient and immediate thoughts, actions and feelings that are self-critical, self-destructive, or self-punishing" (p. 193). The Ambivalent Hostility scale is scored to "all themes about destructive, injurious, critical thoughts and actions of others (including situations and objects) toward the self" (p. 114) from sources outside the speaker (Gottschalk, Winget, & Gleser, 1969). Gottschalk and Gleser (1969) suggest that ambivalent hostility may be related to either or both hostility inward and outward. This may be

especially true when a certain degree of pathology is present. Gottschalk and Gleser have reported a substantial correlation between the ambivalent and outward hostility scales.

Gottschalk and his associates have taken the position that these psychological states all have biological roots. Both the definitions of the psychological states as well as the specific scoring categories and cues were designed and chosen so that whenever possible they would be associated with biological characteristics of the individual (Gottschalk, 1979, in press). They presumed that "at a neurophysiological level, the qualitative and quantitative differences typifying emotional states are associated with the activation of different configurational patterns of the cerebral cortex and the visceral brain" (Gottschalk & Gleser, 1969, p. 13). They believe that affects have physiological biochemical and behavioral components as well as subjective, purely psychological aspects.

Construct Validation

Over the years Gottschalk and his associates have reported numerous construct validation studies. Based on the findings of these studies, changes were made in the scales and their weightings in order to maximize the correlations between the scale scores and the measurement criteria (Gottschalk, in press). Gottschalk and Gleser (1969) cite four basic groups of validation studies which include psychological, psychophysiological,

psychopharmacological and psychobiochemical criteria. In many of the studies they emphasized the relationship between affective states and biological variables with the hope that the affects could be discriminated biologically as well as psychologically.

Psychological Studies

Among the psychological studies which Gottschalk and Gleser (1969) report was a pilot study of chronic schizophrenic patients in a state hosptial. Total hostility outward was significantly higher ($p=.02$) for belligerent schizophrenics than for withdrawn autistic schizophrenics, as designated by observers' ratings of aggressive behavior. The authors also reported a study of six points in psychoanalysis. For each subject, two five-minute samples were tape recorded and then rated by the analyst as to the relative intensity of the total immediate hostility outward. A year later these same samples were rated by a research technician using the Hostility Outward Scale of Gottschalk and Gleser. The correlation between the two scores was .76.

Gottschalk and Gleser (1969) report other psychological validation studies have related the hostility scales to 1) ratings of items from the Wittenborn Psychiatric Rating Scales (1955) for patients on psychiatric wards; 2) the Beck Depression Inventory (1961), and adjective checklist developed by Gleser (1960) and the Buss hostility measure (1961) for depressed and nondepressed inpatients; 3) the Mental Status Schedule of Spitzer (1965, 1966) with chronic

schizophrenic hospitalized patients; 4) the Oken Hostility Scale (1960) with persons referred by municipal court judges for psychiatric evaluation, and 5) Gleser's adjective checklist (1960), the Beck depression inventory (1961), the Buss hostility scales (Buss, 1961), the Oken hostility rating (1960); and a clinical depression rating scale with 50 psychiatric outpatients.

Psychophysiological Studies

Among the construct validation studies which Gottschalk and Gleser (1969) report using psychophysiological criteria is one which examined hostility scores for coronary patients and patients free of coronary artery disease. The former were higher than the latter on hostility inward and ambivalent hostility but not on hostility outward. Kaplan, Gottschalk, Magliocco, Rohovit, and Ross (1961) report hypertensive patients to be higher on hostility outward than were normals. In a study of 12 hypertensive women, Gottschalk, Gleser, D'Zmura, and Hanenson (1964) report significant positive relationships between inward hostility and blood pressure and significant negative correlations between hostility outward and blood pressure. All significant relationships between hostility and anxiety levels and blood pressure disappeared when the patients were given hydrochlorothiazide (a diuretic).

Psychopharmacological Studies

Gleser, Gottschalk, Fox, and Lippert (1965) found that among white adolescent males who were administered chlordiazepoxide (a minor tranquilizer) there was a significant drop in ambivalent hostility and a near significant drop in overt hostility outward after several administrations of the drug. No such findings occurred in the placebo group. Gottschalk et al. (1960) also report a significant drop in outward hostility for 16 of 20 patients after perphenazine (a major tranquilizer) administration, as compared to a placebo. Gottschalk, Gleser, Wylie, and Kaplan (1965) also report a significant increase in overt hostility outward to be associated with administration of an antidepressant (Imipramine).

Psychobiochemical Studies

Gottschalk and Gleser (1969) report a number of studies relating their hostility scales to psychobiochemical variables. In a study of male patients at a veteran's hospital, total outward hostility and ambivalent hostility was found to correlate significantly with plasma 17 hydroxycorticosteroid levels (Sholiton, Wohl, & Werk, 1963). However, no such findings occurred in a study of chronic male and female schizophrenics.

In another psychobiochemical study, Gottschalk, Kaplan, Gleser, and Winget (1962) report that for four of the five

women studied there was a statistically significant rhythmical change in the magnitude of at least one of the affects studied (hostility outward, hostility inward and anxiety) during their menstrual cycles.

On the basis of these and other studies, Gottschalk and Gleser (1969) concluded that "it was statistically, as well as heuristically, valid to separate the affect of hostility into three types based on the direction of the drive or impulse" (p. 158). The great numbers and varieties of publications which have continued to be published by Gottschalk and other researchers over the past quarter of a century have provided further construct validation.

State Hostility vs Trait Hostility

In his work on anxiety, Spielberger (1966) distinguished "between anxiety as a transitory state that fluctuates over time and a personality trait that remains relatively stable over time" (p. 15).

Though a person with trait anxiety might be more prone to react with anxiety states than others, he/she may or may not be anxious at a particular point in time. State anxiety is a reaction or process which is occurring at a given time while trait anxiety indicates a latent disposition for a certain type of reaction to occur if it is triggered by the appropriate stimuli. Spielberger argued that research on anxiety suggested that "trait anxiety measures reflect anxiety-proneness-differences between individuals in the

probability that anxiety states will be manifested under circumstances involving varying degrees of stress" (p. 15).

More recently, Speilberger has adapted these concepts and developed a state-trait anger scale (Spielberger, Jacobs, Russell, & Crane, 1983). He and his associates defined state anger (S-Anger) as an emotional state or condition which "can vary in intensity and fluctuate over time" (p. 169). Trait anger (T-Anger) was "defined in terms of differences in the frequency that S-Anger was experienced over time" (p. 169).

A similar state versus trait dichotomy would appear to apply to the Gottschalk-Gleser hostility scales. According to Gottschalk (in press) the scores made on the transcripts of five-minute speeches represent short-lived transient feelings. In the development of the scales Gottschalk and his associates were attempting to show how the analysis of speech behavior could "provide a numerical approximation (assessable in terms of probabilities) of complex psychological states" (Gottschalk & Gleser, 1969, p. 3).

Much of the research supports the variability of the content analysis scores over relatively short periods of time. For example, in one of the first investigations of sequential changes in affects and other psychological states, Gottschalk, Gleser, Magliocco, and D'Zmura (1961) found changes in anxiety, hostility outwards, and social alienation-personal disorganization between successive five-minute segments of two psychotherapy interviews.

Gottschalk, Winget, Gleser, and Springer (1966) also reported scores of five-minute units to vary over therapy sessions.

Schofer, Koch, and Balck (1979) also found that by using patient statement units, affective changes within therapy sessions could be demonstrated. Having studied 200 subjects, they concluded that there probably is a lawful sequence of changing affects within therapy sessions.

Similarly, Luborsky et al. (1975), in a study of one twenty-year-old male patient, examined interviews which had been tape recorded simultaneously with electroencaphalograms. It was found that using the Gottschalk-Gleser scales, high amplitude bursts of paroxysmal E.E.G. activity were preceded by higher hostility inward ($p<.05$) and higher anxiety ($p<.05$) on the thirty-word segments prior to the burst than on the thirty-word segments not followed by such a burst.

Despite the state-like nature of the variables being measured by these scales, Gottschalk (in press) believes that "affect scores derived from three or more five-minute verbal samples (produced at intervals of at least an hour apart) approximate trait measures in the sense of providing a measure of the relatively unvarying central tendency of a psychological characteristic" (p. 44).

In that light, Gottschalk and Gleser (1969) report a number of studies which examine the generalizability of the hostility measures over time. For example, in a study in

which one male subject taped his free associations for a period of 15 to 30 minutes, thirty-nine such recordings were made. It was found that hostility outward scores for the first 600 words of each protocol (approximately 5 minutes) were correlated .68 with the remainder of the protocol. This provided some evidence for generalizability.

In a study of 16 males who were hospitalized for various medical illnesses and who ranged in age from 30 to 72 years, verbal samples were obtained two to three weeks apart. The scores for ambivalent and inward hostility showed a moderate degree of generalizability though scores for hostility outward were extremely variable over time (Gottschalk & Gleser, 1969).

Gottschalk and Gleser (1969) also report a study of 28 dermatological patients, who were tested daily for three days. It was found that males were significantly more variable on ambivalent and outward hostility from day to day than were females. The average level for males varied somewhat less from patient to patient. On the hostility inward scale, males were more variable than females over both occasions and persons.

In another study designed to examine generalizability, eight hypertensive and one nonhypertensive (control) women were tested once a week for three weeks. It was found that "scores on all three scales were fairly consistent over occasions relative to the variability between persons" (Gottschalk & Gleser, 1969, p. 66), though this was somewhat

less in hostility outward than the other two scales. The authors conclude that verbal samples spaced over a limited interval of time should give "the typical level of inward or ambivalent hostility for most subjects", though "larger numbers of verbal samples would be needed to obtain the typical level of hostility outward, particularly for males" (Gottschalk & Gleser, 1969, p. 66).

Thus, research utilizing the Gottschalk-Gleser scales supports the notion that the affects being measured are transitory in nature. However, there is also support for the idea that repeated samplings may approximate more trait like measures.

Normative Data

Gottschalk and Gleser (1969) have reported normative data on the three hostility scales. In their initial studies, no differences were found for age, education or intelligence with the exception of a slight increase with age for women. However, later studies have shown some differences. For example, initial affect scores were found by Gleser, Winget, Seligman, and Rauh (1979) to be higher for teenagers than for the previous normative samples. Silbergeld, Manderscheid, and O'Neil (1979) also found higher hostility, as well as anxiety scores, amongst adolescents than had been found in previous normative samples on adults. They report data which shows significantly higher means on hostility inward and overt and total hostility outward for adolescents than for employed

personnel. In a study performed in Germany, significant differences between high and low social classes have also been found (Schofer, Koch, & Balck, 1979).

One variable which has been found to be significant in the use of the Gottschalk-Gleser scales is sex. Various studies have shown sex of interviewee and interviewer to influence results on one or all of the hostility scales. In their preliminary normative data on employed personnel, students and medical patients, Gottschalk and Gleser (1969) report no significant differences between the sexes for hostility directed inward or ambivalent hostility. However, both the mean and median scores for hostility outward were significantly higher for men than for women. Patients and male students were also slightly higher than females on this measure. The means differed at the .05 level and the median at the .06. Gottschalk and Gleser (1969) reported that for males, scores on hostility outward are similar to scores for other measures of aggression. This was not true for females. Also, hostility inward correlated with measures of guilt and depression on a consistently higher basis for females than for males.

A number of studies have examined sex of interviewer as well as that of interviewee. Gottschalk and Gleser (1969) report that in a study of 170 freshman college students, ambivalent hostility scores were significantly related to sex of interviewer and interviewee ($p<.001$). Females were higher on ambivalent hostility when interviewed by men,

while males were higher on ambivalent hostility when interviewed by females. However, no significant differences were found according to sex of interviewer and interviewee with the other hostility scales. In a study of 19 undergraduate and graduate student volunteers, Gottschalk, Hanson, and Gleser (1964) examined the influence of sex of interviewer on content of speech. The findings of that study tended to support the notion that men and women behave differently with interviewers of different sexes. In this study, heterosexual compatibility scores were a significant factor. There was a nonsignificant trend for women to have higher hostility outward when interviewed by men than by women. Schofer, Koch, and Balck (1979), in a normative study performed in Germany, related various measures including sex of interviewer and interviewee to the Gottschalk-Gleser hostility scales. Subjects were each interviewed twice, the first sample occurring one hour before the second. They found that women were significantly higher than men on hostility inward in the first sample, though there was only a tendency in the second. They did not find any significant differences between those interviewed by males and those interviewed by females, though there was a tendency for female interviewers to elicit more hostility inward. However, the authors did find interaction of sex of interviewer and interviewee to be at times important. In both samples, women interviewed by men showed higher hostility inward than men interviewed by men.

In the second sample, men interviewed by men showed lower hostility inward than men interviewed by women.

Relationship to Pathology

A number of studies have related these hostility scales to measures of pathology and behavior problems. Gottschalk and Gleser (1969) report that for males, measures of hostility outward are associated with other measures of aggression, such as Gleser's adjective checklist (1960), and the Oken Hostility Rating (1960). They report that for males, high hostility outward is also correlated to high clinical ratings of depression and suggest that hostility inward is related to depression and fatigue. Using the Gottschalk-Gleser scales, Lemaire and Clapton (1981) found that subjects who were depressed according to MMPI scores, expressed significantly more inward, outward, and total hostility than did controls.

The hostility scales have at times been related to measures of shame and guilt. Gottschalk and Gleser (1969), for example, report a relationship between shame and hostility inward as assessed in five-minute samples obtained by the standard procedure. They found shame anxiety and hostility inward to correlate .43 and .43, guilt and hostility outward to correlate .56 and .26, and shame and hostility outward .10 and .09, respectively amongst 50 psychiatric outpatients and 94 employed persons.

Witkin, Lewis, and Weil (1966, 1968) studied the relationship of shame and guilt to anxiety and hostility in

four "differentiated" and four "undifferentiated" psychotherapy patients. Both shame and guilt anxiety were found to relate to feelings of hostility in psychotherapy sessions in both types of patients.

In a study of outpatient volunteers who were suffering from neurotic anxiety and tension of at least moderate degree, Gottschalk, Hoigaard, Birch, and Rickels (1979) compared the hostility scales to, among other instruments, the Hopkins Symptom Checklist. They studied patients before and after the administration of psychoactive drugs and found numerous significant correlations between the hostility scales and the SCL. For example, total SCL correlated significantly with pre-drug total hostility outward scores ($p<.02$), as did the Depression factor and total SCL. The Somatization score correlated significantly ($p<.05$) with post-drug hostility inward, as did the Obsessive-Compulsive factor and total SCL scores. There were no significant correlations found between the SCL and pre-drug ambivalent hostility scores. However, the Somatization factor of the SCL did correlate significantly ($p<.05$) with post-drug ambivalent hostility scores.

In a study which compared junior high school students who had been referred for "coping courses" (counselor groups) by school guidance personnel for a variety of reasons (absenteeism, behavioral problems, etc.) with volunteer students, Silbergeld, Manderscheid, and O'Neill (1979) found a number of differences on the

Gottschalk-Gleser Hostility scales. The former participated in groups which had been designed to enhance self-esteem and abilities to express, perceive, and interpret communications and feelings. Those referred to the coping groups were significantly higher on hostility inward. On ambivalent hostility, males in the counselor groups were highest, followed by females in the noncounselor groups, females from counselor groups, and finally males from noncounselor groups. Hostility outward was highest for whites in counselor groups, followed by blacks in noncounselor groups, blacks in counselor groups, and whites in noncounselor groups. The results of the study suggest that total inward hostility and ambivalent hostility, which were higher in counselor groups, are indicators of poorer school performance. Similarly, Coelho, Hamburg, and Adams (1974) found guilt and ambivalent hostility to correlate with weak coping ability, while Stierlin (1974) found these two measures to correlate with sense of failure.

Relationship to Psychotherapy

A number of studies have examined the Gottschalk-Gleser hostility scales as they relate to psychotherapy. Gottschalk, Mayerson, and Gottlieb (1967), for example, had clients in a brief psychotherapy clinic speak for five minutes in response to standardized instructions to talk about any interesting and dramatic life experiences. Using an early version of the Gottschalk-Gleser scales, they found a significant ($p<.001$) decrease in hostility inward on those

speeches after brief psychotherapy. They did not find significant changes between pre- and post-treatment measures of hostility outward or ambivalent hostility.

Macleod and Tinnin (1966) found, on the basis of five-minute samples taken before and just after emergency brief psychotherapy, that hostility inward decreased significantly ($p<.05$), though no significant changes were found on hostility outward or ambivalent hostility.

Gleser, Winget, Seligman, and Rauh (1979), in a study evaluating psychotherapy with adolescents, examined the relationship of outcome to delay of treatment, psychiatric consultation, and the Gottschalk-Gleser content analysis scales. They found that female therapy dropouts had higher hostility outward and lower hostility inward than male therapy dropouts or those of either sex who remained in therapy. They did not find significant differences on hostility scores between initial assessments and six-week assessments between those who received immediate treatment and those who had a six-week delay. However, at twelve weeks there was a significant difference between the two groups ($p<.01$). The former group temded to be lower on hostility outward while the latter was slightly higher on hostility inward at twelve weeks. At twelve weeks, male patients were significantly lower on hostility outward in all conditions except for the group which had had both a six-week delay of treatment and whose therapists had not received psychiatric consultation. Females at twelve weeks

showed a significant decrease in ambivalent hostility in the two conditions in which they a) had both immediate treatment and their therapists had had psychiatric consultation, and b) had a delay in treatment, but their therapists had not received psychiatric consultations. The authors did find that ambivalent hostility remained higher on average for cases presented for psychiatric consultation than for those not presented,though this was significant only for those in the delay of treatment group.

At a six-month follow-up assessment, all groups were found to have decreased hostility outward except for white females whose scores increased from their initial levels. Black and white females showed a modest decrease from initial assessments to six months, while black males showed a slight increase. On the ambivalent hostility scales, females were initially higher than males and blacks were initially higher than whites. Post-treatment scores decreased for all except black males who increased. At six months, scores were significantly higher for blacks.

Results of this study (Gleser et al., 1979), as well as others discussed above, demonstrate clearly the existence of complex interactions between client expression of hostility as measured by the Gottschalk-Gleser hostility scales and other variables in the psychotherapy situation. These include level of pathology such as depression, shame and guilt anxiety, obsessive compulsiveness, somatization, low self-esteem, and poor coping abilities, as well as global

levels of pathology. Race and sex were shown to be at times important, as were differences in aspects of treatment. The variety, as well as the complexity, of these findings point to the significance of client expression of hostility as it relates to psychotherapy. Further study is thus indicated.

Application of Hostility Scales to Psychotherapy Transcripts

Although much of the research which utilized these scales followed standard instructions to "speak for five minutes about any interesting or dramatic personal life experiences" (Gottschalk, Winget, & Gleser, 1969, p. 5), various researchers have applied the tests to psychotherapy, diagnostic, and other interviews (Gottschalk, 1979, in press). The studies reported in this section demonstrate the validity of the direct application of the Gottschalk-Gleser hostility scales to actual psychotherapy typescripts.

One of the first such studies examined consecutive five-minute samples of a patient's speech in two psychotherapeutic interviews (eighth and eighteenth sessions) (Gottschalk, Springer, & Gleser, 1961). Using an earlier version of the content analysis scales to score grammatical clauses for hostility, anxiety, and schizophrenic disorganization and alienation, they were able to find a number of differences within and between the two interviews. For example, they found that in the eighteenth interview, as opposed to the eighth, there was an increase in average number of references to hostility inward

(initiated by self or others) and a decreasse in average number of references to negative feelings or relations with others. They also found in interview eight, that anxiety and hostility were closely related (r=.70) but that there was no relationship in interview number eighteen (r=-.15). They found a strong relationship between the schizophrenic and hostility scales (r=.90) and a less strong relationship between anxiety and schizophrenia (r=.65). However, in the eighteenth interview, the latter relationship was stronger (r=.79) and the former weaker (r=-.28).

In another study which analyzed the same data, DiMascio (1961) demonstrated that an early version of inward hostility was negatively related to heartbeat in the earlier interview (p<.10) and the later interview (p<.05) and positively related to skin temperature in the earlier one (p<.10).

Lewis (1971, 1979) has also used typescripts of therapy interviews in order to analyze hostility and anxiety using the Gottschalk-Gleser scales. Among other results, she found that guilt anxiety correlated significantly and positively with hostility outward while shame anxiety correlated significantly and positively with hostility inward.

In another use of the scales in a natural setting, von Rad, Drucke, and Lolas (1979) examined the first 1000 words (approximately ten minutes) of patients' psychoanalytic interviews. They were able to establish greater than .85

reliability on measures of client speech. Among other results, they found that psychosomatic patients were lower than psychoneurotic patients on hostility inward ($p<.001$), ambivalent hostility ($p<.05$) and total hostility inward (a compilation of the two) ($p<.001$). Total hostility outward just missed reaching significance. Total anxiety, guilt anxiety, and shame anxiety also differentiated the groups in the same direction ($p<.001$).

Lolas and von Rad (1982), in a study comparing psychosomatic and neurotic patients were also able to find significant results by examining the first thirty minutes of tape-recorded interviews. They utilized an electronic verbal analysis system for obtaining scores on the Gottschalk-Gleser content analysis scales.

Steingart, Grand, Margolis, Freedman, and Buchwald (1979) evaluated the anxiety level of chronic schizophrenics. They applied the Gottschalk-Gleser scales to transcripts of ten-minute segments of clinical interviews. They found diffuse (nonsignal) anxiety and guilt anxiety on the Gottschalk-Gleser scales to be related to the communication behaviors of marginally adjusted chronic male schizophrenics.

In a study designed to examine the usefulness of teaching psychotherapy by the use of brief transcripts, Kepecs (1979) used typescripts of ten-minute segments of therapy to make ratings on a variation of the

Gottschalk-Gleser categories. He found this to be a useful tool for the supervision of psychiatric residents.

The studies which have just been reported provide support for the use of the Gottschalk-Gleser scales directly on psychotherapy material. Gottschalk himself (in press) has recently reaffirmed his recommendation that these scales be used for the objective measurement of psychological states within therapy. According to Gottschalk, the value of the utilization of content analysis procedures in psychotherapy research is that they can provide more objective measurements of "the magnitude of specific psychological states" (p. 24). He furthermore states that "such precise and accurate assessments of specific psychological dimensions may have considerable usefulness, for example, in the prediction of treatment outcome" (p. 24-25).

THE PRESENT STUDY

In their review of process and outcome in psychotherapy, Orlinsky and Howard (1978) state that, "the apparent importance of expressed hostility for good therapy outcome suggests that further research attention to the specific affective content of patient messages would be rewarding" (p. 306). The present study which examined hostility in psychotherapy sessions at the Michigan State University Psychological Clinic was performed to provide more data in this area. As was discussed earlier, despite the widespread assumption that the expression of hostility within therapy is desirable and even necessary for successful outcome, some authors have questioned the assumption (Pierce, Nichols, & Dubrin, 1983; Tavris, 1982; Warren & Kurlychek, 1981). Results which have been reported in the research literature are at times minimal, inconsistent, and even contradictory. The relationship of client hostility expression to other variables is at the least quite complex and complicated. Thus, further study was indicated. The basic question which the present study addressed is: "In what ways are the client's expressions of hostility within therapy related to other significant therapy variables?"

As was previously pointed out, Kiesler (1975), in the N.I.M.H. outcomes measures project, recommended the use of the content analysis scales developed by Gottschalk and Gleser (1969). The use of these scales in the present study

served a number of purposes. Firstly, it followed Waskow and Parloff's (1975) recommendation that a standard battery of tests be used in psychotherapy research. Secondly, it provided further information regarding the Gottschalk-Gleser scales themselves. As Schofer, Balck, and Koch (1979) pointed out, one of the original motivations of the development of the scales was the desire for instruments which "could measure immediate and changing affects of patients in interview or therapy situations" (857). However, these scales have tended to be utilized on material gathered in standardized testing situations rather than in actual therapy sessions. "The use of the instrument in research on psychotherapy is, therefore, at the present time still at an early stage of development" (Schofer, Balck, & Koch, 1979,p. 858). The present study was thus an attempt to provide potentially valuable information on a more direct use of the Gottschalk-Gleser content analysis scales in psychotherapy research.

Relevant Variables

The research which has been previously discussed points to a number of important variables to which client levels of hostility expression are likely to be related. Some of these relationships were investigated in the present study.

For example, the importance of levels and types of pathology was addressed. As was reported earlier, Green (1968) found a difference in hostility expression between males and females when degree of pathology was controlled

and suggested replication of her study. Other authors have been cited who indicate a relationship between the Gottschalk-Gleser scales and various measures of pathology.

One such study was reported by Gottschalk, Hoigaard, Birch, and Rickels (1979). They correlated the Gottschalk-Gleser scales with the Hopkins Symptom Checklist and report a number of significant findings. The present study related the hostility scales to the SCL-90, in an attempt to provide further understanding of the scales, specifically as they are used to measure affect expression within actual therapy sessions.

Sex of therapist and client were also taken into account. A number of studies cited previously point to the existence of differences on the hostility scales according to sex of interviewer, sex of interviewee, and the interaction of the two. Given traditional differences in sex roles and behaviors regarding expression of hostility, such findings are not unexpected.

Another area of interest which was examined was the pattern of client expression of hostility over the course of therapy. Results from previous studies have been somewhat unclear. Varble (1964), for example, found that for successful clients, hostility increased from early to middle sessions and then decreased from middle to end. Green (1968) found a similar trend, though results were not significant. One purpose of re-examining these issues was the availability of theoretically more valid outcome

measures (the SCL-90). Varble (1964) and Green (1968) relied upon therapists' ratings for success. Given the connection which might theoretically exist between client expression of hostility and therapist ratings of success, it was hoped that a study which used additional success criteria might clarify these patterns.

Other studies have reported changes in levels of hostility over the course of therapy. For example, Gottschalk, Mayerson, and Gottlieb (1967), using an early version of the Gottschalk-Gleser scales, found a decrease in hostility inward as a result of brief psychotherapy. Given the relationship which has at times been found between hostility inward and depression, this finding makes sense theoretically. Gleser, Seligman, Winget, and Rauh (1979) also report complex findings regarding the pattern of hostility expression over the course of therapy.

Sampling Issues

The decision as to the length and selection methods of segments to be analyzed for hostility in the present study was based on the previous literature, as well as on the needs of the present investigation. Gottschalk and Gleser (1969) recommend using verbal samples of at least seventy words. However, segments as small as thirty words have been reported to show significant correlations with other measures (Gottschalk, 1972, 1979; Luborsky et al., 1975). In relation to actual therapy sessions, one method which Gottschalk and his asssociates have suggested is the

breaking down of therapy transcripts into segments, for example, two to five minutes in length (Gottschalk, 1979, in press; Gottschalk, Winget, & Gleser, 1969).

In Gottschalk's 1979 compilation of studies, Schofer, Balck and Koch (1979) have proposed the use of three natural units for application of the Gottschalk-Gleser scales to psychotherapy. These include: a) the individual clause or sentence which consists of a subject and predicate; b) the individual statement in which the verbal statement of one of the participants is framed by two statements of the other participant; and c) the individual session. They found that the analysis of sections from a therapy hour could represent the whole hour and indeed the whole therapy.

The present study utilized tapes from the beginning, middle, and final stages of therapy. Five one-minute sections of each tape were transcribed for the purposes of analyzing client speech for expression of hostility. This made possible the calculation of average hostility scores for each session to be analyzed.

This procedure also served to address the state-trait issues which were previously discussed. The present study took the point of view that client expression of hostility would vary within sessions according to the changing affective state of the client. By averaging scores for five one-minute samples from each analyzed session, a representation of the overall affective state of that session was produced.

Although these scores on the hostility scales were assumed to represent transient affective states, it was hypothesized that these states would be influenced by the "differences between individuals in the probability" that the states would be manifested under varying circumstances (Spielberger, 1966). In other words, it was predicted that certain types of clients were more likely (prone) to express certain levels and types of hostility in beginning, middle, and end psychotherapy sessions (the varying circumstances).

HYPOTHESES

The experimental hypotheses which guide the present study reflect the, at times, contradictory nature of the theoretical and empirical literature. The expression of hostility outward and inward will be measured by means of the Gottschalk-Gleser content analysis scales. Hypothesis I will address the relationship between client expression of hostility outward within therapy and measures of client psychopathology. Although much evidence has been cited which relates hostility expression to psychopathology, that evidence has often been inconsistent. The present study predicts that there will be a relationship between levels of outward hostility expression in therapy, but does not specify the direction of that relationship.

Hypothesis I: Client expression of hostility outward in therapy is related to client global psychopathology as measured by:

A) client self reports on the Symptom Checklist (SCL-90R), and

B) intake and primary therapist ratings on the Hopkins Psychiatric Ratings Scale (HPRS).

Hypothesis II will address the relationship between client expression of hostility inward and psychopathology.

Studies which were cited previously (e.g., Silbergeld et al., 1979) demonstrated a relationship between expression of hostility directed inward and other indices of pathology. The present study provides an opportunity to further substantiate this relationship.

Hypothesis II: Client expression of hostility inward in therapy is positively related to client global psychopathology as measured by:

A) client self reports on the Symptom Checklist, and

B) intake and primary therapist ratings on the Hopkins Psychiatric Ratings Scale.

Hypotheses III and IV predict that there is a positive relationship between client expression of hostility (outward and inward) and the hostility scales on the SCL-90R and HPRS. If the predicted relationships are found, they will provide further validation for the Gottschalk-Gleser content analysis scales.

Hypothesis III: Client expression of hostility outward in therapy is positively related to client hostility as measured by:

A) client self reports on the Symptom Checklist, and

B) intake and primary therapist ratings on the Hopkins Psychiatric Ratings Scale.

Hypothesis IV: Client expression of hostility inward in therapy is positively related to client hostility as measured by:

A) client self reports on the Symptom Checklist, and

B) intake and primary therapist ratings on the Hopkins Psychiatric Ratings Scale.

Hypothesis V will address the relationship between hostility inward and depression. As was previously discussed, Gottschalk and Gleser (1969) suggest that hostility inward is related to depression. Indeed, the thematic categories which comprise the hostility inward scale are scored for depression, as well as for related feelings such as grief, disappointment, and discouragement. Thus, there should be a positive and significant relationship between hostility inward and depression simply based on the instructions and rules of the Gottschalk-Gleser scoring system. In addition, there is the widespread psychodynamic concept which holds that depression is a result of hostility turned against the self. Should the relationship be found in the present study, it would provide further empirical support for this theoretical concept.

Hypothesis V: Client expression of hostility inward in therapy is positively related to client depression as measured by:

A) client self reports on the Symptom Checklist, and

B) intake and primary therapist ratings on the Hopkins Psychiatric Ratings Scale.

Hypotheses VI, VII and VIII will deal with the effects of sex of client and therapist on expression of hostility within therapy. Hypothesis VI predicts that male clients will be significantly higher on expression of hostility outward than are females. This prediction is based upon the notion that males in our culture have traditionally been encouraged to express hostility outward more than have females. As Tavris (1982) points out, women are typically criticized for acting in an angry or aggressive fashion while men receive respect for such behaviors. As was discussed earlier, Gottschalk and Gleser (1969) previously found males to be higher on hostility outward than were females. Hypothesis VI is designed to provide further data in this area.

Hypothesis VI: Male clients are higher on expression of hostility outward than are female clients.

Hypotheses VII and VIII deal with the possible interaction between sex of client and sex of therapist on expression of hostility. Although no specific directional hypotheses were made, previous research points to the likelihood of interaction effects.

Hypothesis VII: Client expression of hostility outward is related to the interaction of the sex of the client and the sex of the therapist.

Hypothesis VIII: Client expression of hostility inward is related to the interaction of the sex of the client and the sex of the therapist.

Hypotheses IX and X will address the, at times, contradictory theoretical and empirical literature on the efficacy of the expression of hostility directed outward. The theoretical assumptions underlying virtually all schools of psychotherapy support the importance of the client's expression of such hostility within therapy. For those clients who are overly inhibited, it is assumed that expression of hostile feelings in the presumably safe, reassuring environment of psychotherapy will provide a sense of relief and a decrease in the guilt and anxiety which accompany the client's unexpressed feelings of hostility. For the client who is undercontrolled in the expression of hostility in his or her daily life, some theorists believe that expression of hostility in therapy is beneficial in that it reduces tension and the internal aggressive drive. However, other authors have questioned these assumptions regarding hostility expression and point to the empirical and social psychological literature for support. Many of the studies previously cited indicate that the expression of hostility leads to an increase rather than a decrease in

aggression. Some suggest that verbal expressions of anger lead not to feelings of relief but rather to a continued and sometimes increased experience of distress. The present study will attempt to clarify these opposing views and findings by means of the following experimental hypotheses.

Hypothesis IX: For clients who are initially high on expression of hostility outward, success is related to a drop in the level of expression of hostility from beginning to end of therapy.

Measures of outcome will include pre-post differences on the client's SCL-90R, pre-post differences on the therapists' HPRS, and client and therapist ratings of success.

Hypothesis X: For clients who are initially low on expression of hostility outward, success is related to an increase in the level of hostility expression from beginning to middle stages and a drop from middle to end stages of therapy.

Measures of outcome will include pre-post differences on the client's SCL-90R, pre-post differences on the therapists' HPRS, and client and therapist ratings of success.

Hypothesis XI will address the relationship between client expression of hostility inward over the course of

therapy and success. As was discussed previously, hostility inward is predicted to be associated with psychopathology. Therefore, clients who show a decrease in hostility inward from beginning to middle to final stages of therapy should be more successful than those who do not.

Hypothesis XI: Success in therapy is related to a drop in the level of expression of hostility inward from beginning to middle to end of therapy.

Measures of outcome will include pre-post differences on the client's SCL-90R, pre-post differences on the therapists' HPRS, and client and therapist ratings of success.

METHOD

Data

The present study utilizes data which has been collected for research purposes at the Michigan State University Psychological Clinic. The clinic is a training and research agency and is part of the Michigan State University Department of Psychology. It is staffed by clinicians (advanced psychology graduate students) who are under the supervision of Ph.D. clinical psychologists and it provides low-cost outpatient psychotherapy to members of the community who are not enrolled at the university. The data was originally obtained with the purpose of gathering relatively nonintrusive information on agency clients and their experiences in psychotherapy which could be utilized in later research undertakings. The data for the present study was collected between September of 1978 and June of 1983.

Clients

At the time of intake, all clients were asked to participate in an "evaluation" of the services offered at the clinic and were assured of confidentiality and their right to receive treatment regardless of whether or not they agreed to participate. If they gave permission, they were then asked to sign an agreement to fill out questionnaires

and to have some of their therapy sessions tape recorded (see Appendix A). As part of the study, all client participants were administered the Symptom Checklist (SCL-90R) after intake and after their termination interview. After the final interview, they were also administered a post-therapy questionnaire.

Subjects of the present study are comprised of all adult clients who agreed to take part in the study and for whom the necessary tape recordings and paper and pencil measures had been collected. Clients typically met on a once-a-week basis for an average of 27.5 total sessions. The number of sessions ranged from 10 to 71 sessions. The 40 clients to be examined include 15 males (37.5%) and 25 females (62.5%). They ranged in age from 20 to 54, with a mean age of 29. The mean annual income was $11,430 and ranged from $2,000 to $35,000. Subjects averaged 14.8 years of education, with a range of 6 to 20 years of schooling completed.

Therapists

Two groups of clinicians collected data and made ratings for the current study. The first included those therapists who conducted the initial intake interview and who filled out the initial Hopkins Psychiatric Ratings Scale. They included advanced clinical psychology graduate students who were serving half-time internships at the clinic. The second group was comprised of advanced graduate students whose participation in the present study resulted

from their agreement to participate in the overall data collection process at the clinic and their client's having met the requirements for the present study. They included beginning practicum students, advanced practicum students, and students who were serving half-time internships at the clinic, many of whom had received an M.A. degree. Although the staff is non-doctoral, it is comparable in education and training to that generally found in community mental health centers and many other outpatient clinics which service the public. Following the termination interview, these therapists rated the client on the HPRS and filled out a post-therapy questionnaire.

Tape Recordings

The present study utilized tape recordings which were obtained as part of the clinic research project. Tape recordings were made of the first (post-intake) session, the third session, and every fifth session after that. Termination sessions were also tape recorded.

From the tapes which were used to examine beginning, middle, and final stages of therapy, typescripts were made. A portion of these typescripts had already been obtained in a previous examination of the data (Filak, 1985). For each client, approximately five minutes of verbal discourse were obtained on each of the relevant tapes. The samples were obtained by utilizing a stratified random sampling procedure. On a tape recorder whose counter averaged 800 units per session, typescripts were made at approximately

200-225, 300-325, 400-425, 500-525, and 600-625. In those instances when a blank portion of tape was found, tapes were rewound to a nonblank section of tape.

Instruments

A. Hostility Measures

Hostility was assessed by means of the Gottshalk-Gleser Content Analysis Scales (Gottschalk & Gleser, 1969). Raters were trained in the method of content analysis according to the directions in the Manual of Instructions for Using the Gottschalk-Gleser Content Analysis Scales (Gottschalk, Winget, & Gleser, 1969). Speech samples were rated on hostility outward, both overt and covert, and on hostility inward.

The Gottschalk-Gleser categories for scoring hostility directed outward range from "references to anger without an object, to hostility toward a situation or infrahuman objects, and finally to varying degrees of hostility toward human beings" (Gottschalk, Winget, & Gleser, 1969, p. 62). Items are assigned weights ranging from one to three according to the intensity of the various thematic categories (see Appendix B).

The hostility outward thematic categories are divided into two subscales. Overt hostility outward encompasses statements in which the hostility emanates from the speaker, in this case the client. Covert hostility outward encompasses statements in which the hostility is attributed to persons other than the speaker (client). They

may be active participants (attacking) or passive recipients (being attacked). Covert hostility outward also includes the denial of hostile feelings.

The Gottschalk-Gleser categories for scoring hostility inward were "designed to measure transient and immediate thoughts, actions and feelings that are self-critical, self-destructive, or self-punishing" (Gottschalk, Winget, & Gleser, 1969, p. 93). Items in the inward scale are assigned weights ranging from one to four according to the intensity of the scoring categories (see Appendix C). Towards the lower end are milder statements, such as those reflecting disappointment in self or denial of anger toward the self. Middle scores reflect discouragement and self-deprecation. The higher scores reflect such items as wanting to die or attempting to kill oneself.

B. Measures of Outcome and Pathology

Numerous researchers have reported low agreement among psychotherapy outcome measures (Garfield, Prager, & Bergin, 1971a, 1971b; Mintz, 1972; Strupp & Bergin, 1969). Because of this, Fiske, Cartwright, and Kirtner (1964) suggest that no one measure or score based on a single measure is an adequate measure of change in therapy. Garfield, Prager, and Bergin (1971b) recommend that since agreements between different outcome measures are typically low, a number of outcome measures should be used. They believe that single measures are limited and don't tell the entire story. As Fiske (1971) points out, different outcome

measures may not be the same, but each "probably has some validity" (p. 314) in the assessment of the client from a particular perspective. The proposed study will address these issues by utilizing multiple outcome measures, which will include client and therapist ratings of improvement and post-therapy functioning, as well as pre-post changes on the Hopkins Psychiatric Rating Scale and the SCL-90R.

The rationale for the use of both client and therapist ratings is based in part on the tripartite model of psychotherapy evaluation put forth by Strupp, Hadley, and Gomes-Schwartz (1977). They asserted that there are three major factors which need to be considered simultaneously when assessing outcome in psychotherapy. These include a) the individual patient's sense of well being, b) the mental health professional's assessment of the patient's personality structure, and c) society's and significant others' judgement as to the adaptive qualities of the patient's behavior. These authors believe that the same individual might be judged as mentally ill by one criterion and mentally healthy by another. Because of this, they recommend the use of patient, professional, and societal measures of improvement when conducting psychotherapy research. Limitations in the data available for the present study prevent the evaluation of treatment from the perspective of society and significant others. However, the investigation does utilize the other two criteria suggested

by Strupp et al. (1977), namely professional and client evaluations.

The use of multiple outcome criteria is in part also a response to the limitations inherent in such measures. For example, a certain amount of distortion may be present in post-therapy assessments of change made by both the client and therapist. Some of this distortion may arise from the possibility that the ratings made by therapists and clients are influenced by their need to view therapy as successful in order to justify the time and efforts made during treatment (Garfield, Prager, & Bergin, 1971a).

Distortion may also result from the judge being asked to recall what the client was like at the beginning of treatment and to compare that with post-treatment functioning. Such comparisons between two points in time may increase the likelihood of error (Garfield, Prager, & Bergin, 1971a). This may in part result from the fact that ratings of improvement made by judges appear to be related more to the client's post-treatment status than to actual changes made (Green, Gleser, Stone, & Seifert, 1975; Keniston, Boltax, & Almond, 1971; Mintz, 1972). When judging success, therapists and clients tend to focus on how healthy the client is at the end of therapy rather than how much he or she has actually changed over the course of therapy. Mintz (1972), for example, found that rated change correlated higher with end point levels of pathology (r=.84)

than with actual raw gain (r=.58). He found that patients who end therapy at a higher level of functioning are typically judged as having more successful outcomes than those making the same size changes at lower levels of functioning.

In utilizing pre-post differences as success criteria, certain methodological problems also arise. One major difficulty arises from the fact that those clients who begin treatment at a more pathological level have more room for improvement (Beutler & Crago, 1983). Those who start therapy at a more healthy level may run into a ceiling effect, i.e. that is, not much room on the measure over which they can improve (Mintz, 1972). For example, ratings made on the HPRS global pathology index range from absence of pathology (0) to extreme pathology (8). A client who starts out at slight pathology (2) has little room for improvement. However, a client who starts out at severe pathology (7) has a much greater range of improvement available. As a result of this tendency, raw gain scores are highly related to initial levels of pathology. This creates methodological and statistical problems in the use of raw change scores. These issues will be addressed further in the results section of this paper.

The paper and pencil measures of pathology and outcome include the following measures:

1) SCL-90 (Symptom Checklist, Derogatis, 1977).

a) The SCL-90R is comprised of 90 statements of problems. At intake and termination, clients were instructed to rate each problem as to how much each problem had bothered or distressed him or her during the previous couple of weeks, including the day of the test. The rating scale ranged from 0 (not at all) to 4 (extremely) (Appendix D). The 90 problems comprise and load 9 symptom dimensions as well as a global severity index (GSI).

b) The SCL-90A (HPRS) is made up of nine symptom dimensions plus a global pathology index (GPI). The intake worker was instructed to rate the client on the nine symptom dimensions and the global pathology scale according to brief clinical descriptors. These descriptors typify in clinical terms the level of severity on the ten items and were rated on a 7 point scale from 0 (none) to 6 (extreme) for the nine symptoms and a 9 point scale from 0 (absent) to 8 (extreme) on the global pathology index (Appendix E).

2) Post-Therapy Client Questionnaire

At the termination of therapy a 56-item client form (Strupp, Lessler, & Fox, 1969, shortened version) was administered to clients. They were instructed to choose answers which best described their therapy experience. These items included questions designed to obtain subjective beliefs regarding initial level of distress and symptomatology, feelings about the therapy experience, efficacy of therapy, level of distress and symptomatology at termination, and other relevant variables (Appendix F). The

present study pooled the responses to four of these questions to assign an overall success score. These questions were:

3. How much have you benefitted from your therapy?

4. Everything considered, how satisfied are you with the results of your psychotherapy experience?

11. How much do you feel you have changed as a result of psychotherapy?

15. To what extent have your complaints or symptoms that brought you to therapy changed as a result of treatment?

3) Post-Therapy Therapist Questionnaire

This instrument comprised ten questions from the SCL-90A (Hopkins Psychiatric Ratings) plus 23 questions for which the therapist was asked to rate his or her client as to the before and after symptomatology and level of adjustment of the patient, degree of success, experiences regarding the therapeutic process and other relevant issues (Strupp et al., 1969, shortened version) (Appendix G). The present study pooled the answers to three of these ratings in order to obtain an overall therapist evaluation of client success. These ratings were:

22. Degree of symptomatic improvement.

27. Overall success of therapy.

29. How satisfied do you think the patient was with the results of his therapy?

Raters

Raters of the Gottschalk-Gleser hostility scales were comprised of three graduate students in clinical psychology. One of these raters was a first-year graduate student who had had extensive experience as a rater of the Gottschalk-Gleser scales over a two-year period prior to entering graduate school. This student rated all typescripts first for overt and covert outward hostility and at a later time for inward hostility. The other two raters were advanced clinical psychology graduate students who had obtained their Master's degrees and who were involved in their clinical internships during the course of the present study. One of these rated all the typescripts for outward hostility. The other rated all the typescripts for inward hostility.

Procedure

Typescripts of therapy sessions were rated according to the directions in the Manual of Instructions for Using the Gottschalk-Gleser Content Analysis Scales (Gottschalk, Winget, & Gleser, 1969). The coding unit which was utilized was the clause, either independent or dependent. Each clause was scored only once, if at all, for hostility outward. When more than one outward scoring was applicable to a single clause, the category with the higher intensity, and thus weight, was used. Likewise, if both covert and overt subscales were applicable, only the more intense verb was scored.

The typescripts were rated for hostility inward in a similar fashion. Each clause was scored only once, if at all, for hostility inward. If more than one inward category was applicable, the more intense category was utilized. Hostility inward was scored regardless of whether hostility outward had been scored. Thus some clauses were scored for both inward and outward hostility.

Once the statements in a session were rated, tabulations were made for the number of references in each thematic category. The score for each category was obtained by adding the weights for each verbal reference made within the category during the session. The sum of all the categories in each affect category (overt hostility outward, covert hostility outward, and hostility inward) represent the raw score for the category. Because clients varied a great deal in their rate of speech, the number of scorable clauses varied between and within clients and across time. Indeed, certain typescripts had no scorable affective references at all for one or more of the scales. This was especially true for covert hostility outward.

In order to deal with these variables, Gottschalk, Winget, and Gleser (1969) have devised a formula for calculating the magnitude of the affects. The formula adds .5 to the raw scores, multiplies the sum by 100, and divides that figure by the number of words in the rated material. In order to reduce skewness and to provide greater

homogeneity of variance, the square root of this ratio is taken to provide a final corrected score.

After having been given time to study and familiarize themselves with the coding categories and examples provided in the manual, raters were given a set of sample typescripts of therapy sessions not used in the present study. The author then met with the raters and discussed these scored samples. For those clauses in which there was a disagreement as to which, if any, of the thematic categories was to be rated, discussions amongst the author and raters took place. The scoring manual was examined and agreement was achieved as to which was the most appropriate rating. Raters were then given another set of sample typescripts to rate, followed by another training session. This process was continued over an extended period of time.

An overall score for each rater on each typescript was calculated for overt and covert and total hostility outward in the manner previously discussed. Interrater reliability of these scores was assessed by means of a Pearson product-moment correlation. The last group of sample typescripts showed an interrater reliability of $r=.95$ for the total of overt and covert hostility outward.

Subsequent to the training period for hostility outward, training sessions took place for the raters involved in scoring the hostility inward scale. Procedures followed the same methods utilized for training hostility

outward. The interrater reliability for the final set of hostility inward samples produced a correlation of .85.

After the training periods, raters were given the typescripts for the 120 sessions used in the present study. These included initial, middle and final sessions for each of 40 cases. In two instances, a tape of the initial session was either unavailable or inaudible. In those cases, typescripts were made and rated for the second therapy session. Those typescripts designated as "middle sessions" were taken from the tape which came closest to the midpoint of the actual number of sessions. "Last sessions" were comprised of typescripts taken from the final termination interview.

Order of scoring the typescripts was obtained by use of a random numbers table. Raters were blind as to whether the typescript was of an initial, middle or final therapy session, although the verbal content of the material sometimes indicated this information, as well as the sex of the participants and other demographic and diagnostic information. Raters were also blind as to the experimental hypotheses.

During the course of rating the data utilized in the present study, interrater reliability was checked on a regular basis. When it appeared that these reliability ratings had begun to fall, discussion sessions, similar to those which took place during the training periods, were held. Differences in scoring were discussed and agreement

as to the correct scoring was achieved. The purpose of these sessions was to increase reliability of segments to be scored in the future. The values of segments already scored were not changed but were entered into the statistical analyses as originally rated.

RESULTS

Interrater Reliabilities

The interrater reliabilities for the Gottschalk-Gleser hostility ratings are shown in Table 1. Although all three of the Pearson product-moment correlations are highly significant, they are somewhat low in terms of the standards often applied to these measures. To improve the reliability, the present study utilized the average of the two raters' scores for each session, thus providing a single score for overt, covert and inward hostility for each typescript. This method is supported by Kraemer (1979) who holds that, "the use of multiple observations per subject ... will reduce unreliability by reducing the error in characterizing each subject" (p. 471). Kraemer (1979, 1981) suggests the application of the Spearman-Brown prophecy formula (Brown, 1910; Spearman, 1910) to amplify reliability when such a procedure has been utilized. Although this formula is more frequently used as a means of determining split-half reliabilities, Kraemer recommends its use in the calculation of reliability based upon multiple observations. The Spearman-Brown coefficients are presented in Table 1. Although the interrater reliabilities on the Gottschalk-Gleser hostility scales were not as high as the author would have preferred, the use of averaged ratings on

all samples thus amplifies the confidence one can place in these ratings.

Table 1

Interrater Reliabilities for Gottschalk-Gleser Hostility Scales

Measure	n	PPMC	Spearman-Brown
Overt Hostility Outward	120	.75*	.86*
Covert Hostility Outward	120	.66*	.80*
Hostility Inward	120	.61*	.76*

*p<.0005 (one-tailed)

Overview of Gottschalk-Gleser Hostility Variables

An examination of the data indicates that no significant relationships were found between overt, covert and inward hostility at either the initial or final stages of therapy. Similarly, at the middle session, neither overt nor covert hostility outward was significantly related to hostility inward. However, overt and covert hostility outward were found to be significantly related to one another at the middle stage of therapy for the total combined sample of 40 males and females (see Table 2). Analyzed separately for male and female clients it was found that overt, covert, and inward hostility were not significantly related at any of the stages.

Table 2

Intercorrelations Between
Gottschalk-Gleser Hostility Scales

Hostility Scale	Overt	Covert	Inward
		Initial Stage	
Overt	--	.10	.07
Covert		--	.01
Inward			--
		Middle Stage	
Overt	--	.37*	.22
Covert		--	-.13
Inward			--
		Final Stage	
Overt	--	.23	-.05
Covert		--	-.03
Inward			--

*$p < .02$ (two-tailed)

Table 3 presents the group means for males and females of the Gottschalk-Gleser overt, covert, and inward hostility measures at the beginning, middle and final phases of therapy. Males and females did not differ significantly from one another on either overt or covert hostility outward

Table 3

Group Means, Standard Deviations, and *t*-tests for Gottschalk-Gleser Hostility Ratings

Hostility Scale	Male		Female		
	M	SD	M	SD	t
Overt					
Initial	1.35	.49	1.59	.45	1.51
Middle	1.29	.50	1.35	.36	.42
Final	1.23	.38	1.25	.53	.15
Covert					
Initial	.58	.31	.80	.32	.88
Middle	.54	.25	.73	.33	1.06
Final	.51	.18	.50	.24	.14
Inward					
Initial	1.17	.38	1.54	.51	2.33
Middle	1.31	.39	1.33	.34	.17
Final	1.32	.43	1.39	.43	.47

*$p < .05$

at any of the three stages of treatment. However, females were found to express significantly greater amounts of hostility inward during the first session than did males. Males and females were not found to differ significantly in the amount of hostility inward expressed at the middle and final stages of treatment. Although only one significant difference was found between males and females, it was decided that the data be analyzed separately for males and females, as well as for the pooled group of both sexes. This decision was based on the literature which pointed to

sex of subject as often interacting in a complicated manner when these hostility measures are related to other variables. Because of some missing data for one of the female subjects, the analyses which follow are based on an n of 15 for males and an n of 24 or 25 for females. Degrees of freedom for significance level will account for change in sample size due to missing data.

Hypothesis I

Client expression of hostility outward in therapy is related to client global psychopathology as measured by: a) client self reports on the Symptom Checklist and b) intake and primary therapists' ratings on the Hopkins Psychiatric Rating Scale.

Results of the study do not support Hypothesis I. As can be seen in Table 4, the expression of overt hostility outward for males, females and the combination of the two sexes was not significantly related to the global severity index (GSI) of the Symptom Checklist (SCL-90R), although the correlation for males and females together would have achieved significance at the $p<.05$ level had a one-tailed test been utilized. It is interesting that the correlation for females was higher than that for males. Initial levels of covert hostility outward were not significantly related to pre GSI, although males tended to have a higher correlation than did females.

Table 4

Correlations Between
Outward Hostility
and Global Pathology

Gottschalk-Gleser Hostility	SCL-90R					
	Pre GSI			Post GSI		
	M	F	M&F	M	F	M&F
Initial						
Overt	.15	.32	.27	.43	.26	.24
Covert	.37	.17	.25	.13	.12	.11
Middle						
Overt	-.54*	.33	-.02	-.43	.48**	.06
Covert	-.42	.09	-.06	.08	.03	-.02
Final						
Overt	.14	-.08	.03	.32	-.15	-.03
Covert	.12	.02	-.02	.39	.01	-.12

	HPRS					
	Pre GPI			Post GPI		
	M	F	M&F	M	F	M&F
Initial						
Overt	-.32	.09	-.06	-.11	-.07	-.07
Covert	.14	-.02	.11	-.01	-.12	-.06
Middle						
Overt	.32	.18	-.30	-.15	.20	.04
Covert	-.33	.13	-.02	-.14	-.03	-.05
Final						
Overt	-.37	.19	.17	.03	.26	.18
Covert	-.14	-.05	-.10	.44	.12	.22

*p<.05 (two-tailed)
**p<.02 (two-tailed)

The correlations between initial levels of hostility outward (overt and covert) and the pre-therapy global pathology index (GPI) of the Hopkins Psychiatric Rating Scale (HPRS) were not significant. It is interesting to note that intake therapists' ratings of psychopathology (HPRS) were negatively related to male clients expression of overt hostility outward in the first, post-intake session, although the results were not significant (r=-.32). Thus, males who were seen as less pathological by their intake therapists tended to express more hostility outward in their first, post-intake therapy session.

Final levels of hostility outward were not significantly related to final, post-therapy ratings of global severity on the SCL-90R, although correlations for both overt and covert hostility tended to be higher for males than for females.

Final therapist ratings of pathology (GPI) were not significantly related to final levels of overt hostility outward. Similarly, final therapist ratings of pathology were not significantly related to final levels of covert hostility outward, although there was a trend for therapists to rate males with higher covert hostility outward as more pathological at the final state of therapy (r=.44, p<.10, two-tailed).

An examination of the data indicates a number of significant relationships between the expression of

hostility outward at the middle stage of therapy and the global severity index (GSI) of the SCL-90R. As can be seen in Table 4, initial levels on the GSI were negatively related to the expression of hostility outward at the middle stage of therapy for males. This relationship was significant for overt hostility outward (r=-.54, p<.05, two-tailed). Thus, males who rated themselves as being higher on pathology prior to therapy were significantly lower on the expression of overt hostility outward at the middle phase of therapy. The expression of overt hostility outward by females at the middle of therapy was positively related to their pre-therapy self reports of hostility, although the relationship was not significant (r=.33). A test of the difference between the correlations for males and females revealed that they differed from one another significantly (z=2.62). Some caution should be used in interpreting this difference between correlations and those which follow when the initial correlations on which they are based are not significant.

Several other interesting relationships were found between outward hostility expression and global psychopathology at the middle stage of therapy. For example, the relationships between the expression of overt hostility outward at the middle phase of therapy and final post therapy self reports of psychopathology (GSI) differed significantly for males and females (z = 2.72, p <.05). The expression of overt hostility outward for women at the

middle stage of therapy was positively related to their final levels of self-reported psychopathology (GSI) (r = .48, p <.02, two-tailed). The relationship was in the opposite direction for males, although it did not achieve significance, in part due to the small number (15) of male subjects (r=-.43, n.s.).

The relationship between initial levels of pathology as rated by the intake therapist (GPI) and levels of overt hostility outward expression tended to change over the course of therapy for males. The correlations were negative at the beginning (r=-.32) and end (r=-.37) of therapy, but positive at the middle stage (r=.32). The correlations for the middle and final phases differed significantly from one another (z=1.99, p<.05). The correlations for beginning and middle phases just missed reaching significance (z= 1.85). Thus, while the intake therapists' ratings of psychopathology tended to be positively related to the expression of overt hostility outward at the beginning and end of therapy, they tended to be negatively related to the expression of overt hostility at the middle phase of treatment for males.

It is also interesting to note that for males, while pre-therapy ratings of psychopathology by the intake therapist tended to be positively related to middle levels of overt hostility outward (r=.32), they tended to be negatively related to middle levels of covert hostility outward (r=-.33).

Hypothesis II

Client expression of hostility inward in therapy is positively related to client global pathology as measured by a) client self reports on the Symptom Checklist and b) intake and primary therapists' ratings on the Hopkins Psychiatric Rating Scale.

Results of the study provide partial support for Hypothesis II (see Table 5). Initial levels of hostility inward were significantly related to initial levels of global psychopathology as measured by client self reports (SCL-90R GSI), (r=.43, p<.025, one-tailed) and intake therapist ratings (HPRS GPI) (r=.39, p<.05, one-tailed) for females, though not for males. The pooled group of males and females together also achieved significance. Thus, initial levels of expression of hostility inward were significantly related to therapist and self reports of global psychopathology, though the result was due to the influence of the female clients.

At the final phase of therapy the expression of hostility inward was not related to client self reports of pathology (post GSI) for males, females, or the combination of males and females. However, at the final stage of therapy the expression of hostility by males was significantly related to post-therapist ratings of pathology (GPI) (r=.66, p<.005, one-tailed). The relationship between final inward hostility expression and therapists' final ratings of pathology was not significant for females and

indeed was in the opposite direction (r=-.25). These correlations differed significantly for males and females (z=.29, p<.05). Thus, males and females differ significantly in the relationship between their final levels

Table 5

Correlations Between Inward Hostility and Global Pathology

Gottschalk-Gleser Hostility Inward	SCL-90R					
	Pre GSI			Post GSI		
	M	F	M&F	M	F	M&F
Initial	.24	.43***	.34***	-.29	.37	.08
Middle	-.28	.21	.07	-.14	.06	-.03
Final	.06	.41*	.27	.18	.21	.18
	HPRS					
	Pre GPI			Post GPI		
	M	F	M&F	M	F	M&F
Initial	.25	.39**	.32***	.46	.29	.33*
Middle	.31	-.29	.05	-.07	-.12	-.10
Final	-.06	-.17	.16	.66****	-.25	.12

*p<.05 (two-tailed)
**p<.05 (one-tailed)
***p<.025 (one-tailed)
****p<.005 (one-tailed)

of hostility inward expression and their therapists' ratings of global pathology.

It is interesting to note that for females initial hostility inward expression tended to be related to final self reports of global psycopathology (r=.37, p<.10, two-tailed) even though final levels of expression of hostility inward were not significantly related to final self reports of pathology. Thus, the more hostility inward that the female client expressed at the beginning of therapy, the more pathological she tended to rate herself at the end of therapy.

Also of interest is the finding that for women, initial self reports on the GSI were significantly related to final levels of hostility inward (r=.41, p<.05, two-tailed). Thus, women who initially saw themselves as more pathological expressed more hostility inward at the final phase of therapy.

Hypothesis III

Client expression of hostility outward in therapy is positively related to client hostility as measured by: a) client self reports on the Symptom Checklist and b) intake and primary therapists' ratings on the Hopkins Psychiatric Rating Scale.

Hypothesis III was partially supported by the data (see Table 6). Initial levels of overt and covert hostility outward were significantly related to the hostility subscale

Table 6

Correlations Between Hostility Outward, SCL-90R Hostility, and HPRS Hostility

Gottschalk-Gleser Hostility	SCL-90R					
	Pre			Post		
	M	F	M&F	M	F	M&F
Initial						
Overt	.25	.20	.30*	.30	-.04	.07
Covert	.35	.24	.37***	-.04	.00	-.04
Middle						
Overt	-.65**	.19	-.12	-.25	.23	-.02
Covert	-.19	-.23	-.09	.22	.01	.05
Final						
Overt	.41	-.39	.09	.41	-.04	.08
Covert	.09	-.05	-.01	.26	-.18	-.04

	HPRS					
	Pre			Post		
	M	F	M&F	M	F	M&F
Initial						
Overt	-.13	-.32	-.16	.06	-.25	-.06
Covert	-.06	.09	.14	-.03	-.16	-.04
Middle						
Overt	.32	.16	.21	.10	-.28	-.08
Covert	.30	.12	.22	.08	.03	.10
Final						
Overt	.07	.01	.04	.32	-.16	.00
Covert	.36	.14	.17	.33	.14	.19

*p<.05 (one-tailed)
**p<.01 (two-tailed)
***p<.01 (one-tailed)

of the pre-SCL-90R for the combined group of males and females, although the relationships did not achieve significance when analyzed separately for males and females. Initial SCL-90R hostility outward for the entire sample was significantly related to overt hostility outward (r=.30, p<.05, one-tailed) and covert hostility outward (r=.37, p<.01, one-tailed). However, intake therapists' ratings of hostility on the HPRS were not significantly related to initial expression of hostility inward. Indeed, as can be seen in Table 6, a number of the relationships were in the opposite direction.

At the final stage of therapy the expression of hostility outward was not significantly associated with hostility as measured by self reports (SCL-90R) or therapist ratings (HPRS), although the correlations tended to be higher for males. Indeed, when overt and covert hostility outward were combined to form one total hostility outward scale, the relationship between final total hostility outward and post SCL-90R hostility was significant (r=.45, p<.05, one-tailed).

Specific hypotheses were not made as to the relationship of middle hostility outward expression (Gottschalk-Gleser) and the other hostility measures. An examination of these relationships did show that for males the relationship of pre SCL-90R hostility to middle levels of outward hostility expression was negative (r=-.65, p<.01, two-tailed). The correlations of pre SCL-90R

hostility and overt hostility outward (Gottschalk-Gleser) differ significantly between initial and middle stages (z=2.76, p<.05) as well as between middle and final stages (z=3.26, p<.05). Furthermore, the correlations of pre SCL-90R hostility and middle stage overt hostility outward differ significantly for males and females (z=2.59, p<.05). Thus, for men, but not for women, the expression of overt hostility outward is negatively related to pre-therapy self reports of hostility. The more males rate themselves as being angry prior to therapy the less overt hostility outward they relate at middle stages of therapy.

Also of note are the relationships which were found between pre SCL-90R hostility and the expression of hostility outward in the final session. For females the correlation was -.39 and for males it was .41. Although, due to small sample sizes neither achieved significance (two-tailed), the two correlations do differ significantly from one another (z=2.34, p<.05). Thus, the relationship between pre-therapy self reports of hostility and the expression of overt hostility outward at the end of treatment differed for men and women.

Hypothesis IV

Client expression of hostility inward in therapy is positively related to client hostility as measured by: a) client self reports on the Symptom Checklist and b) intake

and primary therapist ratings on the Hopkins Psychiatric Rating Scale.

Partial support was found for Hypothesis IV (see Table 7). Initial levels of hostility inward (Gottschalk-Gleser) were significantly related to pre SCL-90R self reports of

Table 7

Correlations Between Hostility Inward, SCL-90R Hostility, and HPRS Hostility

Gottschalk-Gleser Hostility Inward	SCL-90R Hostility					
	Pre			Post		
	M	F	M&F	M	F	M&F
Initial	-.20	.34	.27*	-.32	.22	.02
Middle	.03	.20	.16	.04	-.31	-.08
Final	.32	.23	.27	.30	.01	.12
	HPRS Hostility					
	Pre			Post		
	M	F	M&F	M	F	M&F
Initial	-.05	.22	.24	-.01	.07	.11
Middle	.12	-.35	-.18	.20	-.12	.02
Final	.00	-.27	-.16	.38	-.38	-.06

*$p < .05$ (one-tailed)

hostility for the combined sample of males and females (r=.27, p<.05, one-tailed). However, an examination of the data for males and females separately indicates that the relationship was only a trend for females (r=.34, n= 25, p<.10) and actually was negative for males (r= -.20). Thus, while pre SCL-90R hostility tends to be associated with the expression of hostility inward in therapy for females, the relationship does not hold for males. Post SCL-90R hostility was not significantly related to post hostility inward, although the correlation was higher for males than for females.

Correlations between initial therapist ratings of hostility (HPRS) and initial client expression of hostility inward were not significant for males, females, or the combined sample of both sexes. Correlations between final therapist ratings of hostility inward were also not significantly related to final levels of hostility on the HPRS. Indeed, the correlations for males (r=.38) and females (r=-.38) were in the opposite direction and differed significantly from one another (z=2.21, p<.05). Thus, while final expression of hostility inward tended to be associated with final therapist ratings of hostility for men, the opposite tended to occur for women.

Hypothesis V

Client expression of hostility inward in therapy is positively related to client depression as measured by : a)

client self reports on the Symptom Checklist and b) intake and primary therapist ratings on the Hopkins Psychiatric Ratings Scale.

Partial support was found for Hypothesis V (see Table 8). For females, self reports of depression on the pre-therapy SCL-90R were significantly related to hostility inward expression at the beginning of treatment (r=.54, p<.01, one-tailed). For males the relationship was not significant (r=.15), although the strength of the relationship for females caused the correlation for the pooled group of males and females to achieve significance (r=.34, p<.025, one-tailed). However, intake therapist ratings of depression (HPRS) were not found to be significantly related to expression of hostility at the initial stage of therapy. Similarly, expression of hostility inward at the final stage of therapy was not found to be significantly related to either self reports (SCL-90R) or therapist ratings (HPRS) of depression at the end of treatment. This was true for males and females, as well as for the combination of the two.

The results also produced a trend for there to be a positive relationship between initial expression of hostility inward and post SCL-90R depression amongst females (r=.39, p<.10, two-tailed). Thus, women who expressed more hostility inward at the beginning of therapy tended to see themselves as being more depressed at the end of the final session.

Table 8

Correlations Between
Hostility Inward and Depression

Gottschalk-Gleser Hostility Inward	SCL-90R Depression					
	Pre			Post		
	M	F	M&F	M	F	M&F
Initial	.15	.54***	.34**	-.16	.39	.18
Middle	-.24	-.05	-.08	-.04	-.04	-.06
Final	-.08	.13	.04	.24	-.09	.12

	HPRS Depression					
	Pre			Post		
	M	F	M&F	M	F	M&F
Initial	-.02	.17	.19	.12	.46*	.37*
Middle	.16	.42*	.33*	-.22	-.16	-.17
Final	.41	.34	.36*	.10	.14	.04

*$p<.05$ (two-tailed)
**$p<.025$ (one-tailed)
***$p<.01$ (one-tailed)

Similarly, a significant relationship was also found for females between client expression of hostility inward at the beginning of therapy and final therapist ratings of depression ($r=.46$, $p<.05$, two-tailed). Although the relationship was not significant for males, the strength of the relationship for females elevated the relationship for

the total sample to a significant level (r=.37, p<.05, two-tailed). Thus, women who showed a greater expression of hostility inward in the first stage of therapy were rated as being more depressed by their therapists at the end of therapy. This is especially interesting in that expression of hostility inward at the end of therapy was not associated with either self reports or therapist ratings of client depression at the end of treatment.

It is also interesting that although pre-treatment therapist ratings of client depression were not significantly related to initial levels of hostility inward expression, they were significantly related to middle (r=.36, p<.05, two-tailed) levels of hostility inward expression for the combined sample of males and females. The relationship was also significant for females analyzed separately at the middle of therapy (r=.42, p<.05, two-tailed), although not for males. Thus, women who were judged as being more depressed at the beginning of therapy did not express significantly more inward hostility at the start of therapy, but did express significantly more hostility inward at the middle of therapy.

Hypothesis VI

Male clients are higher on expression of hostility outward than are female clients.

In order to test Hypothesis VI a two (sex of client) by two (sex of therapist) analysis of variance was used to

compare groups' hostility outward scores at each stage in therapy. Due to unequal group sizes, an unweighted means solution was used (see Tables 9 through 14). Contrary to the hypothesis, males were not significantly greater than females on expression of hostility outward. Indeed females tended to be higher than males on the expression of overt and covert hostility outward at the initial and middle phases of therapy, although the results were not significant.

Hypothesis VII

Client expression of hostility outward is related to the interaction of the sex of the client and the sex of the therapist.

As can be seen in Tables 9 through 14, Hypothesis VII was not confirmed. The interaction of sex of therapist and sex of client was not found to be significant for overt or covert hostility at the initial, middle or final phase of therapy.

Table 9

Analysis of Variance of Initial Overt Hostility Outward: Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.15	1	.15	.65
B (Sex of Therapist)	.34	1	.34	1.48
AB	.47	1	.47	2.04
Within Cell	8.31	36	.23	

Table 10

Analysis of Variance of Middle Overt Hostility Outward: Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.26	1	.26	1.44
B (Sex of Therapist)	.59	1	.59	3.28
AB	.48	1	.48	2.67
Within Cell	6.41	36	.18	

Table 11

Analysis of Variance of Final Overt Hostility Outward: Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.01	1	.01	.05
B (Sex of Therapist)	.73	1	.73	3.32
AB	.32	1	.32	1.45
Within Cell	7.77	36	.22	

Table 12

Analysis of Variance of Initial Covert Hostility Outward: Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.28	1	.28	2.80
B (Sex of Therapist)	.14	1	.14	1.40
AB	.00	1	.00	0.00
Within Cell	3.75	36	.10	

Table 13

Analysis of Variance of Middle Covert Hostility Outward: Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.35	1	.35	3.50
B (Sex of Therapist)	.11	1	.11	1.10
AB	.00	1	.00	0.00
Within Cell	3.53	36	.10	

Table 14

Analysis of Variance of Final Covert Hostility Outward: Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.00	1	.00	.00
B (Sex of Therapist)	.01	1	.01	.20
AB	.00	1	.00	.00
Within Cell	1.91	36	.05	

Hypothesis VIII

Client expression of hostility inward is related to the interaction of the sex of the client and the sex of the therapist.

In order to test Hypothesis VIII, a two (sex of client) by two (sex of therapist) analysis of variance was used to compare groups' hostility inward scores at each stage of therapy. Due to unequal group sizes, an unweighted means solution was used. As can be seen in Tables 15, 16, and 17, Hypothesis VIII was not supported by the data. The interaction of sex of therapist and sex of client was not found to significantly impact upon the amount of hostility inward expressed at the beginning, middle or end of treatment.

Although no specific hypotheses were made as to impact of sex of client alone on the expression of hostility inward, a significant difference was found at the beginning stage of therapy (see Table 15). As was discussed earlier, females were found to express significantly greater amounts of hostility directed inward during the first session than did males ($p<.05$). Males and females were not found to differ significantly in the amount of hostility inward expressed at middle and final stages of treatment.

Table 15

Analysis of Variance of Initial Inward Hostility:
Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	1.20	1	1.20	5.22*
B (Sex of Therapist)	.00	1	.00	.00
AB	.08	1	.08	.35
Within Cell	8.4	36	.23	

*p<.05

Table 16

Analysis of Variance of Middle Hostility Inward:
Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.00	1	.00	.00
B (Sex of Therapist)	.11	1	.11	.92
AB	.10	1	.10	.83
Within Cell	4.46	36	.12	

Table 17

Analysis of Variance of Final Hostility Inward:
Sex of Client by Sex of Therapist

Source	SS	DF	MS	F
A (Sex of Client)	.11	1	.11	.58
B (Sex of Therapist)	.03	1	.03	.16
AB	.48	1	.48	2.53
Within Cell	6.69	36	.19	

In order to assess the association between changes in hostility expression over time and success in therapy (Hypotheses IX, X, and XI) multiple correlations were performed. Four measures of success were utilized as the dependent variables. These included: a) final scores on the global severity index (GSI) of the SCL-90R, b) final scores on the global pathology index (GPI) of the HPRS, c) therapist ratings of success, and d) client ratings of success. Separate multiple correlations were calculated for each of these dependent measures. The independent variables were entered into the correlations cumulatively according to a heirarchy which was determined on the basis of the hypotheses and logic of the study. This heirarchical model is suggested by Cohen and Cohen (1975) and "calls for a determination of R^2 and the partial coefficients of each variable at the point at which it is added to the equation" (p. 98). The multiple correlations provided in Tables 18 through 37 demonstrate the association between the dependent variable (outcome) and the independent variable(s). Each additional line in the tables represents a multiple correlation based upon the prior independent variables plus the addition of one more independent variable (as labeled). F tests were performed to determine the significance of each of the multiple correlations. For those multiple correlations which did not produce a significant F, independent variables were not tested for significance. Cohen and Cohen (1975) recommend that such independent

variables "not be accepted as significant. The reason for this is to avoid spuriously significant results" (p. 109).

For those equations in which post GSI was the dependent variable, the first independent variable (X_1) entered into the heirachy was pre GSI. Thus, all subsequent independent variables entered into the equation could be examined to reflect their relationship to the postscore from which the influence of the prescore had been removed. Similarly, for those equations in which post GPI was designated as an indication of success, the pre GPI (X_1) was entered as the first independent variable in the heirachy. Subsequent independent variables were entered in the following order: a) initial hostility (overt, covert, or inward), b) middle minus beginning hostility, c) final minus middle hostility, d) sex of client, and e) for those equations utilizing client or therapist rating of success as the dependent variable, sex of therapist.

Before proceeding with the analyses relevant to Hypothesis IX and X, clients were divided into two samples for both overt and covert hostility outward by means of a median split. Scores above the median were designated as high on outward hostility expression, while those below were designated as low on outward hostility.

Hypothesis IX

For clients who are initially high on expression of hostility outward, success is related to a drop in the level

of expression of hostility outward from beginning to middle to end stages of therapy.

For those 20 subjects who fell above the median on overt hostility outward, change in overt hostility over the course of therapy was not found to relate significantly to success as measured by post GSI (see Table 18), post GPI (see Table 19) or therapist ratings of success (see Table 20). However, as can be seen in Table 21, client ratings of success were significantly related to a drop in overt hostility outward from beginning to middle stages of therapy ($p<.05$). A semipartial correlation coefficient ($sr=.5848$) representing the unique contribution of the change from beginning to middle, with initial overt hostility outward partialled out also proved to be significant ($F=8.84$, $p<.01$). Thus, the client's assessment of his or her success was significantly related to the drop in overt hostility from the beginning to middle of therapy with initial levels of overt hostility partialled out. The additions of the change from middle to end of therapy and client sex did not add significantly to the multiple correlation. However, the addition of sex of therapist into the heirarchy did produce a significant multiple correlation ($F=4.72$, $p<.01$). The semipartial correlation ($sr=.25$) demonstrates that sex of therapist contributes uniquely to the client's evaluation of success after the prior independent variables had been partialled out ($F=9.45$, $p<.01$). Clients of male therapists

saw themselves as significantly more successful than those of female clients.

For those 20 clients who fell above the median on covert hostility outward, change in covert hostility was not found to be significantly related to success as measured by post GSI (see Table 22), post GPI (see Table 23), or therapist ratings of success (see Table 24). However, an examination of the zero order correlations did reveal a significant relationship between drop in covert hostility from the beginning to end of therapy and client ratings of success ($r=.39$, $p<.05$, one-tailed). Thus, there was partial confirmation for Hypothesis IX for covert hostility.

Table 18

Cumulative Multiple Correlations for High Overt Hostility and Post GSI (Y)

X	Cum. R	Cum. R^2	F
Pre GSI	.001	.0000	.000
+ Initial Overt	.165	.0022	.282
+ Middle-Initial Overt	.179	.0320	.183
+ Final-Middle Overt	.182	.0331	.130
+ Sex of Client	.446	.1989	.701

Table 19

Cumulative Multiple Correlations for
High Overt Hostility and Post GPI (Y)

X	Cum. R	Cum. R^2	F
Pre GPI	.047	.0022	.040
+ Initial Overt	.088	.0077	.066
+ Middle-Initial Overt	.213	.0454	.254
+ Final-Middle Overt	.362	.1310	.565
+ Sex of Client	.364	.1325	.428

Table 20

Cumulative Multiple Correlations for
High Overt Hostility and Therapist Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Overt	.064	.0041	.0740
+ Middle-Initial Overt	.194	.0376	.3324
+ Final-Middle Overt	.201	.0404	.2245
+ Sex of Client	.340	.1156	.4852
+ Sex of Therapist	.440	.1936	.6722

Table 21

Cumulative Multiple Correlations for
High Overt Hostility and Client Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Overt	.014	.0002	.004
+ Middle-Initial Overt	.585	.3422	4.422*
+ Final-Middle Overt	.611	.3733	3.177
+ Sex of Client	.613	.3758	2.258
+ Sex of Therapist	.792	.6273	4.718**

*$p < .05$
**$p < .01$

Table 22

Cumulative Multiple Correlations for
High Covert Hostility and Post GSI (Y)

X	Cum. R	Cum. R^2	F
Pre GSI	.383	.1467	3.094
+ Initial Overt	.383	.1467	1.461
+ Middle-Initial Overt	.405	.1640	1.046
+ Final-Middle Overt	.457	.2209	1.063
+ Sex of Client	.551	.3036	1.221

Table 23

Cumulative Multiple Correlations for
High Covert Hostility and Post GPI (Y)

X	Cum. R	Cum. R^2	F
Pre GPI	.036	.0013	.023
+ Initial Covert	.359	.1289	1.258
+ Middle-Initial Covert	.531	.2820	2.094
+ Final-Middle Covert	.586	.3434	1.961
+ Sex of Client	.603	.3636	1.600

Table 24

Cumulative Multiple Correlations for
High Covert Hostility and Therapist Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Covert	.218	.0475	.898
+ Middle-Initial Covert	.220	.0484	.432
+ Final-Middle Covert	.305	.0930	.547
+ Sex of Client	.503	.2530	1.270
+ Sex of Therapist	.517	.2673	1.026

Table 25

Cumulative Multiple Correlations for
High Covert Hostility and Client Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Covert	.195	.0380	.712
+ Middle-Initial Covert	.208	.0433	.384
+ Final-Middle Covert	.447	.1998	1.420
+ Sex of Client	.544	.2959	1.576
+ Sex of Therapist	.630	.3969	1.843

Hypothesis X

For clients who are initially low on expression of hostility outward, success is related to an increase in the level of hostility from beginning to middle stages and a drop from middle to end stages of therapy.

As can be seen in Tables 26 through 29, the multiple correlations for those clients who fell below the median on overt hostility outward were not significant. An examination of the zero order correlations did reveal that client ratings of success were significantly related to a drop in overt hostility outward in the final half of therapy (r=.46, p<.025, one-tailed). However, the hypothesis did not receive support using the other three outcome measures.

Table 26

Cumulative Multiple Correlations for
Low Overt Hostility and Post GSI (Y)

X	Cum. R	Cum. R^2	F
Pre GSI	.409	.1673	3.415
+ Initial Overt	.495	.2450	2.596
+ Middle-Initial Overt	.614	.3770	3.026
+ Final-Initial Overt	.614	.3770	2.118
+ Sex of Client	.670	.4489	2.118

Table 27

Cumulative Multiple Correlations for
Low Overt Hostility and Post GPI (Y)

X	Cum. R	Cum. R^2	F
Pre GPI	.106	.0112	.193
+ Initial Overt	.107	.0114	.093
+ Middle-Initial Overt	.177	.0313	.162
+ Final-Middle Overt	.229	.0524	.194
+ Sex of Client	.229	.0524	.144

Table 28

Cumulative Multiple Correlations for
Low Overt Hosility and Therapist Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Overt	.011	.0001	.002
+ Middle-Initial Overt	.232	.0538	.455
+ Final-Middle Overt	.455	.2070	1.305
+ Sex of Client	.534	.2852	1.396
+ Sex of Therapist	.534	.2852	1.037

Table 29

Cumulative Multiple Correlations for
Low Overt Hostility and Client Ratings of Success

X	Cum. R	Cum. R^2	F
Initial Overt	.050	.0025	.043
+ Middle-Initial Overt	.165	.0272	.224
+ Final-Middle Overt	.520	.2704	1.853
+ Sex of Client	.523	.2735	1.318
+ Sex of Therapist	.532	.2830	1.026

Hypothesis X was also not supported by the data for covert hostility. As can be seen in Table 30, the multiple correlations which utilized post GSI as the dependent measure were not found to be statistically significant. Similarly, those multiple correlations which utilized post GPI as the dependent measure were not found to be statistically significant (see Table 31).

Table 30

Cumulative Multiple Correlations for
Low Overt Hostility and Post GSI (Y)

X	Cum. R	Cum. R^2	F
Pre GSI	.202	.0408	.723
+ Initial Covert	.247	.0610	.520
+ Middle-Initial Covert	.253	.0640	.342
+ Final-Middle Covert	.282	.0795	.302
+ Sex of Client	.296	.0876	.250

Table 31

Cumulative Multiple Correlations for
Low Covert Hostility and Post GPI (Y)

X	Cum. R	Cum. R^2	F
Pre GPI	.189	.0357	.607
+ Initial Covert	.217	.0471	.395
+ Middle-Initial Covert	.416	.1731	1.046
+ Final-Middle Covert	.445	.1980	.864
+ Sex of Client	.474	.2247	.754

As can be seen in Table 32, the analyses which used therapist success ratings as the dependent variable did produce some multiple correlations which appeared to be significant. However, a closer examination of the zero order correlations on which the multiple correlations were based showed that contrary to the hypothesis, success was related to a drop in covert hostility from beginning to middle of therapy (r=.26, n.s.). The correlation of these two variables with the effect of the initial level of covert hostility partialled out was .34 (n.s.) An examination of the zero order correlation between therapist ratings of success and change from middle to end of therapy was -.01. The correlation of these two variables with the effect of the change between beginning and middle partialled out was .37 (n.s.).

Table 32

Cumulative Multiple Correlations for
Low Covert Hostility and Therapist Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Covert	.184	.0339	.560
+ Middle-Initial Covert	.358	.1282	1.176
+ Final-Middle Covert	.638	.4070	3.432*
+ Sex of Client	.669	.4476	2.836
+ Sex of Therapist	.740	.5476	3.147*

*$p<.05$

As can be seen in Table 33, there was a trend for the multiple correlation of client rating of success with initial covert hostility and change in covert hostility to be significant. However, an examination of the zero order correlations demonstrated that the relationships were in the direction opposite to that which had been predicted. That is, the correlation of client ratings of success and change from beginning to middle of therapy was .51. Thus, the more successful the person below the median on covert hostility judged himself or herself to be, the greater the drop in covert hostility outward from the beginning to middle of therapy. The correlation of the change in covert hostility from beginning to middle and client rating of success with the effect of initial level of covert hostility partialled out was .54. An examination of the data also indicated that the change in covert hostility from the middle to end of therapy tended to be in the direction opposite to that predicted, although the result was not significant ($r=-.29$).

Table 33

Cumulative Multiple Correlations for
Low Covert Hostility and Client Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Covert	.068	.0046	.170
+ Middle-Initial Covert	.538	.2894	3.258
+ Final-Middle Covert	.609	.3709	2.947
+ Sex of Client	.613	.3758	2.107
+ Sex of Therapist	.745	.5550	3.243*

*$p < .05$

Those who judged themselves as successful actually had a certain amount of increase from middle to end. The correlation of change from middle to end and success, with the change from beginning to middle, partialled out was .14 (n.s.).

Thus, Hypothesis X was not supported. Success for those below the median on overt and covert hostility was not positively associated with an increase from beginning to middle and a drop from middle to final stages of therapy.

Hypothesis XI

Success in therapy is related to a drop in the level of expression of hostility inward from beginning to middle to end of therapy.

The multiple correlations which were calculated to test Hypothesis XI are provided in Tables 34 through 37. None of the multiple correlations were significant. Thus, success in therapy was not found to be associated with a decrease in

the expression of hostility directed inward over the course of therapy.

Table 34

Cumulative Multiple Correlations for Inward Hostility and Post GSI (Y)

X	Cum. R	Cum. R^2	F
Pre GSI	.250	.0625	2.467
+ Initial Inward	.253	.0640	1.231
+ Middle-Initial Inward	.256	.0655	.818
+ Final-Middle Inward	.292	.0853	.793
+ Sex of Client	.389	.1513	1.177

Table 35

Cumulative Multiple Correlations for Inward Hostility and Post GPI (Y)

X	Cum. R	Cum. R^2	F
Pre GPI	.080	.0064	.238
+ Initial Inward	.340	.1156	2.353
+ Middle-Inital Inward	.340	.1156	1.525
+ Final-Middle Inward	.371	.1376	1.357
+ Sex of Client	.379	.1436	1.107

Table 36

Cumulative Multiple Correlations for
Inward Hostility and Therapist Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Inward	.010	.0001	.004
+ Middle-Initial Inward	.015	.0002	.004
+ Final-Middle Inward	.018	.0003	.000
+ Sex of Client	.210	.0441	.392
+ Sex of Therapist	.212	.0449	.310

Table 37

Cumulative Multiple Correlations for
Inward Hostility and Client Ratings of Success (Y)

X	Cum. R	Cum. R^2	F
Initial Inward	.060	.0036	.134
+ Middle-Initial Inward	.063	.0040	.072
+ Final-Middle Inward	.073	.0053	.062
+ Sex of Client	.163	.0266	.232
+ Sex of Therapist	.172	.0296	.201

Additional Findings

Post hoc examination of the data was performed to further clarify the nature of the expression of hostility of clients within therapy. These were indicated based upon the findings reported for the experimental hypotheses.

An examination of the data indicates no significant changes in either overt or covert hostility outward for males over the course of time (see Table 38). However, for

females both variables changed significantly over the course of therapy (see Table 39). On overt hostility outward, females dropped significantly from first to middle and first to final stages of treatment ($p<.05$, two-tailed). The drop from middle to final stages was not significant.

On covert hostility outward, women showed a significant drop in hostility from first to last ($p<.01$, two-tailed) and middle to last ($p<.05$, two-tailed) stages of therapy. The drop from first to middle stages was not found to be significant.

Table 38

Changes in Mean Hostility Expression Over Time for Males

Stage Comparison	Change in Means	SD	t
	Overt		
Initial & Middle	5.8	88.58	.25
Middle & Final	6.4	69.21	.36
Initial & Final	12.2	47.59	.99
	Covert		
Initial & Middle	4.27	43.57	.38
Middle & Final	2.9	24.16	.55
Initial & Final	7.2	36.27	.79
	Inward		
Initial & Middle	-13.40	59.09	.88
Middle & Final	- 1.67	46.07	.17
Initial & Final	-15.07	53.67	1.09

The data did not yield significant differences for hostility inward over time for either males (see Table 38)

or females (see Table 39). It is interesting that the pattern of inward hostility expression tended to differ for males and females. Males had a nonsignificant increase in hostility from first to final stages of therapy followed by a small increase from middle to final stages of therapy. However, as was stated previously, none of these differences proved to be significant.

Table 39

Changes in Mean Hostility Expression Over Time for Females

Stage Comparison	Change in Means	SD	t
	Overt		
Initial & Middle	23.25	48.15	2.37*
Middle & Final	9.17	58.12	.77
Initial & Final	32.42	67.24	2.37*
	Covert		
Initial & Middle	7.88	41.25	.94
Middle & Final	22.58	42.69	2.60*
Initial & Final	30.46	45.95	3.24**
	Inward		
Initial & Middle	18.75	63.06	1.46
Middle & Final	- 4.54	37.50	.59
Initial & Final	14.21	67.65	1.03

*p<.05 (two-tailed)
**p<.01 (two-tailed)

Also of interest is the amount of change over time for males and females as it relates to initial levels of hostility expression. As can be seen in Tables 40 and 41, for both males and females, the greater the initial level of

each hostility scale, the greater the decrease in that scale from the beginning to middle of treatment. These results were all significant at the p<.01 level or higher. Similar results were found when comparing initial levels of hostility with changes from the beginning to end of therapy. For both males and females, the higher the initial level on overt, covert, and hostility inward, the greater the drop in hostility from the beginning to end of therapy. These results were all significant at the p<.02 level or higher.

Table 40

Correlations Between Initial Levels of Hostility and Changes in Hostility for Males

Time Period	Initial a	Initial b	Initial c
Initial to Middle			
a. Overt	.88***	.36	.04
b. Covert	.19	.82***	.12
c. Inward	.06	.00	.84***
Middle to Final			
a. Overt	-.64**	-.50	.01
b. Covert	-.17	-.18	-.35
c. Inward	.02	-.18	-.38
Initial to Final			
a. Overt	.70**	-.05	-.05
b. Covert	.11	.87**	-.38
c. Inward	.08	-.15	.60*

*p<.02
**p<.01
***p<.001

Males and females did differ in the relationship of initial hostility with the change in the last half of therapy. For males, the greater the initial overt hostility, the greater the increase in overt hostility from middle to final stages ($p<.01$). This was not true for females. Also of interest was the finding that initial hostility inward in females was significantly related to a drop in overt hostility outward in the final half of therapy ($p<.05$). Thus, the more these women expressed hostility towards themselves at the start of treatment, the more they increased the amount of hostility expressed towards others in the last half of treatment.

Success as rated by the client or therapist was not found to be significantly related to initial levels of hostility expression for males or females. However, for males, self ratings of success were negatively related to the amount of covert hostility expressed at the middle stage of therapy ($r=-.57$, $p<.05$, two-tailed). There was also a trend for males who saw themselves as successful to express less overt hostility at the middle of therapy ($r=-.48$, $p<.10$, two-tailed). Similarly, therapists of male clients rated them as more successful, the less overt hostility they expressed at the middle of therapy ($r=-.62$, $p<.02$, two-tailed). Thus, the greater the hostility directed outward at the midpoint of therapy, the less likely it was that the client or his therapist viewed treatment as having been successful. It is interesting that although the

Table 41

Correlations Between Initial Levels of Hostility and Changes in Hostility for Females

Time Period	Initial 1	Initial 2	Initial 3
Initial to Middle			
1. Overt	.70***	-.35	-.30
2. Covert	-.06	.61**	-.13
3. Inward	-.11	-.11	.84***
Middle to Final			
1. Overt	.13	.31	.43*
2. Covert	.05	.34	.16
3. Inward	.29	-.22	-.03
Initial to Final			
1. Overt	.61**	.01	.16
2. Covert	-.01	.86***	.03
3. Inward	.06	-.22	.76***

*$p<.05$
**$p<.01$
***$p<.001$

ratings of success were made at the end of treatment, they were not significantly related to final levels of overt, covert, or inward hostility.

Therapist and client ratings of success of treatment were not significantly related to initial or middle levels of overt, covert, or inward hostility expression for women. However, at the final stage of therapy female client ratings of success were negatively related to the expression of covert hostility outward ($r=-.46$, $p<.05$). Similarly at the final stage of therapy, therapist ratings of success for women were negatively related to the amount of covert

hostility expression, although the correlation just missed achieving significance (r=-.40, p<.10). Thus, at the end of treatment women who saw others as expressing more hostility towards others, saw themselves as less successful, and tended to be seen as less successful by their therapists.

DISCUSSION

The focus of this study involved the examination of the expression of hostility by clients at the beginning, middle, and end of psychotherapy. It was hypothesized that this expression would be related to a number of other variables, including depression, psychopathology, sex of client, and other hostility measures. The basic question which the present study addressed was: "In what ways are the client's expressions of hostility within therapy related to these other significant therapy variables?"

Sex Differences

The impact of sex of client upon the results of this study was quite dramatic. An initial examination of the data indicated that males and females were not found to differ significantly in the mean group expression of overt hostility outward at the beginning, middle, or end of treatment. Contrary to predictions, men were not found to express higher amounts of overt or covert hostility outward than women. Indeed, at the beginning and middle of therapy women actually expressed more outward hostility than did males, although the differences were not significant. These findings would seem to support the conclusions that Tavris (1982) put forth in Anger: The Misunderstood Emotion. After

reviewing the literature, she determined that the notion that men and women differ in the experience and expression of anger is a myth. She posited that society may have stereotypes regarding the existence of sex differences in anger expression, but that there is no empirical evidence to support these beliefs.

However, a closer examination of the data in the present study did demonstrate the existence of a significant impact of sex of client on the relationship of hostility expression with other therapy variables. Although males and females did not differ in the overall amount of hostility outward expressed, they did differ in the way that their levels of hostility expression were associated with other treatment variables.

Women were found to express more hostility inward than men at the beginning of treatment. This is interesting in light of the fact that Gottschalk and Gleser (1969) did not report sex differences for hostility inward. The findings of the present study may reflect variables attributable to differences between the standard testing situation to which these scales have usually been applied and the therapy interviews which were utilized in the present study. These differences may be related to cultural prohibitions against males expressing feelings of self doubt, inadequacy, and sadness, all of which are part of the hostility inward scoring system. Thus, they may be more defensive in the first interview and, therefore, less likely to express as

much hostility inward as their female counterparts. Although these cultural influences might be expected to impact upon hostility inward in the standard testing situation, the less obvious nature of that situation may mitigate against male defensiveness. That is, the more neutral circumstances of the standard procedure may not elicit as strong a need for the male subject to cover up his perceived inadequacies. The mere act of seeking therapy is an admission that one is experiencing some problems in conducting one's life. This may increase defensiveness for males in their inward hostility expressions at the beginning of therapy. At any rate, the differences in the means on inward hostility expression dropped out at the middle and final stages of treatment. However, as will be discussed in the sections which follow, sex of client did impact greatly upon the relationship of inward hostility with other relevant variables.

Overview of Gottschalk-Gleser Hostility Expression

Results of the study indicated that for female clients there was a significant drop in the group means for both overt and covert hostility from the beginning to final stages of therapy. Thus, treatment was associated with a decline in the amount of expression of hostility expressed by the client towards others, as well as a decline in the amount of hostility which she reported other persons showing to persons other than herself. This may reflect an

improvement in the female client's life. The fact that she is no longer talking as much about being angry at other persons and situations may mean that she has eliminated some of the factors which caused her to be dissatisfied earlier on in therapy. It may also be that the expression of hostility outward in the earlier therapy sessions has led to a reduction in the internal hostile state. These findings may, therefore, provide some confirmation of the importance of catharsis in the expression of hostility for women.

Although males as a group did drop in the level of outward hostility expression over the course of therapy, the changes were not significant. The decline in outward hostility expression by males is, thus, less dramatic. It may also reflect the fact that males began treatment with somewhat lower levels of outward hostility and, thus, had less room to change. Indeed, change in hostility expression was significantly related to initial levels of hostility expression for the overt, covert and inward scales for both males and females. This, again, may reflect the fact that those who started out higher had a greater range available over which they could decline than those who started out lower on these measures. Those who started out lower had more chance to increase their hostility expression. Regression towards the mean thus appears to have taken place over the course of treatment.

Relationship to Pathology

Hypothesis I predicted that expression of hostility outward would be associated with global pathology. The hypothesis was not supported for males or females, although the positive relationship for women was somewhat higher than that for males. This lack of findings may reflect the complicated manner in which we view hostility expression. As was discussed in the literature review, the ability to express hostility is to a certain degree viewed as a healthy mechanism. Catharsis is seen as a cleansing, purifying, and even necessary means of emotional discharge. Persons who are unable to express their angry feelings are viewed as being inhibited, repressed, and nonassertive. However, an excessive amount of hostility expression is also viewed as indicative of pathology. What may be represented in the current data is that to a certain degree the two factors may be cancelling one another out. That is, the disclosure and expression of angry feelings by the client in an open manner may reflect a health ability to relate to others and to understand oneself. On the other hand, the expression of hostility does indicate a degree of dissatisfaction with one's life. The person who is angry about his past circumstances may have experienced a more difficult life history. Indeed, the client's description of such a life would be coded on the outward hostility scales. The impact of these experiences would theoretically lead to the development of more psychopathology. A client's expression

of anger and, hence, dissatisfaction with his current life might also indicate a certain degree of pathology. To some extent, the inability of an individual to develop a more satisfying life experience may be seen as indication of psychopathology, in that it demonstrates a lack of skill at getting one's needs met. In other words, it may be a sign of health to be able to express one's anger, but there may be a relationship between pathology and having lived and perpetuated a life about which one is angry. Hence, the lack of a clearcut relationship between pathology and outward hostility expression may reflect these issues.

Some support for this notion is found in the data of the present study. A comparison of the nine symptom dimensions on the SCL-90R reveals that the hostility variable was the only one of the nine symptom dimensions which did not correlate significantly with the global severity index for males.

As we have seen, for males the relationship between initial overt hostility expression and self reports of psychopathology on the SCL-90R was also very low. An examination of the items which comprise the hostility dimension of the SCL-90R, reveals that they are closely associated to the Gottschalk-Gleser overt hostility scale. As a result, it would make sense that since SCL-90R hostility is least associated with global severity on the SCL-90R, that overt hostility would also not be associated with general levels of pathology.

The lack of a significant relationship also makes sense, given the type of male client who might voluntarily seek therapy at a clinic, such as the one utilized in the present study. These men may be somewhat inhibited in hostility expressiveness as compared to the general population. For these individuals, the expression of anger towards others may be viewed as less pathological. Those males who are less expressive of anger towards others may be more inhibited and less in touch with their own feelings. This notion received some tentative support by the evaluations of their therapists. Although the correlation was not statistically significant, therapists tended to rate males who expressed overt hostility at the start of therapy as being less pathological, rather than more pathological.

For women SCL-90R hostility was significantly related to SCL-90R global severity. This might account for the somewhat higher correlation which was found to exist between overt hostility outward expression and global severity for females. For women, overt hostility expression may tend to be associated with psychopathology at the beginning of treatment. It may be that this reflects a dissatisfaction with one's life. The woman who has had the kind of difficult life about which she is quite angry may also have had the kind of life associated with the development of pathology.

An interesting set of relationships was found to exist for males in the expression of overt hostility in the middle

of therapy. This anger directed towards others at the middle phase of treatment was significantly associated in a negative direction with initial levels on SCL-90R measures of both global severity and hostility, as well as overt hostility expression in the first session. Thus, the more pathological and hostile these men were at the beginning of treatment, the less likely they were to talk about their anger towards others in the middle stage of therapy. One possible explanation for this is that these clients were having difficulty forming an open, trusting relationship with their therapists. The male client who has a high degree of initial pathology may have trouble forming a therapeutic alliance with his therapist and feeling free enough to disclose his angry emotions. The client who starts therapy as less disturbed may be more able to form a trusting relationship in which he can reveal his emotions. Similarly, higher degrees of anger towards others by males at the beginning of treatment may be indicative of difficulties in interpersonal relationships, since by definition this category reflects dissatisfaction with others. Such clients may not have the capacity to form a relationship with their therapists and, hence, might not be as willing to express their emotions during the middle, working phase of treatment.

It is interesting that overt hostility expression in middle sessions tended, although not significantly, to relate negatively to final levels of GSI and post therapy

client ratings of success. Therapist ratings of success were indeed found to correlate significantly in a negative direction with middle overt hostility expression in males. Thus, low middle expression of hostility towards others appears to have been related to pathology and lack of success for males.

It is interesting that for females middle session expression of hostility towards others was significantly and positively related to final GSI. Thus, the more women talked about their anger towards others at the middle of treatment, the more severe symptoms they admitted to at the end of therapy. This may have reflected a relationship between the expression of dissatisfaction with one's life (past and present) and pathology. For these women, symptomatology may not have been related to the ability to express feelings, but rather to the presence of negative situations and events about which the woman was displeased.

Hypothesis II predicted that expression of hostility inward would be positively related to indeces of global pathology. Support was found for this prediction for women at the initial stage of treatment. Initial hostility inward was associated with greater levels of psychopathology as indicated by both female clients and their therapists. Women who expressed more feelings of self derogation, disappointment, guilt, discouragement, and depression viewed themselves as being more disturbed. Likewise, their therapists also saw them as exhibiting more psychopathology.

For males, neither initial levels of psychopathology on the SCL-90R nor on the HPRS were found to be significantly related to inward hostility expression. This result is puzzling in light of the types of items which comprise the inward hostility scale. In addition to suicidal ideation, the inward hostility categories include items relating to depression, guilt, loneliness, and disappointment in the self. Theoretically, one would assume that they would be associated with psychopathology. One possible explanation for the lack of significant findings is that the ability to talk about these feelings may be a sign of health for males. That is, although they are indicative of problems and symptomatology, the fact that the client can express these feelings may signify a lack of defensiveness and an ability to be open and candid with one's therapist. As was discussed previously, males as a group expressed significantly less inward hostility at the beginning of therapy than did females. This may be due to cultural prohibitions against males revealing problems and sharing perceived inadequacies. The culturally sanctioned stereotype of the competent male likely makes it more difficult for males to reveal their insecurities. Thus, although hostility directed against the self may indicate that a man has problems, the ability to talk about his problems may indicate a less defensive, more open manner of interacting with others. The lack of a significant relationship in males is also consistent with Gottschalk and

Gleser's (1969) report that measures of guilt and depression correlate more with hostility inward for females than for males.

At the final stage of therapy the relationship between hostility inward and self reported global symptomatology (GSI) was not significant for males or females. However, the relationship between client expression of hostility inward and final therapist ratings of pathology was highly significant for male clients. Men who expressed hostility against themselves at the end of therapy were viewed by their therapists as being significantly more disturbed than those men who expressed less feelings of depression, guilt, and disappointment in themselves. On the other hand, the relationship between final expression of inward hostility and therapist ratings of pathology in women was actually in the opposite direction, though the correlation (r=-.25) was not significant. One explanation of this phenomenon may be that the therapists in the present study were rating clients according to culturally held sex role stereotypes and biases. In other words, males who expressed more self doubting, sad, and vulnerable feelings at the end of therapy were viewed as being more pathological, although women were not viewed in the same manner. While therapists may have accepted and perhaps even valued a certain amount of hostility inward expression by males at the beginning of therapy, they may have seen such emotional expression as pathological at the end of treatment. A "cured" male would

not express these emotions in the eyes of his therapist, while a "cured" female might. This theory is further substantiated by the finding that therapists tended to rate males as more hostile the more they expressed inward hostility at the last session. Women, on the other hand, tended to be seen as being less hostile the more they expressed hostility inward at termination. Although these correlations were not significant, they did differ from one another at a significant level. That is, therapists viewed men and women quite differently. At the conclusion of treatment, they tended to accept hostility inward expression by women but to reject such expression by men.

Relationships of Hostility Expression to SCL-90R and HPRS Hostility

Hypothesis III predicted that there would be a positive relationship between hostility outward and the hostility dimensions of the SCL-90R and HPRS. Some support was found for there being a positive relationship between hostility outward and the hostility dimension of the SCL-90R. At the beginning of therapy, the pooled group of males and females did show a significant positive relationship between SCL-90R hostility and expression of overt and covert hostility. This provides some further construct validation for the Gottschalk-Gleser hostility scales, specifically as applied to therapy sessions. However, overt hostility was not related to beginning levels of hostility on the HPRS or to

final levels on either the SCL-90R or HPRS. Thus, the relationship is only a tentative one.

Covert hostility outward was not significantly related to hostility on the other two measures. A closer examination of the items and descriptors which comprise the latter two indicates items more relevant to overt hostility than to covert hostility. They have to do with the subject's angry and aggressive urges rather than those of persons other than the subject. It therefore follows that, as found in the present study, covert hostility expression is not significantly related to the hostility dimensions of either the HPRS or SCL-90R.

For the most part, expression of hostility inward was not found to be significantly related to client reports of hostility on the SCL-90R, although there was a nonsignificant positive trend for women at the beginning of therapy. As was discussed above, the items which comprise the hostility dimension of the Symptom Checklist indicate that they reflect angry impulses directed away from the self (e.g., shouting or throwing things), rather than towards the self. Thus, the lack of a significant relationship is understandable. The trend which was found for women at the beginning of treatment may again reflect cultural sex roles and prohibitions. It is possible that prior to treatment women have been trained not to express their anger, although they may have the "urge" to harm other persons or objects, or may feel irritated at others. These impulses comprise

half the items on the SCL-90R hostility scale. Not feeling comfortable acting on these affects, they may turn the hostility inward. For males who may have been allowed to act more aggressively, such impulses may not need to be turned inward, hence the lack of a positive relationship between the two variables at the start of treatment.

Therapist ratings of hostility were also not significantly associated with client expression of hostility inward at the beginning of therapy. Again, this may reflect the fact that although both measures are termed "hostility," in reality they measure quite different concepts. The HPRS dimension reflects anger towards others, while hostility inward reflects anger directed against the self.

At termination, HPRS ratings of hostility were not significantly related to client expression of hostility inward. However, the correlations for males and females did differ significantly from one another. The relationship was positive for males (r=.38) and negative for females (r= -.38). Thus, at the end of therapy, therapists tended to judge males who expressed more hostility inward as being more hostile. On the other hand, they tended to judge females who expressed more hostility inward as being less hostile. These results parallel those reported for the correlations between inward hostility and HPRS global pathology. It appears that therapists may be less accepting of hostility inward expression by males than by females at the end of treatment. Males who express inward hostility at

that point tend to be viewed as being hostile and disturbed. Females who express this affect tend to be seen as somewhat less hostile and disturbed.

Relationship of Hostility Inward and Depression

For men, self reports and therapist ratings of depressive symptoms were not associated with the expression of hostility inward. On face value, this does not make sense. Statements which include expressions of depression, grief, discouragement, and despair are included among the thematic categories in the manual for scoring Gottschalk-Gleser hostility inward. However, as Gottschalk and Gleser (1969) report, hostility inward is less consistently associated with depression in males. The current study provides further corroboration for these findings, at least at the initial stage of therapy. One explanation of this lack of relationship may be that for males who have traditionally been discouraged from expressing any vulnerable feelings, the expression of these feelings may be somewhat positive. That is, the male who can talk about his self-perceived inadequacies and is willing to share his feelings of sadness, may actually be somewhat less depressed than the man who has suppressed the expression of these feelings.

For women the relationship between inward hostility expression and depression appears to be quite complex. It should be remembered that women were significantly higher on

inward hostility expression than were men at the beginning of treatment. At that stage, for women but not for men, the expression of inward hostility was significantly and positively related to client self reports of depressive symptoms on the SCL-90R. The results replicate the previously cited reports of Gottschalk and Gleser (1969) that hostility inward is more consistently associated with depression for women than for men. However, the relationship did not hold at the final session for females and males. These findings indicate that women who start out therapy feeling more depressed express more negative statements about themselves at that time, but that they decrease this tendency as therapy progresses.

The relationship between the intake therapists' ratings of depression and inward hostility expression also appears to be complicated. The intake therapists' ratings of depression were not significantly related to the amount of inward hostility expressed by either males or females in the first, post-intake session. However, for women, as well as for the pooled group of men and women, they were significantly associated with inward hostility expression at the middle stage of therapy. Intake therapist ratings of depression were also significantly associated with final levels of inward hostility for the pooled group of men and women, although the correlations did not achieve significance for males and females analyzed separately, due to the lowered degrees of freedom. Although these results

are rather confusing, it appears that intake therapists may possibly be picking up on a depressive personality trait which manifests itself later in the therapeutic process. In other words, the intake therapist may be making an assessment of the client based upon more subtle evidence which then predicts client behavior at a later time.

Although initial levels of hostility inward expression were not significantly related to intake therapists' ratings of depression on the HPRS, they were significantly related to the primary therapists' ratings of depression at the end of treatment for the pooled sample of males and females. Thus, those clients who expressed more hostility inward at the beginning of therapy were judged as being more depressed at the end of treatment. However, expression of hostility inward at the end of therapy was not significantly related to final therapist assessments as to depression. One explanation for these findings may be that therapists at termination were judging their clients' final levels of depression more upon the basis of initial interactions than on final interactions. The opinions which they formed at the beginning of therapy may have persisted despite actual changes in client behavior over the course of treatment. The therapist may have viewed hostility inward and depression as relatively stable trait-like characteristics, rather than as changing affective states.

Relationship of Hostility Expression to Success in Therapy

Results of the study did not show consistent support for there being a relationship between patterns of hostility expression and success in therapy. A number of methodological problems may have contributed to the relative lack of significant findings. Primary amongst these was the small number of subjects used in the present study. It was, therefore, much more difficult to generate a multiple correlation of significant value. This problem was exacerbated by the need to divide overt and covert hostility for the predictions which related outward hostility to success. Indeed the use of a median split to divide clients into high and low levels of outward hostility expression was also quite problematical. Since those clients just above the median fell into one category, and those just below fell into the other category, clients with fairly similar hostility levels were categorized differently from one another. As a result, for some clients, levels of hostility expression were more dissimilar to other members of their own group than to some members of the other group.

Client ratings of their own success tended to be more associated with changes in hostility than were the other outcome criteria. For example, it was found that clients who were initially high on the amount of hostility which they expressed towards others judged themselves as more successful the more they decreased in the expression of that hostility. Moreover, for clients initially low on overt

hostility there was a significant relationship between client ratings of success and a drop in overt hostility in the last half of therapy. Thus, clients who declined in the amount of anger expressed in the last half of therapy viewed themselves as being more successful. This follows logically. A client who begins therapy feeling very dissatisfied with other persons and situations feels that he or she has improved if he no longer feels as angry. A client who feels less anger towards others is less likely to be dissatisfied and, therefore, more likely to judge that he or she has benefitted from treatment.

A similar result was found for clients who began therapy above the median on the expression of covert hostility outward. Clients who experienced a larger drop in levels of covert hostility saw themselves as more successful. Indeed, contrary to the hypothesis, client ratings of success were associated with a drop in covert hostility from beginning to middle of therapy for those below the median. Even though they started out relatively low in their view of others being hostile to other persons, success was still associated with such a drop. The present author would conclude that these clients began to view the world in a less negative manner. Covert hostility represents the reports of other persons being critical or injurious of other persons, objects or situations. Although this measure does not provide a direct measure of the client's angry or aggressive impulses, it does reflect his

or her view of the world. A person who reports a great deal of covert hostility does not see the world in a very positive manner. That person sees people as being hostile and critical towards one another and, hence, the world as an unfriendly place in which to live. A lowered score on covert hostility at the middle or end of treatment may indicate that the client has begun to feel more positive about others and the ways in which they interact with one another. Although a decline in such statements would not necessarily apply directly to the manner in which the client interacts with others, it would appear to be associated with an increased positive outlook.

The predicted positive relationship between drop in hostility inward and success was not found utilizing any of the four success criteria. In general, clients did not show a significant decrease in the amount of hostility inward expressed across time, although the higher they started out the more they declined. These lack of significant findings may reflect the proposed dual nature of hostility expression which was discussed earlier. It is this author's contention that the expression of these emotions is associated with positive, as well as negative variables. The expressions of guilt, depression, and self-criticism which comprise this rating system indicate unhappiness with one's life and one's self. Thus, one would expect a drop in these to be associated with improvement. However, the ability to express these emotions can be viewed as positive. The

client who was able to talk about his or her feelings of sadness and self doubt might be more likely to benefit from therapy than those who were more inhibited in the experience and expression of their feelings.

Problems in the Use of the Gottschalk-Gleser Scales

The lack of more significant results may be due in part to general difficulties which arose in utilizing the Gottschalk-Gleser content analysis scales. In the standardized testing situation the subject is instructed to "talk about any interesting or personal life experiences you have had" (Gottschalk, Winget, & Gleser, 1969, p. 5). The instructions were designed to simulate a psychoanalytic interview or projective test situation. Examiners are instructed not to speak during the subjects telling of the experience and to minimize any nonverbal cues which might be given. Clearly, this was not the case for clients in the present study. Although therapists varied greatly in the degree to which they spoke, none presented a quality even approaching a "blank screen." Even those therapists who uttered fewer words gave many cues to their clients. Thus, the present study examined client speech within the process of an interaction, as opposed to a simpler projective-like situation. Although therapist statements were not included in the typescripts utilized in the present study, they obviously impacted greatly upon the statements made by the clients. For example, therapists typically asked a variety

of questions to elicit information about the person's past and present life. These were often much more specific than the standard instructions to talk about "any interesting or dramatic life experience." In the standard situation, the subject usually has more choice as to his or her subject matter and, theoretically, projects material of psychological significance and representing his or her current affective level. This was less true in the therapy situation. Since the client did not typically choose the material to be discussed in a totally independent manner, his or her statements may have reflected a factual reporting of real life events, in addition to a projection of internal psychological and emotional states.

This problem was particularly relevant to the scoring of covert hostility outward. This scale reflects statements in which persons other than the subject (client) are expressing anger towards or criticism of objects, events, or persons other than the speaker. Thus, if in the process of reporting his family background, a client were to have told of a relative being killed by a hit and run driver, for example, the statement would have been scored as being high on covert hostility. Though such an incident might possibly have been of prime emotional importance to the client, it might not necessarily have been indicative of hostile affect. It might have been more representative of sad or depressed affect, rather than simply being a covert expression of the client's underlying hostile emotions.

Another related methodological problem in utilizing these scales on therapy typescripts had to do with the verbal tense of the client's statements. When a client reported past behavior it was often scored identically with that of present behavior. For example, the statements, "I used to argue alot with him" and "I've been arguing alot with him this week" would both have been scored for overt hostility outward. However, the former might have been much less indicative of the client's current affect than the latter. The client's overt hostility score would nevertheless not have reflected these differences. Thus, the content analysis scores might have been more representative of a person having been exposed to hostility than being representative of his or her current affective level.

Theoretical Implications

The purpose of the present study was to gain a better understanding as to the role of hostility expression in psychotherapy. This arose in part out of the contradictions which exist between the theoretical and empirical literature. While it is widely held that expression of hostility is a useful and necessary part of the therapeutic process, there is little empirical support for its value. Although some studies have shown cathartic discharge of emotions to be of benefit, others have not. The social psychological literature has tended to focus more on the

negative consequences of hostile statements and behavior. However, as was discussed previously, these empirical findings may not be directly pertinent to the study of psychotherapy.

Results of the present study were very complex. It was quite clear that men and women differed greatly in the manner in which hostility expression impacted upon other relevant variables. Support was not found for the culturally held belief that men express more anger toward others than do women. However, the data did indicate that therapists tend to view male and female clients very differently on a number of variables, especially hostility directed inward.

It is the author's contention that the complexity of the data in the present study and the contradictions in the literature are due to the interaction of two processes. The first of these has to do with the notion that it is healthy for one to express one's feelings. The person who can talk with his therapist about his or her emotions is more able to form intimate, satisfying relationships. In addition, according to the concept of catharsis, such a person can benefit from the discharge of those emotions. More specifically, the person who can ventilate angry, hostile feelings in therapy is hopefully able to work through those issues and under supportive circumstances reduce the internal level of hostile affect. Thus, one would expect

such emotional expression to be of advantage to the client and a sign of psychological health and well being.

The second process has to do with the relationship between hostility expression and negative life experiences. The fact that a client expresses outward hostility implies a demand that other persons or situations be different. In the case of inward hostility, it implies a desire that the client himself or herself be different. If a person were not displeased, he or she would not be angry. The question then arises as to why the person is displeased.

The fact that a person is discontented indicates that he had, or has, something to be discontented about. Although the object of the displeasure may represent a displacement, there is nevertheless the presence of some unmet need. Thus, when an individual expresses hostility in therapy, he or she is indicating that some aspect of life has been unsatisfactory. The more statements of this sort that a client makes, the more likely the person has not had his or her needs met and has experienced a difficult life. Since a more difficult unsatisfying upbringing is generally associated with the development of more psychopathology, it follows that the expression of hostile emotions would be at times indicative of poorer functioning.

When a client expresses greater amounts of dissatisfaction with his or her current life, it can also be seen as an indication to some degree of an inability to cope or get one's needs met. It does not make sense to say that

because a person experiences difficulties in the world he or she is necessarily deficient. However, a great level of dissatisfaction and anger about one's current life does indicate that the person has not managed to conduct his or her life in an effective manner.

The inconsistencies in the literature, as well as the present study, may be due to these issues. While the ability to express anger may be healthy, the fact that one has much to be angry about may be an indication of pathology. Research measures which do not distinguish between these two issues may provide confusing results.

Future Research

Results of the present study suggest that future research on client expression of hostility should try to distinguish more specifically between varying types of hostility. New or refined scales may need to be devised in order to assess the differing sources and causes of anger, as expressed by the client. It would also prove useful to examine the impact of therapist statements and behaviors upon client expressions of hostility.

Results of the present study point to the necessity of examining males and females separately in any studies of hostility expression in psychotherapy. Even if initial levels do not appear to differ according to sex, they may interact differently with other variables.

Future research is indicated on the expression of hostility in therapy using a larger population. Because of the relatively small number of clients available for the present study, it was difficult to achieve significant results. A study which utilized a larger sample size could help to clarify some of the tentative relationships found in the present investigation. Of particular interest would be the study of the expression of outward hostility by males at the middle stage of therapy. Results of the present study pointed to a number of complex relationships which need further elucidation.

A final area for future research would be an analysis of the relationship between hostility expression and the other symptom dimensions of the SCL-90R and HPRS. Although such an analysis was beyond the scope of the present investigation, a preliminary examination of the data indicates a potentially rich source of information.

SUMMARY

The importance of the expression of hostility by clients in psychotherapy has been accepted by most if not all schools of psychotherapy. Beginning with Freud, hostility has been considered to be one of the most important issues with which the client must deal. However, there has been little consistent empirical evidence to support the efficacy of hostility expression in therapy.

Subjects in the present study were comprised of forty non-student adult clients who were engaged in psychotherapy at a university-based outpatient teaching clinic. Clients filled out the Symptom Checklist and therapists rated clients on the Hopkins Psychiatric Ratings Scale after the intake and final therapy sessions. Both groups also filled out a post-therapy questionnaire. Raters scored typescripts of the first, middle, and final sessions for overt, covert, and inward hostility.

Results indicated that males and females did not differ significantly from one another in their mean expressions of overt and covert hostility outward. Women were significantly higher than men on the expression of hostility inward at the beginning of therapy. The two groups did not differ significantly at middle or final stages. For all three hostility variables, men and women differed in the

manner in which hostility expression was related to other variables. Inward hostility was significantly related to global pathology at the beginning of treatment for women, but not men. For men, but not women, the expression of hostility inward at the end of treatment was significantly related to therapist ratings of pathology. For women, but not men, depression was significantly related to initial expressions of hostility inward. There was also some support for the prediction that client ratings of success would be related to a drop in hostility outward over time. The complex results were discussed and areas of future research were suggested.

APPENDICES

APPENDIX A

CLIENT RESEARCH CONSENT FORM

APPENDIX A

CLIENT RESEARCH CONSENT FORM

Dear Client:

The clinic is conducting an evaluation to assess the helpfulness of the services offered here in meeting the needs of our clients. We expect that through this evaluation we will be able to find better ways to serve you.

In order to carry out this evaluation, we request your assistance. We will ask you to fill out one or two questionnaires during your initial intake interview, after your last therapy session and sometime after your therapy has ended. In addition, we would like to tape record occasional therapy sessions. These questionnaires and tapes will help us understand your reasons for coming to the clinic and how useful therapy has been for you. All questionnaires and tapes will be held in <u>strict confidence</u> and you will remain completely anonymous. Your right to therapy will not be affected by your decision on whether or not to participate in the evaluation. You also have the right to drop out of the evaluation at any time.

If you are willing to participate in this research, please sign the statement below.

Sincerely,

The Staff of the Psychological Clinic

I hereby agree to take part in this evaluation research and grant permission for some of my/my child's therapy sessions to be tape recorded. I grant this permission with the understanding that names, questionnaires and recorded materials will be held in strict confidence.

_____

Name

_____

Date

APPENDIX B

HOSTILITY DIRECTED OUTWARD SCALE

APPENDIX B

Hostility Directed Outward Scale: Destructive, Injurious, Critical Thoughts and Actions Directed to Others

I. Hostility Outward-Overt

Thematic Categories

a3* Self killing, fighting, injuring other individuals or threatening threatening to do so.

b3 Self robbing or abandoning other individuals, causing suffering or anguish to others, or threatening to do so.

c3 Self adversely criticizing, depreciating, blaming, expressing anger, dislike of other human beings.

a2 Self killing, injuring or destroying domestic animals, pets, or threatening to do so.

b2 Self abandoning, robbing, domestic animals, pets, or threatening to do so.

c2 Self criticizing or depreciating others in a vague or mild manner.

d2 Self depriving or disappointing other human beings.

a1 Self killing, injuring, destroying, robbing wild life, flora, inanimate objects or threatening to do so.

b1 Self adversely criticizing, depreciating, blaming, expressing anger or dislike of subhumans, inanimate objects, places, situations.

c1 Self using hostile words, cursing, mention of anger or rage without referent.

II. Hostility Outward-Covert

Thematic Categories

a3 Others (human) killing, fighting, injuring other individuals or threatening to do so.

APPENDIX B (cont'd.)

b3 Others (human) robbing, abandoning, causing suffering or anguish to other individuals, or threatening to do so.

c3 Others adversely criticizing, depreciating, blaming, expressing anger, dislike of other human beings.

a2 Others (human) killing, injuring, or destroying domestic animals, pets, or threatening to do so.

b2 Others (human) abandoning, robbing, domestic animals, pets, or threatening to do so.

c2 Others (human) criticizing or depreciating other individuals in a vague or mild manner.

d2 Others (human) depriving or disappointing other human beings.

e2 Others (human or domestic animals) dying or killed violently in death-dealing situation or threatened with such.

f2 Bodies (human or domestic animals) mutilated, depreciated, defiled.

a1 Wild life, flora, inanimate objects, injured, broken, robbed, destroyed or threatened with such (with or without mention of agent).

b1 Others (human) adversely criticizing, depreciating, expressing anger or dislike of subhumans, inanimate objects, places, situations.

c1 Others angry, cursing without reference to cause or direction of anger. Also instruments of destruction not used threateningly.

d1 Others (human, domestic animals) injured, robbed, dead, abandoned or threatened with such from any source including subhuman and inanimate objects, situations (storms, floods, etc.).

e1 Subhumans killing, fighting, injuring, robbing, destroying each other or threatening to do so.

f1 Denial of anger, dislike, hatred, cruelty, and intent to harm.

*The number serves to give the weight as well as to identify the category. The letter also helps identify the category.

APPENDIX C

HOSTILITY DIRECTED INWARD SCALE

APPENDIX C

Hostility Directed Inward Scale: Self-Destructive, Self-Critical Thoughts and Actions

I. Hostility Inward

Thematic Categories

a4* References to self (speaker) attempting or threatening to kill self, with or without conscious intent.

b4 References to self wanting to die, needing or deserving to die.

a3^ References to self injuring, mutilating, disfiguring self or threats to do so, with or without conscious intent.

b3 Self blaming, expressing anger or hatred to self, considering self worthless or of no value, causing oneself grief or trouble, or threatening to do so.

c3 References to feelings of discouragement, giving up hope, despairing, feeling grieved or depressed, having no purpose in life.

a2 References to self needing or deserving punishment, paying for one's sins, needing to atone or do penance.

b2 Self adversely criticizing, depreciating self; references to regretting, being sorry or ashamed for what one says or does; references to self mistaken or in error.

c2 References to feeling of deprivation, disappointment, lonesomeness.

a1 References to feeling disappointed in self; unable to meet expectations of self or others.

b1 Denial of anger, dislike, hatred, blame, destructive impulses from self to self.

c1 References to feeling painfully driven or obliged to meet one's own expecations and standards.

APPENDIX C (cont'd.)

* The number serves to give the weight as well as to identify the category. The letter also helps identify the category.

^ This code is reduced to a weight of 2 if the injury is slight. It is then written Ia3.

APPENDIX D

SYMPTOM DISTRESS CHECKLIST

CLIENT FORM (SCL-90R)

APPENDIX D

SYMPTOM DISTRESS CHECKLIST

CLIENT FORM (SCL-90R)

INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have. Please read each one carefully. After you have done so, please circle one of the numbers to the right that best describes how much that problem has bothered or distressed you during the past couple weeks including today. Circle only one number for each problem and do not skip any items. Please read the example before beginning.

CATEGORIES:
0 - Not at all
1 - A little bit
2 - Moderately
3 - Quite a bit
4 - Extremely

EXAMPLE; How much were you bothered by: 1. Backaches...By circling #1, this person answered that he/she was a little bit bothered by backaches.

1.	Headaches	0	1	2	3	4
2.	Nervousness or shakiness inside	0	1	2	3	4
3.	Unwanted thoughts, words, or ideas that won't leave your mind	0	1	2	3	4
4.	Faintness or dizziness	0	1	2	3	4
5.	Loss of sexual interest or pleasure	0	1	2	3	4
6.	Feeling critical of others	0	1	2	3	4
7.	The idea that someone else can control your thoughts	0	1	2	3	4
8.	Feeling others are to blame for most of your troubles	0	1	2	3	4

APPENDIX D (cont'd.)

CATEGORIES:
0 - Not at all
1 - A little bit
2 - Moderately
3 - Quite a bit
4 - Extremely

9.	Trouble remembering things	0	1	2	3	4
10.	Worried about sloppiness or carelessness	0	1	2	3	4
11.	Feeling easily annoyed or irritated	0	1	2	3	4
12.	Pains in heart or chest	0	1	2	3	4
13.	Feeling afraid in open spaces or on the streets	0	1	2	3	4
14.	Feeling low in energy or slowed down	0	1	2	3	4
15.	Thoughts of ending your life	0	1	2	3	4
16.	Hearing voices that other people do not hear	0	1	2	3	4
17.	Trembling	0	1	2	3	4
18.	Feeling that most people cannot be trusted.	0	1	2	3	4
19.	Poor appetite	0	1	2	3	4
20.	Crying easily	0	1	2	3	4
21.	Feeling shy or uneasy with the opposite sex	0	1	2	3	4
22.	Feeling of being trapped or caught	0	1	2	3	4
23.	Suddenly scared for no reason	0	1	2	3	4
24.	Temper outbursts that you could not control	0	1	2	3	4

APPENDIX D (cont'd.)

CATEGORIES:
0 - Not at all
1 - A little Bit
2 - Moderately
3 - Quite a bit
4 - Extremely

25.	Feeling afraid to go out of your house alone.	0	1	2	3	4
26.	Blaming yourself for things	0	1	2	3	4
27.	Pains in lower back	0	1	2	3	4
28.	Feeling blocked in getting things done	0	1	2	3	4
29.	Feeling lonely	0	1	2	3	4
30.	Feeling blue	0	1	2	3	4
31.	Worrying too much	0	1	2	3	4
32.	Feeling no interest in things	0	1	2	3	4
33.	Feeling fearful	0	1	2	3	4
34.	Your feelings being easily hurt	0	1	2	3	4
35.	Other people being aware of your private thoughts	0	1	2	3	4
36.	Feeling others do not understand you or are unsympathetic	0	1	2	3	4
37.	Feeling that people are unfriendly or dislike you	0	1	2	3	4
38.	Having to do things very slowly to insure correctness	0	1	2	3	4
39.	Heart pounding or racing	0	1	2	3	4
40.	Nausea or upset stomach	0	1	2	3	4
41.	Feeling inferior to others	0	1	2	3	4
42.	Soreness of your muscles	0	1	2	3	4

APPENDIX D (CONT'D.)

CATEGORIES:
0 - Not at all
1 - A little bit
2 - Moderately
3 - Quite a bit
4 - Extremely

43.	Feeling that you are watched or talked about by others	0	1	2	3	4
44.	Trouble falling asleep	0	1	2	3	4
45.	Having to check and double-check what you do	0	1	2	3	4
46.	Difficulty making decisions	0	1	2	3	4
47.	Feeling afraid to travel on buses, subways, or trains	0	1	2	3	4
48.	Trouble getting your breath	0	1	2	3	4
49.	Hot or cold spells	0	1	2	3	4
50.	Having to avoid certain things, places, or activities because they frighten you	0	1	2	3	4
51.	Your mind going blank	0	1	2	3	4
52.	Numbness or tingling in parts of your body	0	1	2	3	4
53.	A lump in your throat	0	1	2	3	4
54.	Feeling hopeless about the future.	0	1	2	3	4
55.	Trouble concentrating	0	1	2	3	4
56.	Feeling weak in parts of your body	0	1	2	3	4
57.	Feeling tense or keyed up	0	1	2	3	4
58.	Heavy feelings in your arms or legs	0	1	2	3	4
59.	Thoughts of death or dying	0	1	2	3	4

APPENDIX D (cont'd.)

CATEGORIES:
0 - Not at all
1 - A little Bit
2 - Moderately
3 - Quite a bit
4 - Extremely

60.	Overeating	0	1	2	3	4
61.	Feeling uneasy when people are watching or talking about you	0	1	2	3	4
62.	Having thoughts that are not your own	0	1	2	3	4
63.	Having urges to beat, injure or harm someone	0	1	2	3	4
64.	Awakening in the early morning	0	1	2	3	4
65.	Having ideas or beliefs that others do not share	0	1	2	3	4
66.	Sleep that is restless or disturbed	0	1	2	3	4
67.	Having urges to break or smash things	0	1	2	3	4
68.	Having ideas or beliefs that others do not share	0	1	2	3	4
69.	Feeling very self-conscious with others	0	1	2	3	4
70.	Feeling uneasy in crowds such as shopping or at a movie	0	1	2	3	4
71.	Feeling everything is an effort	0	1	2	3	4
72.	Spells of terror or panic	0	1	2	3	4
73.	Feeling uncomfortable about eating or drinking in public	0	1	2	3	4
74.	Getting into frequent arguments	0	1	2	3	4

APPENDIX D (cont'd.)

CATEGORIES:
0 - Not at all
1 - A little bit
2 - Moderately
3 - Quite a bit
4 - Extremely

75.	Feeling nervous when you are left alone	0	1	2	3	4
76.	Others not giving you proper credit for your achievements	0	1	2	3	4
77.	Feeling lonely even when you are with people	0	1	2	3	4
78.	Feeling so restless you couldn't sit still	0	1	2	3	4
79.	Feelings of worthlessness	0	1	2	3	4
80.	Feeling that familiar things are strange	0	1	2	3	4
81.	Shouting or throwing things	0	1	2	3	4
82.	Feeling afraid you will faint in public	0	1	2	3	4
83.	Feeling that people will take advantage of you if you let them	0	1	2	3	4
84.	Having thoughts about sex that bother you a lot	0	1	2	3	4
85.	The idea that you should be punished for your sins	0	1	2	3	4
86.	Feeling pushed to get things done.	0	1	2	3	4
87.	The idea that something serious is wrong with your body	0	1	2	3	4
88.	Never feeling close to another person	0	1	2	3	4

APPENDIX D (cont'd.)

CATEGORIES:
0 - Not at all
1 - A little bit
2 - Moderately
3 - Quite a bit
4 - Extremely

89.	Feelings of guilt	0	1	2	3	4
90.	The idea that something is wrong with your mind	0	1	2	3	4

APPENDIX E

SYMPTOM DISTRESS CHECKLIST

CLINICIAN FORM (SCL-90A)

APPENDIX E

SYMPTOM DISTRESS CHECKLIST

CLINICIAN FORM (SCL-90A)

HOPKINS PSYCHIATRIC RATINGS

1.	Somatization	0	1	2	3	4	5	6
2.	Obsessive-Compulsive	0	1	2	3	4	5	6
3.	Interpersonal Sensitivity	0	1	2	3	4	5	6
4.	Depression	0	1	2	3	4	5	6
5.	Anxiety	0	1	2	3	4	5	6
6.	Hostility	0	1	2	3	4	5	6
7.	Phobic Anxiety	0	1	2	3	4	5	6
8.	Paranoid Ideation	0	1	2	3	4	5	6
9.	Global Pathology Index	0	1	2	3	4	5	6

CATEGORIES:
0 - None
1 - Slight
2 - Mild
3 - Moderate
4 - Marked
5 - Severe
6 - Extreme

APPENDIX F

POSTTHERAPY CLIENT QUESTIONNAIRE

APPENDIX F

POSTTHERAPY CLIENT

QUESTIONNAIRE

For each item choose the answer which you feel best describes your therapy experience.

1. How much in need of further therapy do you feel now?

_____No need at all
_____Slight need
_____Could use more
_____Considerable need
_____Very great need

2. What led to the termination of your therapy?

_____My decision
_____My therapist's decision
_____Mutual agreement
_____External factors

*3. How much have you benefitted from your therapy?

_____A great deal
_____A fair amount
_____To some extent
_____Very little
_____Not at all

*4. Everything considered, how satisfied are you with the results of your psychotherapy experience?

_____Extremely dissatisfied
_____Moderately dissatisfied
_____Fairly dissatisfied
_____Fairly satisfied
_____Moderately satisfied
_____Highly satisfied
_____Extremely satisfied

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* Questions used in this study.

APPENDIX F (cont'd.)

5. What impression did you have of your therapist's level of experience?

_____Extremely inexperienced
_____Rather inexperienced
_____Somewhat experienced
_____Fairly experienced
_____Highly experienced
_____Exceptionally experienced

6. How well did you feel you were getting along before therapy?

_____Very well
_____Fairly well
_____Neither well nor poorly
_____Fairly poorly
_____Very poorly
_____Extremely poorly

7. How long before entering therapy did you feel in need of professional help?

_____Less than 1 year
_____1-2 years
_____3-4 years
_____5-10 years
_____11-15 years
_____16-20 years

8. How severely disturbed did you consider yourself at the beginning of your therapy?

_____Extremely disturbed
_____Very much disturbed
_____Moderately disturbed
_____Somewhat disturbed
_____Very slightly disturbed

9. How much anxiety did you feel at the time you started therapy?

_____A tremendous amount
_____A great deal
_____A fair amount
_____Very little
_____None at all

APPENDIX F (cont'd.)

10. How great was the internal "pressure" to do something about these problems when you entered psychotherapy?

_____Extremely great
_____Very great
_____Fair great
_____Relatively small
_____Very small
_____Extremely small

*11. How much do you feel you have changed as a result of psychotherapy?

_____A great deal
_____A fair amount
_____Somewhat
_____Very little
_____Not at all

12. How much of this change do you feel has been apparent to others?

(a) People closest to you (husband, wife, etc.)
_____A great deal
_____A fair amount
_____Somewhat
_____Very little
_____Not at all

(b) Close friends
_____A great deal
_____A fair amount
_____Somewhat
_____Very little
_____Not at all

(c) Co-workers, acquaintances, etc.
_____A great deal
_____A fair amount
_____Somewhat
_____Very little
_____Not at all

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* Questions used in this study.

APPENDIX F (cont'd.)

13. On the whole, how well do you feel you are getting along now?

_____Extremely well
_____Very well
_____Fairly well
_____Neither well nor poorly
_____Fairly poorly
_____Very poorly
_____Extremely poorly

14. How adequately do you feel you are dealing with any present problems?

_____Very adequately
_____Fairly adequately
_____Neither adequately nor inadequately
_____Somewhat inadequately
_____Very inadequately

*15. To what extent have your complaints or symptoms that brought you to therapy changed as a result of treatment?

_____Completely disappeared
_____Very greatly improved
_____Considerably improved
_____Somewhat improved
_____Not at all improved
_____Got worse

16. How soon after entering therapy did you feel any marked change?

_____weeks of therapy (approximately)

17. How strongly would you recommend psychotherapy to a close friend with emotional problems?

_____Would strongly recommend it
_____Would mildly recommend it
_____Would recommend it but with some reservations
_____Would not recommend it
_____Would advise against it

---

* Questions used in this study.

APPENDIX F (cont'd.)

Please indicate to what extent each of the following statements describes your therapy experience. Disregard that at one point or another in therapy you may have felt differently.

1 - Strongly agree
3 - Mildly agree
5 - Undecided
7 - Mildly disagree
9 - Strongly disagree

The following questions were rated on the above scale:

18. My therapy was an intensely emotional experience.

19. My therapy was often a rather painful experience.

20. I remember very little about the details of my psychotherapeutic work.

21. My therapist almost never used technical terms.

22. On the whole I experienced very little feeling in the course of therapy.

23. There were times when I experienced intense anger toward my therapist.

24. I feel the therapist was rather active most of the time.

25. I am convinced that the therapist respected me as a person.

26. I feel the therapist was genuinely interested in helping me.

27. I often felt I was "just another patient."

28. The therapist was always keenly attentive to what I had to say.

29. The therapist often used very abstract language.

30. He very rarely engaged in small talk.

31. The therapist tended to be rather stiff and formal.

32. The therapist's manner was quite natural and unstudied.

APPENDIX F (con't.)

33. I feel that he often didn't understand my feelings.

34. I feel he was extremely passive.

35. His general attitude was rather cold and distant.

36. I often had the feeling that he talked too much.

37. I was never sure whether the therapist thought I was a worthwhile person.

38. I had a feeling of absolute trust in the therapist's integrity as a person.

39. I felt there usually was a good deal of warmth in the way he talked to me.

40. The tone of his statements tended to be rather cold.

41. The tone of his statements tended to be rather neutral.

42. I was never given any instructions or advice on how to conduct my life.

43. The therapist often talked about psychoanalytic theory in my sessions.

44. A major emphasis in treatment was upon my attitudes and feelings about the therapist.

45. A major emphasis in treatment was upon my relationships with people in my current life.

46. A major emphasis in treatment was upon childhood experiences.

47. A major emphasis in treatment was upon gestures, silences, shifts in my tone of voice and bodily movements.

48. I was almost never given any reassurances by the therapist.

49. My therapist showed very little interest in my dreams and fantasies.

50. I usually felt I was fully accepted by the therapist.

APPENDIX F (con't.)

51. I never had the slightest doubt about the therapist's interest in helping me.

52. I was often uncertain about the therapist's real feelings toward me.

53. The therapist's manner of speaking seemed rather formal.

54. I feel the emotional experience of therapy was much more important in producing change than intellectual understanding of my problems.

55. My therapist stressed intellectual understanding as much as emotional experiencing.

APPENDIX G

POSTTHERAPY THERAPIST QUESTIONNAIRE

APPENDIX G

POSTTHERAPY THERAPIST QUESTIONNAIRE

CATEGORIES:
0 - None
1 - Slight
2 - Mild
3 - Moderate
4 - Marked
5 - Severe
6 - Extreme

HOPKINS PSYCHIATRIC RATINGS

1.	Somatization	0	1	2	3	4	5	6
2.	Obsessive-Compulsive	0	1	2	3	4	5	6
3.	Interpersonal Sensitivity	0	1	2	3	4	5	6
4.	Depression	0	1	2	3	4	5	6
5.	Anxiety	0	1	2	3	4	5	6
6.	Hosility	0	1	2	3	4	5	6
7.	Phobic Anxiety	0	1	2	3	4	5	6
8.	Paranoid Ideation	0	1	2	3	4	5	6
9.	Psychoticism	0	1	2	3	4	5	6
10.	Global Pathology Index	0	1	2	3	4	5	6

Please rate each of the following items, comparing the client with other clients whom you see in psychotherapy using the following scale:

1 - Very little
3 - Some
5 - Moderate
7 - Fairly great
9 - Very great

11.	Defensiveness	1	3	5	7	9

APPENDIX G (con't.)

1 - Very little
3 - Some
5 - Moderate
7 - Fairly great
9 - Very great

12.	Anxiety	1	3	5	7	9
13.	Ego Strength	1	3	5	7	9
14.	Degree of disturbance	1	3	5	7	9
15.	Capacity of insight	1	3	5	7	9
16.	Overall adjustment	1	3	5	7	9
17.	Personal liking for patient	1	3	5	7	9
18.	Motivation for therapy	1	3	5	7	9
19.	Improvement expected (prognosis)	1	3	5	7	9
20.	Degree to which counter-transference was a problem in therapy	1	3	5	7	9
21.	Degree to which you usually enjoy working with this kind of patient in psycho-therapy	1	3	5	7	9
*22.	Degree of symptomatic improvement.	1	3	5	7	9
23.	Degree of change in basic personality structure	1	3	5	7	9
24.	Degree to which you felt warmly toward the patient	1	3	5	7	9
25.	How much of an "emotional investment" did you have in this patient?	1	3	5	7	9

* Questions used in this study.

APPENDIX G (con't.)

Continue rating your client in comparison to other clients on the following scale:

1 - Very little
2 - Some
3 - Moderate
4 - Fairly great
5 - Very great

26.	Degree to which you think the patient felt warmly toward you	1	3	5	7	9
*27.	Overall success of therapy	1	3	5	7	9
28.	How would you characterize your working relationship with this patient?	1	3	5	7	9

1 - Extremely poor
3 - Fairly poor
5 - Neither good nor poor
7 - Fairly good
9 - Extremely good

*29.	How satisfied do you think the patient was with the results of his therapy?	1	3	5	7	9

1 - Extremely dissatisfied
3 - Fairly dissatisfied
5 - Neither satisfied nor dissatisfied
7 - Fairly satisfied
9 - Extremely satisfied

30. How would you characterize the form of psychotherapy you conducted with this patient?

1	3	5	7	9
Largely supportive				Intensive analytical

* Questions used in this study.

APPENDIX G (cont'd.)

31. Do you recall any strikingly pleasant experiences that you had during the therapy sessions with this patient? If yes, please mark the number that best indicates the degree of pleasantness. Otherwise mark "0" for No.

1	2	3	4	5	6	7	8	9
Mildly pleasant								Extremely pleasant

32. Do you recall any strikingly unpleasant experiences you had with this patient? If yes, please mark the number that best indicates the degree of unpleasantness. Otherwise mark "0" for No.

1	2	3	4	5	6	7	8	9
Mildly unpleasant								Extremely pleasant

33. Overall, how would you characterize your experiences with this patient?

1	2	3	4	5	6	7	8	9
Unpleasant								Pleasant

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