

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI[®]

University of Alberta

Patient Insight in Short-Term, Time-Limited, Dynamic
Psychotherapy

by

Natasha Ballen

A thesis submitted to the Faculty of Graduate Studies and Research in partial
fulfillment of the requirements for the degree of Master of Science

in

Medical Sciences - Psychiatry

Edmonton, Alberta

Fall 2000



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file *Votre référence*

Our file *Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-59776-8

Canada

University of Alberta

Library Release Form

Name of Author: Natasha Ballen

Title of Thesis: Patient Insight in Short-Term, Time-Limited, Dynamic Psychotherapy

Degree: Master of Science

Year this Degree Granted: 2000

Permission is hereby granted to the University of Alberta to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purpose only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as hereinbefore provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.

N. Ballen

Natasha Ballen
#10, 3477 Rue Aylmer
Montreal, Quebec
H2X 2B4

September 29, 2000

ABSTRACT


The study focused on the development and predictive ability of a reliable observer-based measure of patient insight in short-term, psychodynamic, individual psychotherapy. Insight was conceptually defined as the patient's articulation of an increased intellectual and emotional understanding of conflict (intrapsychic and interpersonal) and the ways in which conflicts contribute to personal problems. Initial analyses determined the psychometric properties (rater reliability, internal consistency, factor structure) of the Insight Rating Scale. The results revealed that the Insight Rating scale can be used reliably by trained Bachelors-level raters and is internally consistent. The common factor analysis resulted in a single factor representing all of the items of the measure. The factor suggested that the intellectual and emotional components of insight could not be empirically differentiated. Subsequent analyses tested a number of hypotheses involving insight, psychological mindedness (PM), quality of object relations (QOR), the therapeutic alliance, the therapist's focus on transference, and treatment outcome. Findings from the data analyses revealed that insight was not related to PM, QOR, or outcome. Insight, in the late phase of therapy, was found to be associated with the therapist's focus on transference in the early and late phases of therapy. Furthermore, insight was significantly associated with the therapist's ratings of the therapeutic alliance. Examination of the effect of interactions between the predictor variables and insight identified a significant interaction between insight and concentration of transference interpretations for the mature defenses residual gain score outcome variable. High levels of insight and high concentration of transference interpretations was associated with

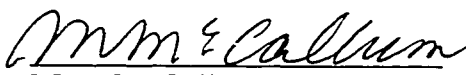
negative treatment outcome. Clinical implications of the findings and themes for future research are also considered.


University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Patient Insight in Short-Term, Time-Limited, Dynamic Psychotherapy* submitted by Natasha Ballen in partial fulfillment of the requirements for the degree of Master of Science in Medical Sciences-Psychiatry.


Anthony, S. Loyce, Ph.D.


Mary McCallum, Ph.D.


Donald Kuiken, Ph.D.


Andrew J. Greenshaw, Ph.D.

September 22, 2000

Dedication

I dedicate this work to my partner and best friend Jon. I am truly grateful for his unwavering support and encouragement. His faith in me made it possible for me to follow my dreams and the sacrifices he has made have been considerable. Thank-you for imparting in me the strength to remain true to myself.

I would also like to dedicate my thesis to my parents who always fostered my search for knowledge.

*There are two mistakes one can make along the road to
truth - not going all the way, and not starting.*

Buddha

*If a little dreaming is dangerous, the cure for it is not to
dream less but to dream more, to dream all the time.*

Marcel Proust

Acknowledgements

I would like to thank my thesis supervisor, Dr. Anthony Joyce, for his guidance and support throughout my research. I am indebted to him for instilling in me the value of discipline and perseverance. I would also like to thank the members of my thesis committee, Dr. Donald Kuiken for his thoughtful suggestions, and in particular Dr. Mary McCallum. I am sincerely grateful for her encouragement, understanding, and generous kindness. In addition, I would like to extend my gratitude to Dr. Andrew Greenshaw for his wise counsel. The completion of my thesis would not have been possible without the efforts of the research assistants in the Psychotherapy Research Unit. Their contributions are greatly appreciated.

Table of Contents

| | |
|---|----|
| Introduction..... | 1 |
| Overview..... | 1 |
| Clinical Literature Regarding Insight..... | 3 |
| Definitions of Insight..... | 3 |
| Intellectual and Emotional Insight..... | 5 |
| Summary of Clinical Literature..... | 8 |
| Empirical Literature Regarding Insight..... | 8 |
| Summary of Empirical Literature..... | 17 |
| Implications of The Clinical and Empirical Literature to The Current Research..... | 18 |
| Hypotheses..... | 19 |
| Method..... | 21 |
| Context..... | 21 |
| Setting..... | 22 |
| Patients..... | 22 |
| Therapists..... | 23 |
| Type of Therapy..... | 23 |
| Measures..... | 24 |
| Insight Rating Scale..... | 24 |
| Technique Measures..... | 27 |
| Therapist Intervention Rating System..... | 28 |
| Interpretive and Supportive Technique Scale..... | 29 |
| Perception of Technique Scale..... | 30 |
| Outcome Measures..... | 31 |
| Psychotherapy Process Measures..... | 33 |
| Vanderbilt Psychotherapy Process Scale..... | 33 |
| Therapeutic Alliance..... | 34 |
| Patient Personality Measures..... | 36 |
| Psychological Mindedness..... | 36 |
| Quality of Object Relations..... | 37 |

| | |
|---|----|
| Procedure..... | 38 |
| Psychometric Phase..... | 38 |
| Hypothesis-Testing Phase..... | 39 |
| Exploratory Phase..... | 40 |
| Results..... | 41 |
| Psychometric Phase..... | 41 |
| Rater Reliability..... | 41 |
| Internal Consistency..... | 42 |
| Factor Structure..... | 43 |
| Summary of Psychometric Properties..... | 44 |
| Hypothesis-Testing Phase..... | 44 |
| Rater Reliability..... | 45 |
| Factor Structure..... | 45 |
| Description of Insight Scores..... | 46 |
| Insight and the Therapist's Use of Transference-Focused Technique..... | 47 |
| Insight and Treatment Outcome..... | 48 |
| Interaction Between Insight and the Therapist's Use of Transference-Focused Technique..... | 48 |
| Insight and Psychotherapy Process..... | 53 |
| Insight and VPPS..... | 53 |
| Insight and the Therapeutic Alliance..... | 54 |
| Insight and Patient Personality..... | 54 |
| Insight and PM..... | 54 |
| Insight and QOR..... | 55 |
| Summary of Results From Hypothesis-Testing Phase..... | 55 |
| Exploratory Phase..... | 55 |
| Summary of Results from Exploratory Phase..... | 58 |
| Summary of Results..... | 59 |
| Discussion..... | 61 |
| Determining the Psychometric Properties of the Insight Rating Scale..... | 62 |
| Hypothesis-Testing..... | 64 |
| Assessing the Pattern of Insight Across Therapy..... | 64 |
| Insight and Transference-Focused Technique..... | 65 |
| Insight and Treatment Outcome..... | 67 |

| | |
|--|-----|
| Effect of Interaction Between Insight and Transference-Focused Technique..... | 69 |
| Insight and Psychotherapy Process..... | 71 |
| Insight and Patient Personality..... | 74 |
| Exploratory Phase..... | 76 |
| Effect of Interaction Between Insight and Other Predictor Variables..... | 76 |
| Limitations of the Current Study..... | 78 |
| Clinical Implications of the Current Findings..... | 82 |
| Use of the Insight Rating Scale..... | 82 |
| Insight and Treatment Variables..... | 83 |
| Themes for Future Psychotherapy Process Research..... | 84 |
| Tables and Figures..... | 88 |
| Bibliography..... | 109 |
| Appendices..... | 120 |
| A. Insight Rating Scale – Original..... | 120 |
| B. Interpretive-Supportive Technique Scale..... | 136 |
| C. Insight Rating Scale – Revised..... | 137 |
| D. Summary of Hierarchical Regression Analyses..... | 152 |
| E. Summary of Hierarchical Regression Analyses with Estimated Concentration of Transference Interpretations Scores..... | 156 |

LIST OF TABLES

- TABLE 1: Patient Axis I and II Diagnostic Information
- TABLE 2: Patient Information: Demographic Variables
- TABLE 3: Rater Reliabilities for Insight Rating Scale: Training Phase
- TABLE 4: Outcome Factors, Variables, and Loadings
- TABLE 5: Rater Reliabilities for Insight Rating Scale: Psychometric Phase
- TABLE 6: Internal Consistency of Insight Rating Scale: Psychometric Phase
- TABLE 7: Common Factor Analysis of Insight Rating Scale: Psychometric Phase
- TABLE 8: Rater Reliabilities for Insight Rating Scale: Hypothesis-Testing Phase
- TABLE 9: Common Factor Analysis of Insight Rating Scale: Hypothesis-Testing Phase
- TABLE 10: Means and Standard Deviations for Overall and Phase-Based Insight Scores
- TABLE 11: Intercorrelations of Insight Rating Scale Items
- TABLE 12: Correlations Between Insight and Transference-Focused Technique
- TABLE 13: Correlations Between Insight and Treatment Outcome
- TABLE 14: Regression Analysis on Mature Defenses Residual Gain Score for Insight and Concentration of Transference Interpretations Interaction
- TABLE 15: Correlations Between Insight, Patient-Rated Alliance, and Therapist-Rated Alliance
- TABLE 16: Correlations Between Insight, PM, and QOR
- TABLE 17: Correlations Between Insight, Concentration of Transference Interpretations, Therapeutic Alliance, PM, and QOR

LIST OF FIGURES

FIGURE 1: Insight ratings by phase of therapy

FIGURE 2: Interaction effect between insight and concentration of transference interpretations in predicting mature defenses residual gain score outcome measure

INTRODUCTION

Overview

Psychodynamic psychotherapy is an approach to psychotherapy which aims to help patients whose problems of anxiety, depression, and interpersonal conflict are viewed as the product of chronic maladaptations. The basic principles of psychoanalytic therapy, such as the interpretation of transference and resistance, are important strategies in this approach (Strupp & Binder, 1984). The goals of psychodynamic psychotherapy are symptom reduction and a greater awareness of unconscious processes through the resolution of intrapsychic conflict (Glucksman, 1993). An important component of conflict resolution is the achievement of insight (Keisler, 1996). In the psychoanalytic literature, insight denotes an increase in self-awareness (Marková & Berrios, 1992). It has been argued that integral to the development of insight in analytic therapy is the re-experiencing of the conflict in the immediacy of the transference relationship (Crits-Christoph, Barber, Miller, & Beebe, 1993). The current study focused on these key elements of psychodynamic psychotherapy and examined the relationships among patient insight, transference technique, and therapy outcome.

Freud's concept of transference derived from his observation that there is a parallel between the patient's relationship patterns, or templates, and the relationship with the therapist. The relationship pattern of the patient has its roots in the relationship with early parental figures and is replicated in the course of the patient's life with a variety of people, including the therapist (Fried, Crits-Christoph, & Luborsky, 1992). Greenson (1967, p. 256-258) described the transference reaction as "the patient's reaction to the therapist as to many or most of the people in his life." Joseph (1985) elaborated on the

concept of transference by describing it as everything that the patient brings into the relationship: "what he brings in can best be gauged by our focusing our attention on what is going on with the relationship, how he is using the analyst, alongside and beyond what he is saying (p. 447)." Attending to the transference relationship between the patient and the therapist is a way of illuminating the conflicts underlying the patient's presenting problem.

Within the psychoanalytic literature, much emphasis is placed on facilitating patient insight through interpretation, particularly the interpretation of transference (Loewald, 1960). Transference interpretations enlarge the patient's awareness of his or her current psychological state and the factors contributing to this condition. By highlighting similarities between the therapy experience and the patient's current or past relationships, the therapist can facilitate the patient's insight into his or her history of emotional and interpersonal conflicts (Strupp & Binder, 1984). Working through the patient's central problems in the transference can lead to clinical change by increasing the patient's self-understanding of his or her present symptoms and relationship problems. This insight enables the patient to "see clearly what he could not see before and to feel things which he could not feel before by confirming or verbalizing his discoveries" (Menninger, 1958, p. 129). A progressive understanding of personal conflicts can assist the patient in gaining knowledge about him or herself and his or her experiences so that he or she can move toward achieving desired goals.

The following sections focus on the clinical and empirical literature on patient insight in psychotherapy. Conceptual and methodological issues pertaining to the

assessment of insight are discussed. Finally, a review of previous efforts in studying insight will set the stage for the current study.

Clinical Literature Regarding Insight

Definitions of Insight. While the concept of insight is central to psychoanalytic theory, it has been subject to various definitions that have made it difficult to fully operationalize the construct. Early definitions were abstract in nature and emphasized the significance of making unconscious material conscious. For example, Sargent (1953) defined insight as the ability to symbolize repressed content thus rendering manageable sources of strain and conflict. Kris (1956) defined insight as the ability of the ego to observe the self and its own functions with some measure of objectivity. Eskey (1958) referred to insight as the development of conscious awareness and understanding of formerly unrecognized impulses and drives. Finally, Myerson (1960) defined insight as awareness of oneself or of the world as it affects oneself. Thus a key element in early definitions of insight was the primacy of a focus on internal functioning.

As an aid to understanding the analytic process, Karl Menninger developed the concept of the triangle of insight. According to Menninger (1958), insight is "the simultaneous identification of the characteristic behaviour pattern in all three of these situations [childhood, contemporary, and analytic situation], together with an understanding of why they were and are used as they were and are" (p.148). Malan (1979) offered a second triangle representing intrapsychic conflict as being comprised of three components: defense, anxiety, and the hidden impulse. Malan claimed that the aim of dynamic psychotherapy is to extend beneath the defenses and the anxiety to the hidden impulse, and then trace this impulse back from its origins in the past to the present. By

means of the therapist's interpretations, the patient gains insight into the nature of his or her conflict in relation to the transference, current, and past relationships.

Wallerstein and Robbins (1956, p. 259) contend that insight is the "ideational representation" of a change in ego functioning. The transformative nature of insight depends on two important parameters. One is the degree to which the ego can tolerate the insight, and the second is the degree to which the individual is willing to make a conscious effort to integrate the insight into his/her personality style. In the psychotherapy literature, this would refer to "the use of ego strength to effect further psychological growth" (Boorstein, 1994, p. 95-96). Ego strength denotes the ability to see clearly and tolerate what is seen. Psychological insights can become part of "healing" when they are fully explored and integrated into our lives (ibid.). Insight can lead to changes in behaviour, patterns of defenses, and self-representation, and provide a better understanding of one's past. Insight enables the patient to view parts of the unconscious self and the connections between them, allowing for changes in self-perceptions, personal relations, and reality testing. The process of gaining and using insight seems to be connected with an awareness of one's own problems and the ability to view oneself with objectivity (Kris, 1956).

From a research perspective, the clinical definitions of insight pose some difficulty in terms of measurement since their focus is on an internal subjective process of the patient. However, the clinical literature on insight does provide examples of observable behaviours that are indicative of insight. Examples include displaying more adaptive ways of behaving toward other people in the patient's life, including the therapist, indicating a greater tolerance for aspects of relationship problems (Luborsky,

1984), or expressing emotions (e.g., crying), indicating that the patient has begun to contact feelings more fully (Safran, 1989). A patient might also make a statement that provides an explanation for his or her experiences: "I have a very bad image of myself as I thought I was as a child. But that image was given to me by...my father, my mother...I never questioned their negative...feelings about me, until now" (O'Connor, Edelstein, Berry, & Weiss, 1994). Insight can also be observed in the display of feelings of emotional arousal (Maher & Nadler, 1986), the expression of a recognition of unconscious conflicts, or the identification of something new about oneself (Elliot, Shapiro, Firth-Cozens, Stiles, Hardy, et al., 1994).

In the current study, the approach to measurement involved a focus on concrete behaviours. Focusing on observable behaviours that are indicative of insight, such as the patient's speech and expression of affect, is advantageous because it is less open to subjective interpretations and more amenable to experimental study.

Intellectual and Emotional Insight. A longstanding question among clinicians and researchers concerns the type of knowledge acquisition that is related to change. A traditional way of determining how insight is related to change has been to distinguish between intellectual insight and emotional insight (Safran, 1989).

Strachey (1934) postulated that dynamic change is possible when the phases of the "mutative" (p.143) interpretation (transference interpretations that are conducive to change) are carried through, that is, when the patient becomes aware of the "infantile material" (p.143) he or she is re-experiencing in relation to the analyst. It is not enough for the patient to comprehend his or her anxiety by having it emerge into consciousness (intellectual insight), but the patient has to also resolve the conflict (emotional insight).

Strachey believed that the mutative interpretation must be emotionally immediate and the patient must experience it as something actual. Thus, when the emotional component is present, the mutative interpretation can induce dynamic change in psychological structures.

Reid and Finesinger (1952) also differentiated between generic or cognitive (intellectual) insight and emotional insight. They defined intellectual insight as any cognitive act by which a person grasps the significance of some pattern of relations. Emotional insight, or insight which incorporates affect, was defined as an appreciation of the relationship between unconscious conflict and emotional experiences. These authors regarded emotional insight as the key to therapeutic benefit.

Intellectual insight and emotional insight have been defined in the clinical literature as two distinct types of insight, each with their own distinguishing features. Intellectual insight involves: a) the recognition of aspects of oneself and one's environment that were previously unknown (Lindén, 1984); b) the conscious recognition of internal dynamics; and c) the connection between interpersonal conflicts and unconscious processes (Reid & Finesinger, 1952). Emotional insight involves: a) an affective appreciation of the connection between unconscious processes and current problems and relationship patterns (Strupp & Binder, 1984); b) an integration of conceptual (intellectual) awareness with emotion; and c) exploration of the feelings associated with the conceptual aspects of insight (Safran, 1989).

Myerson (1960) argued that insight is therapeutically effective only when it is an affective process. Insight that occurs as a result of a series of affective reconstructive experiences developing in the transference situation can be followed by a new and

meaningful adjustment to the world and to one's own self. In order to be meaningful, insight must be accompanied by the perception and expression of appropriate affect. Insight accompanied by emotional release is more therapeutic than intellectual insight because it challenges the defenses basic to the patient's neurosis and suggests areas needing further change. As the process of insight develops, the impulses motivating one's behaviour are affectively appreciated, preparing the way for awareness of still more repressed aspects of the self. In fact, successful therapy patients have been identified as those who manifest emotional access to conflictual themes and the capacity to reflect on them (Brady, 1967). The transformative process of insight involves the expression of feelings associated with the formation of new conceptual representations through which the patient is able to discover aspects of oneself that were previously unknown (Lindén, 1984). Toleration of the affect can lead to even greater access to emotionally laden material that in turn lends itself to further self-reflection (Carek, 1990).

However, the validity of fragmenting the concept of insight into two components, intellectual insight and emotional insight, has been questioned. Miller (1992) points out that this is an inherent problem with the conceptualization of insight: "Theorists are often inconsistent about whether affect is to be seen as part and parcel of insight or seen as something additional that can be present or absent from moments of insight" (p. 613). It has been argued that rather than perceive intellectual and emotional insight as distinct phenomena, insight should be understood as a complex process associated with the working through of intense affects and thoughts in the context of the transference relationship (Crits-Christoph et al., 1993). These authors contend that the intellectual and

emotional components of insight are interdependent and mutually influence one another, and thus, it may be impossible to fully differentiate them in instances of patient insight.

Summary of Clinical Literature

The clinical literature raises a number of issues concerning the concept of insight. The central issues concern the lack of an adequate definition of insight (Marková & Berrios, 1992) and meaningful criteria for differentiating the specific elements of intellectual and emotional insight (Roback, 1974). Given that insight is deemed to be an important component of the process of psychoanalytic change, it would seem to be important that a clear operational definition and measure of insight be developed.

This author contends that insight during psychodynamic psychotherapy can be assessed based on observable behaviours of the patient. In the current study, insight was conceptually defined as the patient's articulation of an increased intellectual and emotional understanding of conflict (intrapsychic and interpersonal) and the ways in which conflicts contribute to personal problems. Intellectual insight was defined as to the acquisition of a rational understanding of personal conflict, including the identification of connections between internal experiences and behaviour with others and oneself, and the identification of parallels in relationship patterns. Emotional insight on the other hand was defined as the articulation of the affective implications of personal conflict and the here and now experience of those feelings.

Empirical Literature Regarding Insight

A small number of quantitative studies investigating the relationship of insight to the process and outcome of psychodynamic psychotherapy have been conducted. Various measures for assessing insight have been developed but no standard accepted measure

exists. A consequence of the lack of guidelines for measuring insight is the development of measures that may be assessing different constructs. Early researchers operationalized insight as the observed match or congruence between the clients description of self and other (Dymond, 1948), or equating the client's understanding of the motives of others with insight. For example, Tolor & Reznikoff (1960) developed an insight scale based on a definition of insight as the ability to understand the causal factors underlying attitudes and behaviours. However, this definition has been questioned on the grounds of whether the ability to understand the motivation of others is dependent upon insight about oneself (Roback, 1974).

Two approaches have generally been employed to identify and categorize instances of patient insight. These methods consist mostly of self-report ratings by clients and therapists, and observer-rated measures for which raters are trained with a manual to ensure consistency of ratings (Stalikas, Rogan, & Berkovic, 1996). Although self-report scales have been used frequently as personality measures they may not be as suitable as measures of process variables in psychotherapy research. The validity of self-report scales for measuring insight has been challenged on the grounds of experimental bias and self-deception. The validity of observer-rated measures of insight has also been questioned in studies that do not supply judges with operationalized definitions of insight (Crits-Christoph et al., 1993).

Although most efforts to study insight have focused primarily on insight in psychotherapy, experimental studies can also be found in psychological research. Kuiken, Carey, and Nielsen (1986-87) conducted an analogue study to assess affective insight. They defined affective insight as a subjective event occurring during intensive self-

reflection. The researchers administered instructions to the participants designed to encourage self-reflection. Afterwards, the participants completed two questionnaires to assess their experience during self-reflection. The researchers found that those individuals who were able to attain some form of affective insight into their problem indicated greater clarification of their feelings, were able to symbolize the significance of their problem, and experienced a novel reconceptualization of their problem. This analogue study is relevant to psychotherapy because the findings indicate that providing instructions that encourage intensive self-reflection (e.g., transference interpretations) can evoke experiences (e.g., insight) that are similar to those reported in insight-oriented psychotherapy.

Psychotherapy researchers have studied insight in the process of psychodynamic psychotherapy, however, the number of studies are few. Elliott and his colleagues (1994) conducted an investigation in which they analyzed client-identified significant insight events within and across sessions in two types of psychotherapy, cognitive-behavioural and psychodynamic-interpersonal. The comprehensive process analysis method (CPA) was used to analyze the insight events. CPA is a qualitative method by which researchers apply a framework involving a range of factors that may be important for understanding significant therapy events. The researchers found that the client-identified insight events in both treatments shared a number of similar features, suggesting the possibility of a general sequential model of insight events. The sequence begins with a conflict experienced by the patient and shared with the therapist (contextual priming). The therapist then provides the client with new information in the form of an interpretation (novel information). The patient initially ponders over this information (initiated

distantiated processing), then grasping a sense of connection, conveys this insight to the therapist in the form of an observable emotional response (insight). The patient then moves into further exploration of the emotional implications of the insight concerning his or her conflict (elaboration). This study is important because it suggests that the process of acquiring insight comprises several elements and evolves over several stages, moving from cognitive insight to emotional insight, and can be facilitated by the therapist's interpretations.

In addition to studying insight in the process of psychotherapy, researchers have also investigated the relationship between insight and treatment outcome. Researchers involved with the Penn Psychotherapy Project conducted an investigation of factors predicting the outcome of psychodynamic psychotherapy (Morgan, Luborsky, Crits-Christoph, Curtis, & Solomon, 1982). Among the variables investigated was patient insight. The researchers developed an insight rating scale and applied it to two early treatment sessions and two late treatment sessions of 20 patients, 10 who had improved the most and 10 who had improved the least in psychoanalytically oriented psychotherapy. The patients chosen had been treated for at least 25 sessions. For the total sample, treatments of the more improved patients lasted 61 weeks (median) while the treatments of the less improved patients lasted 43 weeks (median). The scale addressed seven categories of behaviour and required ratings of nine items on a 10-point Likert-type scale. The items were based solely on the elements characteristic of emotional insight and did not include any cognitive components of insight. In fact, the review of the insight literature suggests that some of the Morgan et al. emotional insight items were more representative of cognitive insight (i.e., "patient recognizes habitual patterns of

behaviour," "patient is able to relate present events to past events"). Two outcome indices, rated benefits and residual gain, were used to assess improvement. Rated benefit scores were obtained from independent ratings of change by patients and therapists. Residual gain variables were based on composite measures of several outcome variables rated by the patient and therapist. Psychoanalysts were trained to use the insight scale and served as judges. The researchers hypothesized that the most improved patients would show a gain in insight from early to late in treatment. They found that the insight scores for the most improved patients showed a linear increase, however this increase was nonsignificant. Although the researchers found that the variables patient insight, patient resistance, and therapist facilitative behaviour correlated with each other, none of the variables alone predicted outcome. This suggests that insight alone may be unrelated to outcome and must be combined with other variables (i.e., therapist technique) to predict treatment benefit. One of the limitations of this study concerns the use of analysts as judges, which renders the study difficult to replicate.

Høglend, Engelstad, Sørbye, Heyerdahl, and Amlo (1994) were also interested in studying the relationship between patient insight and therapy outcome. The researchers tested pre-treatment level of dynamic insight and the long term gain in insight during or after therapy. Patients were treated with dynamic psychotherapy of brief to moderate length. The therapy was open-ended with number of sessions ranging from nine to fifty-three. The treatment modality was characterized by a dynamic focus, active use of confrontations and anxiety-provoking questions, and interpretations of dynamic conflicts. Forty-three moderately disturbed patients participated in the study. Pre-treatment level of insight and gain in insight were assessed by trained clinical judges who conducted

detailed dynamic interviews with the patients. They defined insight as "the patient's ability to recognize intrapsychic components (wish, defense, anxiety) and past/current interpersonal patterns, and to relate them to his or her presenting problems" (p. 306). Their measure of insight, however, was not a measure of process since they did not assess insight during the course of therapy. The researchers found that although pre-treatment level of insight was not directly related with outcome two and four years after therapy, the interaction of insight and treatment duration significantly predicted outcome. Thus less insightful patients may have needed more treatment sessions for successful outcome. It was also found that gain in insight measured at two-year follow-up assessment was the strongest predictor of overall dynamic change four years after therapy. Because pre-treatment insight was not associated with long-term change, the researchers argue that there are perhaps additional patient and treatment variables that may play a role in mediating outcome. This study makes an important contribution to the field of psychotherapy research by demonstrating that insight gain is associated with the long-term outcome of psychotherapy. However, the problems these investigators encountered achieving interrater reliability with the insight measure can be mentioned. First, the average of four judges' ratings had to be employed. Second, even with this adjustment, reliability was marginal [ICC (3,4) = .53].

Crits-Christoph et al. (1993) point out that a fundamental problem with many of the predictive studies concerned with insight and outcome of therapy is the fact that they rely upon unguided clinical assessments and poorly operationalized measures of insight. In an attempt to overcome such methodological flaws Crits-Christoph and Luborsky (1990) developed the self-understanding rating scale. Their measure of self-

understanding is a guided clinical rating that allows judges to assess the extent to which a patient has self-understanding relative to an independent criterion, the Core Conflictual Relationship Theme (CCRT; Luborsky & Crits-Christoph, 1990). The data for the CCRT are derived from narrative episodes about interactions with other people told by the patient during assessment or early psychotherapy sessions. The episodes are coded to derive a formulation comprising a) the patient's main wishes, b) the expected responses of the other person, and c) the consequent responses of the self. Self-understanding is assessed in regards to the CCRT in general, the CCRT in relation to the therapist, the CCRT in relation to parents, and the CCRT in relation to significant others discussed by the patient in each session.

Crits-Christoph and Luborsky (1990) evaluated whether improvement in psychoanalytic psychotherapy is related to gains in patient self-understanding of their central relationship patterns. The self-understanding scale was applied to 2 early treatment sessions (sessions 3 and 5) of 43 patients. The interjudge reliability was assessed for the four viewpoints of the self-understanding scale using the intraclass correlation coefficient and found to be high (global = .77; therapist = .87; parents = .89; other people = .87). The two composite outcome indices used were measures of change (residual gain) and ratings of benefit. The researchers found that self-understanding of the CCRT with the therapist was correlated with the outcome measure of patient- and therapist-rated benefits. They also found that self-understanding with other people was correlated with the outcome measure of residual gain. However, the researchers failed to find any significant increase in insight from session three to session five. Crits-Christoph and Luborsky did find support for their contention that the measure of self-understanding

can be rated reliably and that there is a relationship between level of self-understanding and outcome. However, their results may have been stronger if insight was assessed over more treatment sessions. Furthermore, the researchers took a different approach to measuring insight by operationalizing insight in reference to the CCRT measure. The self-understanding measure provides a specific index of insight for each individual patient. This idiographic perspective, however, may preclude learning about aspects of the insight phenomenon that cut across individual patients. Since their assessment of insight was specific to an independent criterion, the CCRT, their findings may not generalize to other approaches to studying insight.

A study that relates more directly to the current study was conducted by Gelso, Kivlighan, Wine, Jones, and Friedman (1997). These investigators examined the role of therapist-rated transference and insight (in first session and first quarter of treatment) in predicting the outcome of time-limited therapy. Thirty-three clients who presented with slight to moderate dysfunction participated in the study. The process variables used in the study were transference and insight, both derived from a therapist-rated relationship questionnaire, the Therapy Session Check Sheet. The Counseling Outcome Measure (COM) was used to evaluate the amount of client improvement at the end of treatment. Gelso et al. (1997) found that outcome, as rated by both the patient and therapist, was related to the therapist's judgment of the extent to which transference and emotional insight occur early in treatment and the extent to which they correlated with one another. High transference/high emotional insight was found to be directly associated with outcome, whereas high transference/low emotional insight was found to be inversely associated with outcome. The combination of intellectual insight and transference was

not found to be significantly associated with outcome. The researchers also found that both positive and negative transference influence outcome in the same way. It is reported that perhaps positive transference involves as much defensive distortion as does negative transference, and so if not understood, positive distortions can be just as harmful as negative distortions. It was also reported that neither emotional nor intellectual insight alone differentiated more from less successful cases of therapy. The researchers suggest that the unfolding of insight may be contingent upon its interaction with other variables such as the therapist's transference focus.

It is important to note that there are several limitations to the Gelso et al. (1997) study:

- Participants involved in the study may not have been representative of an actual clinical population as they only presented with slight to moderate dysfunction and no clinical diagnoses were made.
- The therapy treatment approach was inconsistent across the therapists, therapists did not follow a treatment manual, and no adherence checks were conducted.
- There were only five items included to assess transference and insight, and they were rated only from the perspective of the therapist.
- The COM's evaluation of improvement was crude, based on only four items assessed by the patient and therapist.

By employing more sophisticated observer measures of insight, transference technique, and outcome, the current study provided stronger tests of the important relationships reported by Gelso et al. (1997).

Summary of Empirical Literature

Many of the research studies cited in the literature are fraught with problems, such as definitions of insight derived from different theoretical perspectives, poorly defined constructs of intellectual and emotional insight, unsatisfactory measures, inadequate reliability, and assessments of insight based on a minimal sampling of therapy process.

The insight measure constructed for this study was based on a thorough review of the literature. Principal elements of insight were identified and integrated into an operational measure which captures the observable components of both intellectual and emotional insight. Previous studies (Crits-Christoph & Luborsky, 1990) found that concepts such as self-understanding can be rated reliably as long as raters are provided with a clear operational definition of the construct being measured (Crits-Christoph et al., 1993). Clarity was sought for the definitions of intellectual and emotional insight.

The measure of insight attempts to correct some of the problems seen in previous research studies by including clear, observable, and non-overlapping items that can be rated objectively by an independent rater. An observer-rated measure of insight has several advantages over other types of measures such as self-report scales. First, observer ratings have been found to have adequate interjudge reliability and validity when clear operational definitions are provided (Crits-Christoph et al. 1993). Second, respondent bias is reduced because independent observers are not personally involved in the treatment and are guided by the rating manual rather than the experience of the session. And third, observer-rated measures are not subject to such problems as suspiciousness or defensiveness on the part of the patient, and failure of the patient and/or therapist to

complete the rating forms (Plutchik & Conte, 1989; Plutchik, Conte, Spence, Buckley, & Karasu 1990).

Implications of Clinical and Empirical Literature to the Current Research

As the clinical literature indicates, insight plays an important role in psychodynamic psychotherapy. An analysis of the literature has revealed that the concept of insight has been separated into two distinct constructs, intellectual insight and emotional insight. This distinction is held to have important implications for treatment outcome, i.e., emotional insight is regarded as critical to benefit. Previous studies however have not adequately defined these constructs and as a result unsatisfactory measures have been developed and used. Other issues have also been overlooked in the empirical literature, including the validity and reliability of the measures used to assess insight, the contributions of intellectual and emotional insight to treatment outcome, the influence of transference interpretations and the mechanisms through which insight can lead to change. Furthermore, certain personality characteristics of the patient may have a bearing on how insight develops across therapy. There have been few studies that have studied the relationship between insight and various patient variables. Examining the influence of patient variables may help researchers gain a better understanding of the insight phenomenon. Patient characteristics, such as psychological mindedness and quality of object relations, may be important determinants of the development of insight and deserve further examination.

The current study capitalized on a comparative trial of individual psychotherapy that was characterized by a large sample of psychiatric outpatients who were representative of an actual clinical population, experienced therapists, reliable measures

of therapist activity, and extensive monitoring of therapist adherence to treatment manuals. The comparative trial database also allowed for attention to be given to additional process, outcome, and patient personality variables.

The study had a twofold purpose: 1) the development of a reliable observer-based measure of insight that addresses the salient behavioural aspects of the phenomena, and 2) the examination of the relationships involving insight and other key variables (transference technique, the therapeutic alliance, and patient personality). Five research hypotheses were formulated. The hypotheses address insight generically, but the analyses were planned to take into account the distinction between intellectual and emotional insight.

Hypotheses

1. The therapist's focus on the transference is a central technique in facilitating patient insight into emotional and interpersonal conflicts. A direct relationship between the therapist's use of transference-focused technique and insight was predicted.
2. Patients who evidence a higher level of insight regarding their present symptoms and relationship problems would be expected to demonstrate greater improvement at the end of therapy. A direct relationship between the average level of insight attained across the therapy sessions and therapy outcome was predicted.
3. It was expected that a high level of insight and a high degree of transference-focused technique would be directly and strongly associated with therapy benefit, whereas other combinations of insight and transference focus would have less impact on outcome. An interaction effect between level of insight attained across sessions and

the therapist's use of transference-focused technique on therapy outcome was predicted.

4. A strong therapeutic alliance can facilitate insight-oriented work because it provides a safe interpersonal context for exploring the patient's problematic relationships (Crown, 1988) and enables the patient to better tolerate the intense focus of psychotherapy. Thus, the therapeutic alliance is likely to have a positive effect on insight. In addition, an insight-oriented therapeutic environment, which emphasizes increased self-understanding, would be expected to have a positive impact on the therapeutic alliance. A direct relationship between the therapeutic alliance and insight was predicted.
5. Patients with a higher level of psychological mindedness have a greater ability to identify dynamic conflicts in another person and as such should be better able to engage in a process of insight into their own personal problems. A direct relationship between psychological mindedness and insight was predicted. Patients with a history of healthy interpersonal relationships would be expected to be more likely to engage in a process of insight since individuals with a mature ego show a greater ability for self-observation (Loewald, 1960). A direct relationship between quality of object relations and insight was predicted.

Exploration of the interactive effect of insight, transference technique, the therapeutic alliance, and patient personality variables on treatment outcome was also considered.

Questions concerning which predictors and interactions contribute most to the prediction of outcome were addressed.

METHOD

Context

The current study involved an analysis of the therapy session material from outpatients who participated in a comparative clinical trial of psychotherapy in the Psychiatric Walk-In-Clinic, Department of Psychiatry, University of Alberta Hospital Site (Piper, Joyce, McCallum, & Azim, 1998). The trial involved an examination of the interaction of two forms (interpretive and supportive) of time-limited, short-term, individual psychotherapy and two dimensions of patient personality (psychological mindedness and quality of object relations) on the therapeutic alliance, premature termination, and therapy outcome. The sample consisted of psychiatric outpatients who presented to the clinic with such difficulties as depression, generalized anxiety, and recurrent internal conflicts. Patients were matched in pairs on the basis of their psychological mindedness (PM) and quality of object relations (QOR) scores, age, gender, and medication use. Each patient from each pair was then randomly assigned to one of the two forms of therapy. The results on post-therapy change indicated that patients in both forms of therapy did not differ on overall improvement, i.e., the benefits associated with the two therapies were similar. The study also found that QOR was directly related to improvement in interpretive therapy, and PM was related to improvement in both interpretive and supportive therapy.

For the purposes of the present study, only the session material of those patients who were assigned to the interpretive therapy condition was investigated, since this treatment approach emphasizes enhancing insight about recurrent conflicts that underlie a patient's problems.

Setting

The patients involved in the study were referred from the Psychiatric Walk-In-Clinic of the Department of Psychiatry. The clinic is part of a large, multifaceted psychiatric outpatient service that is located within a 600-bed university hospital. Approximately 1800 initial assessments are conducted in the clinic each year by a staff of 10 from the disciplines of psychology, social work, occupational therapy, and nursing. About 18% of the patients are offered some form of weekly psychodynamic psychotherapy (individual, couple, family, group). Many other treatments are also offered, including pharmacotherapy, intensive day treatment, and intensive evening treatment, and some patients are referred outside the clinic. The patients in the investigation were regarded by the referring therapists as representative of all psychotherapy cases within the clinic.

Patients

For the current study, 60 of the 72 patients who were assigned to the interpretive therapy condition of the comparative trial were randomly selected. Diagnostic information for this sample is provided in Table 1. Clinical diagnoses made by the intake assessor and consulting psychiatrist were validated using the computer-assisted Structured Clinical Interview for DSM-III-R (First, Gibbon, Williams, & Spitzer, 1990, 1991). Ninety-three percent of the patients received an Axis I diagnosis. The most frequent Axis I diagnoses were Major Depressive Disorder (69%) and Dysthymic Disorder (12%), followed by Anxiety Disorder (5%). A total of 45% of the patients received an Axis II diagnosis, the majority of which were Obsessive-Compulsive (22%),

Dependent (22%), Avoidant (15%), and Narcissistic (11%) personality disorders. With respect to co-morbidity, 38% of the patients received both Axis I and Axis II diagnoses.

Demographic information for the sample is presented in Table 2. The average age of the patients was 35.2 years. Fifty-eight percent were women. Forty percent were married or living with a partner, 23% were separated or divorced, and 37% had never been married. Sixty-eight percent were educated beyond high school and 75% were employed. Eighty percent reported receiving previous psychiatric treatment but only 3% had a history of psychiatric hospitalization.

Therapists

The eight therapists involved in the comparative psychotherapy project came from the disciplines of psychology, social work, occupational therapy, and psychiatry. The project therapists were experienced in practicing interpretive psychodynamic psychotherapy. Seven were white and one East Indian. Five were female. The therapists' average age was 43.6 years ($SD = 6.1$; range = 37-52). Their average experience practicing individual psychotherapy was 11.8 years ($SD = 4.9$; range = 3-19 years). For the current sample, the number of patients assigned to each therapist ranged from 5 to 9.

Type of Therapy

Each patient received 20, once-weekly, 50-minute sessions. All therapists followed the guidelines of a treatment manual for short-term interpretive dynamic psychotherapy. The objective of interpretive psychotherapy is to clarify and enhance the patient's insight concerning his or her underlying conflicts, which are largely unconscious, and to alleviate the problems that brought the patient to therapy. An early task of the therapist is to develop a problem formulation that outlines the central

repetitive conflict experienced by the patient. The patient and the therapist explore the conflict and resulting maladaptive outcomes across the patient's past and current relationships involving significant others, and the "here-and-now" transactions with the therapist. Interpretive therapy focuses upon unconscious processes, fantasy, and transference reactions. The therapist is active, interpretive, and transference-oriented (Piper et al., 1998).

Adherence to the treatment manual was monitored by independent observers using the Therapist Intervention Rating System (TIRS; Piper, Debbane, de Carufel, & Bienvenu, 1987) and the Interpretive-Supportive Techniques Scale (ISTS; Ogrodniczuk & Piper, 1999). The adherence data indicated the therapy had been implemented as intended (Piper et al. 1998).

Measures

Insight Rating Measure. A fundamental goal of psychotherapy is the promotion of clinical change via *insight* (Glucksman, 1993). In the present study, insight was conceptually defined as *the patient's articulation of an increased intellectual and emotional understanding of conflict (intrapsychic and interpersonal) and the ways in which conflicts contribute to personal problems*. Intellectual insight was defined as *the acquisition of a rational understanding of personal conflict, including the identification of connections between internal experiences and behaviour with others and oneself, and the identification of parallels in relationship patterns*. Emotional insight was defined as *the articulation of the affective implications of personal conflict and the here and now experience of those feelings*.

A measure of insight was developed for use by independent raters. An exhaustive search of the psychotherapy literature was conducted. The aim of the search was to identify the principal elements and important indicators of insight during therapy. Indicators of insight (e.g., definitions, examples) were extracted from the literature, resulting in an initial pool of 125 items. Items were grouped together based on their similarities, which narrowed the pool of items to 35. Group discussions with the raters were held to review this list. At each step of the process, the remaining items were reviewed by a clinician. Once a consensus was reached regarding the items that best captured the intellectual and emotional aspects of insight, the Insight Rating Scale was constructed. The original version of the insight scale consisted of seven items, each rated on a 4-point Likert-type scale ranging from "0 = absent" to "3 = clearly present" (see Appendix A). The seven items addressed the salient characteristics of intellectual (4 items) and emotional (3 items) insight.

A team of four raters was involved for the duration of the project. All of the raters were graduates of baccalaureate psychology programs. Three of the raters were hired as research assistants in the Research Unit of the Department's psychiatric outpatient service and one was the principal investigator of this study.

A preliminary training phase occurred prior to any data collection in the project. Raters were provided with audiotaped, 50-minute therapy sessions from the case material of patients who participated in the comparative study. Audiotaped sessions used for training were independent of those used in the hypothesis-testing phase of the project. Before actual ratings were attempted, group discussions were held to review the conceptual background of the Insight Rating Scale. The team of four raters then practiced

rating insight according to criteria set out for each item with the emphasis being on the development of a consensus agreement.

Ratings for the insight items were assigned for a five minute segment from each 15-17 minute "third" of the therapy session (5-10 minute segment, 20-25 minute segment, and 30-35 minute segment). A five minute segment from each third of the therapy session was considered an adequate representation of the process and an amount of material that would not be overwhelming for the rater. In a study conducted by Kiesler, Mathieu, and Klein (1963), the effect of variations in length of segments sampled from individual psychotherapy recordings on ratings of patient Experiencing (EXP; a dimension of process similar to that of insight) was assessed. They found that interrater reliability was unaffected by segment length, and furthermore, that no difference was found in the range of EXP ratings made from segments of different lengths. Two, four, eight, and 16-minute segments did not differ with regard to their sensitivity to individual differences in EXP level or their reflection of variations in EXP over time. The Kiesler et al. study supported the rationale for the use of 5-minute segment lengths in the current study.

Rater reliability for the training phase was assessed on three occasions. Each training sample involved having all raters independently rate one session from each of 12 independent therapy cases. Rater reliability was determined using Shrout & Fleiss's (1979) Intraclass Correlation Coefficient (ICC) method. Intraclass correlation coefficients were calculated to provide estimates of interrater reliability, both for the individual rater working alone (2,1) and for pairs of raters (2,2). Table 3 presents the intraclass correlation coefficients for the training phase of the project.

For the first set of 12 pilot cases the average ICC (2,1) for the seven items was .57. The coefficients were low as a function of a) infrequent occurrence (item 1), or b) remaining problems with clarity in the definitions (items 2, 3, and 7). In terms of paired ratings, the average ICC (2,2) across the seven items was .72. Following revision of the problematic items, a second sample of 12 pilot cases was then rated by the four raters. At the level of the individual rater, the average ICC (2,1) for the seven items was .50. In terms of paired ratings, the ICC (2,2) across the seven items was .66. In light of these data, the raters met as a group to discuss problems associated with application of the rating measure. The seven items were reviewed, resulting in some further revisions and improved clarity of item definitions. A third sample of 12 pilot cases was rated. At the level of the individual rater, the average ICC (2,1) across the seven items was .50. In terms of paired ratings, the average ICC (2,2) across the seven items was .63.

Given the data from the training phase, it was apparent that, overall, there was a slight decline in interrater reliability across the three training samples. At the level of the individual rater, the coefficients for the items were relatively low, especially by the third sample. The mean ICC (2,1) coefficient for the entire training phase was .52. However, the average coefficient for the paired ratings was consistently between .60 and .70. The mean ICC (2,2) coefficient for the training phase was .67. The data from the training phase thus suggested that reliable ratings could be obtained using two raters.

Technique Variables. During the comparative trial, the therapist's focus on transference technique was assessed from a variety of perspectives: a) observer ratings of therapist interventions during the session using the TIRS (Piper et al., 1987), including ratings of the therapist's reference to dynamic components (e.g., interpretations), b)

observer ratings of therapist adherence to the interpretive therapy manual, including ratings of the therapist's emphasis on a transference focus (ISTS; Ogrodniczuk & Piper, 1999), and c) patient and therapist ratings of the therapist's technical approach in the session via the Perception of Technique Scale (PTS; Piper, Joyce, McCallum, & Azim, 1993a).

The TIRS categorizes all therapist interventions, ranging from simple facilitative remarks (e.g., Mm Hm) to complex statements concerning the patient's internal conflicts. The TIRS defines coding elements that serve to identify therapist's interventions, interpretations, and transference interpretations. Therapist interpretations contain references to one or more types of dynamic components (impulses, anxiety, defenses, dynamic expressions) which define a part of the patient's conflict that has an influence on some part or parts of the patient (e.g., a wish that triggers a defense). Categories 7 to 10 are defined as interpretations because they address one or more types of dynamic components (single, double, triple, quadruple component interventions). The TIRS defines a transference interpretation by its reference to the dynamic components implicated in the patient's relations with the therapist.

During the comparative trial, the TIRS was scored by five independent raters. Rater reliabilities were calculated for 12 sessions, one from each of 12 randomly selected cases. A Kappa was calculated for each pair of raters for each session. The mean Kappa for all pairs and sessions was .71. The TIRS was used with six sessions (3,7,9,11,15,17) for the first 80 patients (40 interpretive, 40 supportive) who completed an average of 18 sessions. For the 40 interpretive therapies, the mean numbers of interventions, interpretations, and transference interpretations per session were 74.2, 14.4, and 3.7

respectively. The TIRS data demonstrated that the therapists were active, interpretive, and transference-oriented. For this study, data for 33 of the 40 patients who were assigned to interpretive therapy were available for analysis. The TIRS variables used to assess the therapist's focus on transference included the *frequency of transference interpretations* and the *concentration of transference interpretations* (proportion of transference interpretations relative to all interventions) in the session. Phase-based TIRS scores were derived by averaging the TIRS ratings for each third of therapy. The six coded therapy sessions were divided into three phases: early phase (sessions 3 and 7), middle phase (sessions 9 and 11), and late phase (sessions 15 and 17). An overall score for each TIRS variable was also calculated by averaging across the three phases.

Adherence is defined as the degree to which a therapist follows a set of techniques as outlined in a therapy manual. Measuring adherence is considered important in psychotherapy research in order to ensure that the therapist follows the guidelines for a particular type of therapy. In the comparative study, adherence was monitored with the ISTS (Ogrodniczuk & Piper, 1999). The ISTS rating form is presented in Appendix B. The 14 ISTS items represent a continuum, with supportive interventions at one end and interpretive interventions at the other end. Examples of interpretive items include: "make links between the patient's relationship with the therapist and the patient's relationships with others," "encourage the patient to explore uncomfortable emotions." Examples of supportive items include: "gratify the patient", "praise the patient". Each item is rated on a 5-point scale, ranging from "0=No Emphasis" to "4=Major Emphasis." The seven even-numbered items of the scale represent interpretive features, whereas the seven odd-numbered items represent supportive features. The Full-Scale score is keyed in the

direction of interpretive therapy and ranges from 0 to 56. Zero to 27 represents the supportive range of the continuum. Twenty-nine to 56 represents the interpretive range of the continuum. The mean Full-Scale score for the interpretive therapies was found to be 39.1 (SD = 3.8). The two interpretive items concerning the therapist's focus on transference are item 8, "direct attention to the patients' subjective impression of the therapist," and item 12, "focus on the patient and therapist in the treatment situation rather than the patient and significant others outside the treatment situation."

Adherence was monitored by independent observers. Rater reliability for the adherence scale was assessed during three periods of the research: beginning, middle, and end. Each assessment involved seven raters and eight independent sessions. The average intraclass correlation coefficient, ICC (2,1), for the three assessments was .93. The internal consistency of the scale was assessed during the middle phase of the study and involved seven raters and 16 patients. Cronbach's alpha for the 14 items was .88. The adherence scale was applied to the nine odd-numbered sessions beginning with session three for each patient's therapy. For the current study, phase-based scores for the two ISTS transference focus items were derived by averaging the adherence ratings for each third of therapy. The nine rated therapy sessions were divided into three phases: early phase (sessions 3, 5, and 7), middle phase (sessions 9, 11, and 13), and late phase (sessions 15, 17, and 19). An overall score for each transference focus item was also calculated by averaging across the three phases.

The third technique measure that was used in the comparative trial was the Perception of Technique Scale (PTS; Piper, et al., 1993a). The PTS was rated by both the patient and the therapist after every session. The PTS is an 8-item rating scale that

measures the therapist's and the patient's perception of the technical approach used by the therapist during the session. The PTS parallels a subset of the ISTS items. Five of the items represent supportive features and three items represent interpretive features of psychodynamic therapy. Each item is rated on a 5-point scale ranging from "0 = No Emphasis" to "4 = Major Emphasis." The item from the PTS that concerns the therapist's focus on transference is item 6 ("helped me/I helped him/her understand my relationship with him/her"). The session scores derived for this item, from both the patient-rated and therapist-rated version, were selected for use in the study. Phase-based scores were derived by averaging the PTS ratings for item 6 for each third of therapy. The therapy sessions were divided into three phases: early phase (sessions 1 to 7), middle phase (sessions 8 to 14), and late phase (sessions 15 to 20). An overall score for PTS item 6, from the patient-rated and therapist-rated version, was also calculated by averaging across the three phases.

The inclusion of the variables that concern the therapist's focus on transference from the TIRS, ISTS, and PTS, allowed for a general test of the relationships between these technique variables and the insight variables. A moderate direct relationship between insight and each of the six technique variables was expected.

Outcome Variables. A comprehensive battery of outcome measures provided by three sources (patient, therapist, independent assessor) was used in the comparative study. The outcome measures were assessed at pre-therapy, post-therapy, follow-up at six months, and follow-up at 12 months. The battery included nine measures (questionnaire or interview) that assessed 16 variables. The variables assessed areas of interpersonal distress and functioning, psychiatric symptomatology, self-esteem, life satisfaction, and

use of defenses. A principal components analysis was performed on the residual gain scores for post-therapy to reduce the large set of variables to a smaller set of factors. The number of factors retained was determined by a screeplot of the eigenvalues. A three-factor Varimax solution was selected. Collectively, the factors accounted for 60.4% of the variance among the post-therapy residual gain scores. The post-therapy outcome factors were employed in the analyses for the current study. Constituent measures associated with the outcome factors are listed in Table 4.

Factor I accounted for 42.1% of the variance and was interpreted as representing General Symptomatology and Dysfunction. This factor included ratings of target objective severity provided by the patient and independent assessor, the 13-item short form (Beck & Beck, 1972) of the Beck Depression Inventory (Beck & Steer, 1987), the Global Severity Index of the Symptom Distress Checklist-Revised (Derogatis, 1977), the 20-item Trait Anxiety Inventory (Spielberger, 1983), the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979), a life satisfaction rating, the overall rating of the 64-item Inventory of Interpersonal Problems (Horowitz, Rosenberg, Baer, Ureño, & Villaseñor, 1988), and ratings of maladaptive defenses from the 40-item Defense Style Questionnaire (Andrews, Singh, & Bond, 1993). All variables except life satisfaction were scored in the pathological direction, that is, higher scores indicated greater pathology. The scores for life satisfaction were reversed to be consistent with the other variables.

Factor II accounted for 9.6% of the variance and was interpreted as representing Social-Sexual Maladjustment. This factor included ratings from the Social and Sexual Role Dysfunction subscales of the Social Adjustment Scale (SAS; Weissman, Paykel, Siegal, & Klerman, 1971).

Factor III accounted for 8.7% of the variance and was interpreted as representing Nonuse of Mature Defenses and Family Pathology. Two residual gain score variables loaded on this factor. Ratings of mature defenses from the Defense Style Questionnaire (scored in the positive direction) (Andrews et al., 1993) had a negative loading. The Family Role Dysfunction subscale of the SAS (Weissman et al., 1971) had a positive loading. For consistency, the residual gain scores on the mature defenses variable were inverted. For the three post-therapy outcome factors, as well as the constituent variables, then, negative scores reflected improvement.

Psychotherapy process variables. *The Vanderbilt Psychotherapy Process Scale* (VPPS; Suh, Strupp, & O'Malley, 1986) is an observer-based rating measure used to assess the behaviour and demeanor of the patient and the therapist during psychotherapy sessions. The VPPS consists of 80 Likert-type items which are rated for an entire session on a scale ranging from "1 = not at all" to "5 = a great deal." Three global items address the quality of the therapeutic relationship, the overall productivity of the session, and the patient's current level of functioning. The remaining items are divided into eight subscales, five reflecting the patient's contribution and three reflecting the therapist's contribution.

The VPPS was used in the comparative psychotherapy study to rate three sessions (early = session 5, middle = session 11, late = session 19) for each case. Forty-four of the 80 items were used in the study, representing five of the eight subscales. The VPPS subscales included Patient Participation (8 items), Patient Hostility (6 items), Patient Exploration (7 items), Therapist Exploration (13 items), and Negative Therapist Attitude (6 items). Of the remaining four items, two reflected the Patient's Focus on the

Transference, one reflected the Therapist's Focus on the Transference, and one considered the rater's Global Impression of the therapy session.

In the comparative study, training on the VPPS involved listening to therapy sessions and then discussing item application as a group. Seven independent raters provided ratings on a sample of eight independent sessions. The intraclass correlation coefficients, ICC (2,2), for the VPPS subscales were: Patient Participation = -.17, Patient Hostility = .68, Patient Exploration = .79, Patient Focus on Transference = .77, Therapist Exploration = .66, Negative Therapist Attitude = .12, Therapist Focus on Transference = .76, and Global Impression = .44. The subscales Patient Participation, Negative Therapist Attitude, and Global Impression were excluded from further analyses because of low rater reliability. The overall, early, middle, and late session scores derived for the remaining five VPPS subscales were used in the analyses. The inclusion of the process dimensions measured by the subscales allowed for a general test of the relationships between VPPS and the insight variables. The relationships with the VPPS subscales were assessed as a way of gauging the construct validity of the insight measure. A moderate direct correlation between insight and the subscale Patient Exploration was expected. Examples of items from the Patient Exploration subscale include: "Tried to understand the reasons behind the problematic feelings or behaviour." "Concern was how to deal more effectively with self or others."

The direct relationship of the *therapeutic alliance* to change in psychotherapy is a robust finding in psychotherapy research. It has been argued that the therapeutic alliance is a pivotal factor in establishing the therapeutic process and plays a significant role in facilitating the therapeutic interaction (Frieswyk, Allen, Colson, Coyne, Gabbard, et al.

1986). Studies have shown that the overall relation of the therapeutic alliance with outcome is moderate, but consistent, regardless of many of the variables that have been posited to influence this relationship (Martin, Garske, & Davis, 2000). In the comparative study alliance was defined as the nature of the working relationship between the patient and therapist. The alliance was assessed by ratings provided by the patient and the therapist after each session. Six items were rated on a 7-point Likert-type scale ranging from "very little" to "very much." The items focused on whether: 1) the patient had talked about private important material, 2) the patient felt understood by the therapist, 3) the patient understood and worked with what the therapist said, 4) the patient felt that the session enhanced understanding, 5) the therapist was helpful, and 6) the therapist and patient worked well together. The last two items address Luborsky's (1984) concept of the helping alliance (helpfulness and collaboration). The six items were averaged across their respective assessments. A principal component analysis was conducted for each set of six items (patient-rated and therapist-rated) to determine interdependency among the items. The analysis of the patient ratings resulted in a single factor accounting for 87% of the variance; each item loaded highly on the factor (mean loading = .93). For the therapist ratings, the analysis found one factor accounting for 83% of the variance. Each item loaded highly on the factor (mean loading = .91). A test of the internal consistency of each set of items showed a coefficient alpha of .97 for patient ratings and .96 for therapist ratings. Since the analysis demonstrated high interdependency among each set of items, the alliance score was calculated by averaging across the six items for the patient and the therapist. Two scores (patient, therapist) served as summary measures of the therapeutic alliance for each session and over the entire course of therapy. Phase-based alliance

scores were derived by averaging ratings for each third of therapy for both patient and therapist. The therapy sessions were divided into three phases: early phase (sessions 1 to 7), middle phase (sessions 8 to 14), and late phase (sessions 15-20). An overall score for patient- and therapist-rated alliance was calculated by averaging across the three phases.

Patient personality characteristics. *Psychological mindedness* (PM) is a personality trait measure of an individual's ability to identify dynamic (intrapsychic) components and relate them to a person's difficulties (McCallum & Piper, 1997). The inclusion of the personality variable allowed for a general test of the relationship between PM and insight. An important component of psychodynamic therapy is the development of insight into the ways presenting problems may be "compromise formations of underlying psychic conflicts involving unpermissible wishes, anxiety, and defense mechanisms mobilized to cope with anxiety" (McCallum & Piper, 1997, p. 412). An individual with a high level of PM is assumed to be able to consider that current problems may be linked to unconscious conflict.

In the comparative psychotherapy research project, the assessment of PM involved having the patient view a videotape of two simulated patient-therapist interactions. Subsequent to viewing each scenario, the patient being assessed is asked to describe the problem experienced by the actress-patient in the video. The patient's response is scored based on criteria that differentiate nine different levels of PM. The levels reflect the patient's ability to consider the relationship between current problems and unconscious psychic conflicts. A research assistant assessed each patient. A determination of interrater reliability was conducted for 20 cases with seven research assistants who rated the audiotapes of the original interviews. The ICC (2,1) for the first

scenario was .80, and the ICC (2,1) for the second scenario was .71. The PM score was based on two ratings for each scenario, which were then averaged across raters and across scenarios.

Quality of object relations (QOR) is a global measure of the patient's life-long pattern of establishing certain types of relationships. The inclusion of the variable quality of object relations allowed for a general test of the relationship between insight and QOR. Patients with a history of satisfactory relationships are better able to tolerate the demands of interpretive therapy and are more receptive to the therapist's interventions (Piper et al. 1998), and as such would be more likely to open themselves up to self-examination, e.g., show greater insight. QOR is classified according to five dimensions: mature, triangular, controlling, searching, and primitive. There are four criteria that characterize each of the five levels of object relations: behavioural manifestations, affect regulation, self-esteem regulation, and antecedent factors (Azim, Piper, Segal, Nixon, & Duncan, 1991).

In the comparative study, two one-hour interview sessions were conducted with each patient. The patient's pattern of developing certain types of relationships was explored in reference to the criteria for each level of QOR. The interviewer followed a scoring manual for QOR, assigning 100 points across the five levels of the scale. The scoring procedure resulted in an overall rating of QOR that ranged from one to nine. Rater reliability for QOR was determined for 24 cases with five experienced clinical raters. Audiotapes of the original interviews were used by the raters. The ICC (2,2) for the overall QOR score was .68. The QOR score was based on the average of two raters' overall scores.

Other patient variables chosen for the analyses included demographic and diagnostic variables, as well as a measure of symptomatology. Demographic variables were drawn from the patient's history and included age, gender, marital status, education, and previous psychiatric hospitalizations. Diagnostic variables included the presence versus absence of a personality disorder, based on the Axis II diagnosis, and comorbidity (presence of an Axis I and Axis II diagnosis). Initial symptom distress was represented by the pre-therapy scores on the Global Severity Index of the Symptom Checklist-90 (SCL-90; Derogatis, 1977).

Procedure

The primary objective of the current study was the development of the Insight Rating Scale. The psychometric properties of the Insight Rating Scale were assessed using two independent samples of therapy sessions. Subsequently, a third sample of session ratings was obtained to test the relations with other important variables.

Psychometric Phase. For the psychometric phase of the project, rater reliability, internal consistency, and the factor structure of the Insight Rating Scale were assessed. Two independent samples were used to provide cross-validation of the psychometric findings. The Insight Rating Scale was first applied to therapy sessions from patients who participated in an earlier controlled trial of short-term, individual, interpretive psychotherapy (Piper, Azim, McCallum, & Joyce, 1990). All raters were involved in the psychometric phase. Nine cases from each of four conditions (immediate treatment/high QOR; delayed treatment/high QOR; immediate treatment/low QOR; delayed treatment/low QOR) were randomly selected for analysis. Each rater rated one session from each of the 36 selected cases. The psychometric phase also involved a cross-

validation of the analyses with an independent sample. The cross-validation sample comprised 36 randomly selected independent therapy sessions from the comparative study. Three raters were involved in this process. Audiotaped sessions used for cross-validation were independent of those eventually selected for the hypothesis-testing phase.

Hypothesis-Testing Phase. The hypothesis-testing phase of the project involved examining the relationships between insight and other important technique, process, and outcome variables, as outlined in the hypotheses. The Insight Rating Scale was applied to session material from 60 patients who were assigned to the interpretive form of psychotherapy in the comparative study (Piper et al., 1998). The 60 cases were randomly chosen from the 72 patients who were assigned to the interpretive therapy condition. A sample size of 60 was found to be of sufficient statistical power based on tests outlined by Cohen (1988). Alpha was set at $p = .05$, which is a conventional level of significance in behavioural and biological research. With respect to effect size, Høglend et al. (1994) found a correlation of .29 between level of insight and quality of interpersonal relationships, and correlations ranging from .31 to .38 between insight and favourable dynamic change two and four years after therapy. Kivlighan, Multon, and Patton (2000) found a correlation of .53 between client insight and target complaints. Increases in insight were followed by lower target complaints in subsequent sessions. Based on the findings of these studies, an estimated effect size correlation of .35 was used to estimate power. According to Cohen (1988), .35 is a medium effect size for Pearson correlations. Given the sample size of 60, the alpha level of .05, and the effect size of .35, the estimated power was determined to be at an appropriate level of .78 (Kraemer & Thiemann, 1987; Cohen, 1988).

Early, middle, and late therapy sessions from each of the 60 patients were rated (sessions 5, 11, and 19). Two raters provided ratings for each session. Whenever a tape was unavailable or inaudible, the audiotape from the previous or following session was used. Insight was assessed for a five minute segment from each 15-17 minute "third" of therapy sessions. The sampling method provided a good representation of the session as a whole. Interrater reliability was monitored during the data collection. Correlation and multiple regression analyses were employed to test the hypotheses.

Exploratory Phase. The exploratory phase of the project involved testing a number of predictive models in order to examine the interactive effect of insight, technique, relationship and patient variables on treatment outcome. Hierarchical regression analysis was used to test the models.

RESULTS

Psychometric Phase

The psychometric phase of the project involved assessing rater reliability, internal consistency, and the factor structure of the Insight Rating Scale. The psychometric phase involved a cross-validation of the analyses with two independent samples. Initial and cross-validation analyses were each based on independent samples of 36 audiotaped sessions, rated by four and three raters respectively.

Rater reliability. Rater reliability was assessed for the subscales (intellectual, emotional) and individual items of the insight measure. It was estimated using Shrout and Fleiss's (1979) intraclass correlation coefficient for the individual rater, ICC (2,1), and for pairs of raters, ICC (2,2). The ICC is used to indicate the degree of correspondence between the ratings provided by multiple raters (Lahey, Downey, & Saal, 1983). Table 5 presents the reliability coefficients from the psychometric phase of the project.

In the initial analyses of the psychometric phase, the ICC (2,1) coefficient for the intellectual insight subscale ($r = .58$) was low and the coefficient for the emotional subscale ($r = .73$) was moderate. The average ICC (2,1) coefficient for the seven items was .57. In terms of paired ratings, the ICC (2,2) coefficient for the intellectual subscale ($r = .72$) was moderate and the coefficient for the emotional subscale ($r = .85$) was high. The average ICC (2,2) coefficient for all seven items was .74.

In the cross-validation analyses, the ICC (2,1) coefficient for the intellectual subscale ($r = .65$) was moderate, as was the coefficient for the emotional subscale ($r = .62$). The average ICC (2,1) coefficient for the seven items was .53. In terms of paired ratings, the ICC (2,2) coefficients for the intellectual subscale ($r = .78$) and emotional

subscale ($\bar{r} = .77$) were moderate. The average ICC (2,2) coefficient for all seven items was .68. The results from the initial and cross-validation analyses indicated that reliable insight ratings could be obtained using paired raters.

Rater reliability was next assessed on a data set that combined the ratings from three of the four raters across both samples. The ICC (2,2) coefficient for the intellectual subscale ($\bar{r} = .76$) was moderate and the coefficient for the emotional subscale ($\bar{r} = .84$) was high. The ICC (2,2) coefficients for the individual items were in the moderate range ($\bar{r} = .61$ to $\bar{r} = .75$), with the exception of item 1 ($\bar{r} = .53$). The average ICC (2,2) coefficient for all items was .67.

In summary, reliability at the level of the individual rater was generally low across both samples but reliability at the level of paired raters was acceptable in both samples. This finding is consistent with the data from the training phase which suggested that reliable ratings were only possible using paired raters. Double ratings were employed for the sample used in the hypothesis-testing phase.

Internal consistency. Internal consistency of the Insight Rating Scale was evaluated using Chronbach's alpha coefficient (1951). Internal consistency reflects the degree to which the individual items all measure the same construct. The internal consistency of the measure is presented in Table 6. The alpha coefficient of the measure for the first psychometric sample was .78, and .86 for the cross-validation sample. The coefficients of the intellectual and emotional subscales were .35 and .87 for the first sample, and .68 and .36 for the cross-validation sample. The internal consistency analyses were redone with item 1 excluded based on the poor interrater reliability for the item. The alpha coefficient increased to .82 when item 1 was deleted from the initial sample, and

.89 when item 1 was deleted from the cross-validation sample. When combining the data from the two samples, the alpha coefficient was .83, but again increased (.86) when item 1 was deleted from the analysis. The alpha coefficients of the intellectual and emotional subscales for the combined sample were .58 and .72, respectively. Overall, the internal consistency of the Insight Rating Scale was found to be high, indicating that the remaining items fit together well to measure a coherent construct. The internal consistency of the intellectual and emotional subscales were smaller than those for the whole set of items, suggesting that insight reflects a unitary construct.

Factor structure. To determine the underlying structure of the Insight Rating Scale, a common factor analysis of the seven insight items was conducted. In common factor analysis, the principal axis method of estimating factors from the correlation matrix is used to extract components that account for the maximum possible variance in the observed variables. Generally, only components that account for meaningful amounts of variance are retained (Floyd & Widaman, 1995). The analysis was performed on each psychometric sample and on the combined data set. Combining the data from the two samples increased the sample to variable ratio to 10 to 1. According to Steiner (1994), adequate solutions can be obtained with 10 participants per variable when the total sample size is less than 100. Only the results from the common factor analysis of the combined data set are presented since a larger sample to variable ratio yields a more stable factor solution (Tinsley & Tinsley, 1987).

The analysis of the seven items identified one factor with an eigenvalue of 3.56. The factor accounted for 53.3% of the total item variance. The scree plot of the eigenvalues indicated that a single factor was appropriate to represent the variation. The

factor solution could not therefore be subjected to Varimax rotation. The principal factor loadings are presented in Table 7. It can be seen from the table that only insight items 2 to 7 loaded on this factor (factor loadings of .46 or greater). Item 1 did not load on this factor. In summary, the common factor analysis of the combined psychometric data set resulted in a single large factor representing all of the items of the Insight Rating Scale. The common factor analysis for the initial and cross-validation samples provided similar results to that of the combined sample. The factor seemed to suggest that the intellectual and emotional components of insight could not be empirically differentiated.

Summary of Results from the Psychometric Phase

Based on the findings from the psychometric analyses, several revisions were made to the Insight Rating Scale (see Appendix C). Item 1 was dropped from the measure for several reasons: 1) minimal base rate, 2) poor interrater reliability, 3) exclusion from the insight factor structure, and 4) low correlation with the other insight items. Overall, the findings from the psychometric phase of the project established that 1) reliability could be obtained with the use of the average of two rater's judgments, 2) the insight items fit together with high consistency, and 3) insight was best regarded as a unitary construct. Research examining the predictive validity of the Insight Rating Scale proceeded.

Hypothesis-Testing Phase

Four raters were involved in rating the therapy sessions in the hypothesis-testing phase of the project. Preliminary analyses involved assessing rater reliability and the factor structure of the Insight Rating Scale. Rater reliabilities for this phase were calculated on three occasions; during the middle phase of data collection, at the end of the

data collection, and for the total sample. Six pairs of raters provided ratings for early, middle, and late therapy sessions for the 60 cases. A total of 180 sessions were rated. Each of the six pairs of raters rated the same 30 sessions. Scores for the insight items were aggregated over the three segments to get a session score. For each pair of raters, an ICC (2,2) was calculated for the 30 sessions they rated.

Rater reliability. Table 8 shows that for each of the three occasions (middle of data collection = first 15 sessions, end of data collection = second 15 sessions, and overall = all 30 sessions), rater reliabilities for the individual items were in the moderate to high range. The average ICC (2,2) coefficients for each pair of raters varied over the three periods, but for the total sample, the ICC (2,2) coefficients for the individual items, averaged across all pairs of raters, were in the moderate to high range ($\bar{r} = .60$ to $\bar{r} = .83$), with an average coefficient of .73.

Factor Structure. A common factor analysis for the six insight items was conducted for the 60 cases. Means for each insight item over the three sessions (early, middle, late) were calculated for each case. The aggregated scores for the six insight items were entered into the common factor analysis. The analysis identified one factor with an eigenvalue of 4.2. The factor accounted for 65.9% of the total item variance. The factor loadings for each variable are reported in Table 9. Each item loaded moderately to highly on the factor (.58 or greater). Items 2, 4, and 5 had the highest loadings on the factor. This finding suggests that the insight construct is best represented by a single factor, as was identified in the psychometric phase. The insight factor scores were used in subsequent analyses. The item weights from the factor score coefficient matrix were used to also compute early, middle, and late session insight scores.

Description of Insight Scores

Initial analyses examined the distribution of the insight scores, the intercorrelations among the items from the rating scale, and the pattern of change of the insight scores across therapy. The relationships between insight and patient demographic and diagnostic variables were also assessed.

Table 10 presents the means and standard deviations of the overall and phase-based insight scores within the sample. Examination of the distribution of the insight scores revealed relatively low means and variation for the overall and phase-based scores, with fewer scores at the high end of the distribution.

The intercorrelations (see Table 11) of insight items 1 to 6 ranged from $r = .34$ to $r = .93$, with an average correlation of $.64$. This suggests that there was a substantial degree of shared variance between the insight items.

Change in the development of patient insight over the course of therapy was examined by a repeated measures ANOVA. The results indicated that there was no significant change in the level of insight across therapy, $F(1, 59) = 2.37, p = .09$. Figure 1 presents a graphical display of the insight ratings by phase of therapy.

The pattern of the insight scores across sessions was also examined to determine if there was a difference as a function of outcome. Patients were divided into good and poor outcome cases based on the sign (positive was poor outcome, negative was good outcome) of their residual change scores on the outcome factors General Symptomatology and Dysfunction, Social-Sexual Maladjustment, and Nonuse of Mature Defenses and Family Pathology. The insight data were examined using a mixed repeated measures ANOVA. The within (repeated) factor was phase (early, middle, late) and the

between factor was outcome (good and poor). No significant differences were found between good and poor outcome cases in any of the three ANOVAs, indicating that the pattern of insight across therapy was not differentially associated with outcome.

No significant relationships were identified between insight and the demographic variables age, marital status, and education. The patient's previous psychiatric hospitalization and pretreatment symptom severity were also not found to be related to insight. No significant relationships were identified between insight and the presence versus absence of a personality disorder or comorbidity. However, a significant relationship was identified between insight and gender, $t(58) = 1.98, p = .05$. Female patients ($N = 35$) had significantly higher overall insight scores ($M = 1.29, SD = 0.93$) than male patients ($M = 1.03, SD = 0.99$).

Insight and the Therapist's Use of Transference-Focused Technique

Table 12 presents the correlations between insight and the technique variables. The relationships between insight and transference-focused technique were analyzed using Pearson correlation coefficients for early, middle, late, and overall scores. The hypothesis stated that insight would have a direct relationship with the therapist's use of transference-focused technique. No significant relationships were identified between overall level of insight and the transference-focused technique variables. However, several relationships were identified between insight and the technique variables within the phases of therapy. A significant relationship was identified between insight and item # 8 ("direct attention to the patient's subjective impression of the therapist") from the ISTS in the late phase of therapy, $r(58) = .26, p = .04$. The greater the emphasis on the patient's experience of the therapist late in therapy, the higher the patient's level of

insight. A significant relationship was also identified between late therapy insight ratings and concentration of transference interpretations in the early phase of therapy, $r(31) = .47, p = .006$. Thus, the greater the therapist's concentration of transference interpretations early in therapy, the higher the patient's level of insight at the end of therapy. Although the significant relationships identified were fewer than would be expected by chance, the strength of the two correlations would suggest they define an actual relationship between therapist's transference technique and patient insight. Supporting this assumption is the fact that both relationships highlight patient insight in the late phase of therapy.

Insight and Treatment Outcome

Table 13 presents the correlations between insight and the outcome factors. Pearson correlation coefficients were used to assess the relationships between insight and post-therapy outcome. The hypothesis stated that insight would have a direct relationship with treatment outcome. No significant relationships were found between insight (early, middle, late, and overall scores) and any of the three outcome factors.

Interaction Between Insight and the Therapist's Use of Transference-Focused Technique on Treatment Outcome.

Hierarchical multiple regression analyses were used to investigate the hypothesized interaction between patient insight and the therapist's use of transference-focused technique as a predictor of outcome. The dependent variables were the three outcome factors. The independent variables reflecting the therapist's focus on transference included frequency of transference interpretations (TIRS), concentration of transference interpretations (TIRS), item 8 from the ISTS, item 12 from the ISTS, and item 6 from the patient-rated and therapist-rated versions of the PTS. Since a difference in insight scores

was found between female and male patients, gender was included in the analyses to control for a possible confound. In the first step, the gender variable was entered. In the second step of each analysis, one of the transference-focused technique variables was entered. In the third step, the insight variable was included in the equation. In the final step, the multiplicative product of the transference and insight variables was entered. Entering the transference-focus variables before the insight variable allowed for a test of whether insight would contribute significantly to the prediction of outcome over and above the contribution afforded by the transference-focus variables. Furthermore, interaction terms in hierarchical regressions must be entered after main effects if they are to yield interpretable results. In total, 18 analyses were conducted (6 transference-focused technique variables x 3 outcome factors). The overall score for each independent variable was used for the regressions, i.e., the focus was on the transference focus and insight averaged over early, middle, and late phases of treatment. Regression analyses were not conducted for each of the three phases of therapy to reduce the number of tests and probability of committing Type I error.

The predictor variables in the regression analyses were centered (i.e., put in deviation score form so that their means were zero), and the interaction terms were formed by multiplying together the two centered predictors. Centering predictor variables in a regression produces a value of zero on a continuous scale that is meaningful and yields desirable statistical properties (Aiken & West, 1991).

Data for the variables frequency of transference interpretations and concentration of transference interpretations were only available for 33 of the 60 patients. In the comparative study, TIRS data was collected for 40 of the 72 patients. Therefore, in the

current study, data for 33 of the 40 patients who had TIRS ratings were available for analysis. Twelve regression analyses were conducted for the total sample (4 PTS & ISTS variables \times 3 outcome factors = 12 analyses). Six regression analyses were performed for the smaller sample ($N = 33$) (2 TIRS variables \times 3 outcome factors = 6 analyses). Because a large number of regressions were being conducted, a Bonferroni adjustment was made to the individual p levels ($.05/12 = .004$ and $.05/6 = .006$) to maintain an overall familywise alpha of .05.

The results of the hierarchical regression analyses for the total sample revealed that none of the interaction effects between insight and the transference-focused technique variables from the ISTS or PTS reached statistical significance. With respect to main effects, gender was not a significant predictor of outcome, suggesting that insight and the technique variables were not differentially related to outcome as a function of gender.

The results of the regression analyses for the reduced sample ($N = 33$) indicated that there was no significant interaction effect between insight and the transference-focused technique variables from the TIRS. With respect to main effects, insight emerged as a significant predictor of the outcome factor Nonuse of Mature Defenses and Family Pathology, over and above the contributions of the concentration of transference interpretations. High insight was related to less improvement on this outcome factor; however, the strength of this finding is suspect due to the small sample size. Appendix D presents a summary of the results from the hierarchical regression analyses.

While this finding is informative in terms of the role of insight on treatment outcome, the power of the analyses were modest in size given the small sample (N = 33). In view of the fact that data for the variable concentration of transference interpretations was only available for 33 patients, it was decided to estimate scores for the remaining 27 patients. The estimated concentration scores were based on a regression analysis in which related transference-focused technique variables (item 8 and item 12 from the ISTS) were used to predict concentration.

The analysis was conducted with the 33 cases who provided TIRS data. Concentration of transference interpretations was the dependent variable and the two predictors were the ISTS items. The R^2 (.33) for the regression equation was significant, $F(2, 30) = 7.44, p = .002$. The β 's for the predictor variables item 8 (.04) and item 12 (-.02) were statistically significant. The unstandardized coefficients from the regression were entered into an equation to predict concentration of transference interpretation scores.

Equation:

$$\text{estimated concentration of TI} = .0001 + (-.02104 \times \text{item 12}) + (.04079 \times \text{item 8})$$

The estimated concentration of transference interpretation scores for the 27 patients and the original scores for the 33 patients were entered into the data file for the total sample (N = 60). For the 33 patients having a score on the concentration variable, the estimated score correlated significantly with the original score, $r(31) = .58, p < .01$. This suggested that the estimated concentration scores were reasonable approximations of actual concentration values.

Hierarchical multiple regression analyses were performed a second time with the predictor variables insight, concentration of transference interpretation and the multiplicative product of these two variables. The entire sample of 60 patients was employed, thereby increasing the power of the tests. The dependent variables included the three outcome factors, along with the constituent measures of outcome factor III. The individual outcome variables were included because of the significant main effect for insight identified in the regression analysis for the Nonuse of Mature Defenses and Family Pathology outcome variable. Inclusion of the constituent measures allowed for these analyses to indicate which outcome measure, mature defenses or family dysfunction, was most strongly predicted by insight. A Bonferroni adjustment was made to the individual p levels ($.05/5 = .01$) to maintain an overall alpha level of .05. Appendix E presents a summary of the results from the hierarchical regression analyses with the estimated concentration scores.

An interaction effect between insight and concentration of transference interpretations was identified in the regression analysis for the mature defenses residual gain score outcome variable. Table 14 presents the results of this analysis. The increment to the R^2 when the interaction effect was added to the equation was significant, $F(1, 54) = 5.09$, $p = .02$. This finding suggests that insight differentially influenced outcome on mature defenses as a function of concentration of transference interpretations. Figure 2 presents a graphical display of the disordinal interaction. When there was a high concentration of transference interpretations in therapy, patients with a higher level of insight had poorer outcomes than those with a low level of insight. The t-test of the simple slope, $t(55) = -2.91$, $p = .01$, showed that this slope was significantly different

from zero. When there was a low concentration of transference interpretations in therapy, it appeared that patients with a high level of insight showed more improvement than patients with a low level of insight. However, the t-test of this simple slope, $t(55) = 1.32$, $p = .10$, showed that it was not significantly different from zero. This finding indicates that the relationship of patient insight to change in mature defenses varies as a function of the degree of concentration of transference interpretations in therapy. The combination of high insight and a high concentration of transference interpretations was associated with a negative outcome on this variable.

Insight and Psychotherapy Process

Insight and VPPS. The convergent validity of the Insight Rating Scale was assessed by examining the relationship between the insight scores and the VPPS Patient Exploration subscale. Data for the VPPS subscales was only available for 33 of the 60 patients.

A significant relationship was found between overall patient insight and overall scores for the VPPS scale Patient Exploration, $r(31) = .58$, $p < .05$. This finding indicates that the more the patient engaged in self-exploration, the higher the level of insight. A significant relationship suggests that the Insight Rating Scale and the subscale Patient Exploration measure a similar construct whose focus is on self-understanding.

A significant relationship was also identified between overall insight and overall scores for the VPPS Patient Hostility scale, $r(31) = -.36$, $p < .04$. This finding suggests that the greater the patient's hostility in therapy, the less insight the patient acquired. This relationship also supports the construct validity of the insight measure.

Insight and the Therapeutic Alliance. Table 15 presents the correlations between insight and the therapeutic alliance variables. The relationships between insight and the therapeutic alliance (patient-rated and therapist-rated) were assessed using Pearson correlation coefficients for early, middle, late, and overall scores. The hypothesis stated that insight would have a direct relationship with the therapeutic alliance. No significant relationships were identified between insight (early, middle, late, and overall scores) and the patient-rated alliance. However, several significant relationships were identified between insight and the therapist-rated alliance: 1) Insight rated in each phase of therapy was significantly and directly related to the therapist's ratings of the alliance within the same phase, 2) Overall ratings of insight were significantly related to the therapist's ratings of the alliance within each phase of therapy, 3) Late phase insight ratings were directly related to the therapist's ratings of the alliance within each phase of therapy, and 4) Insight rated in the late phase of therapy was directly related to the therapist's overall rating of the alliance.

Insight and Patient Personality

Table 16 presents the correlations between insight and the variables PM and QOR.

Insight and PM. Pearson correlation coefficients were used to assess the relationships between insight (early, middle, late, and overall scores) and PM. The hypothesis stated that the patient variable psychological mindedness would have a direct relationship with insight. No significant relationships were identified between insight (early, middle, late, and overall scores) and PM.

Insight and QOR. The relationships between insight (early, middle, late, and overall scores) and QOR were analyzed using Pearson correlation coefficients. The hypothesis stated that the patient variable quality of object relations would have a direct relationship with insight. No significant relationships were identified between insight (early, middle, late, and overall scores) and QOR.

Thus, insight was apparently independent of both patient personality variables.

Summary of Results from the Hypothesis-Testing Phase

The findings from the hypothesis-testing phase of the study revealed that 1) female patients had significantly higher average insight scores than male patients, 2) insight rated in the late phase of therapy was related to concentration of transference interpretations in the early phase and the therapist's emphasis on the patient's perception of the therapist in the late phase of therapy, 3) insight was significantly associated with the therapist's perception of the therapeutic alliance, and 4) a significant interaction effect was identified for the combination of high insight and high concentration of transference interpretations for the outcome variable mature defenses residual gain score. High levels of insight and high concentration of transference interpretations was negatively associated with treatment outcome on this measure of intrapsychic functioning.

Exploratory Phase

The aim of the exploratory analyses was to examine the prediction of outcome afforded by measures of insight, transference-focused technique, the therapeutic alliance, PM, QOR, and their interactions. Since the study examined the correlational relationships between insight and alliance, PM, and QOR, a logical extension of the investigation was to examine the interactive effect of each predictor and insight on outcome. Inclusion of

these variables also provided an assessment of patient and relationship characteristics considered pertinent in the psychotherapy literature. To simplify the analyses and restrict the inflation of Type I error, only two-way interaction effects were considered.

Hierarchical multiple regression was employed for the exploratory analyses. An a priori ordering of the predictor variables was selected based on their importance in the clinical and research literature, i.e., the order of entry of the predictor variables was based on their research relevance and significance to the process of psychotherapy. The exploratory analyses followed the guidelines provided by Cohen & Cohen (1983).

In conducting the exploratory analyses, each subsequent regression resulted in a more complex model than the previous one. Each addition of a predictor variable to the regression equation increased the chances of Type I error due to the small size of the sample. However, considering the exploratory nature of the analyses, conventional p values were maintained for heuristic purposes. The predictor variables in the regression analyses were centered.

The variables available for entry into the analyses included: insight, concentration of transference interpretations, patient-rated alliance, therapist-rated alliance, psychological mindedness, and quality of object relations. The overall score for each process variable (insight, technique, alliance) was used in the analyses. Scores on the concentration variable involved estimates for 27 of the 60 patients. Examination of the correlation matrix involving these variables (see Table 17) indicated that the variables were relatively independent from one another. Multicollinearity in the regression analyses was therefore not expected to be a problem. The dependent variables included the three outcome factors and the mature defenses residual gain score. No a priori hypotheses were

specified regarding the predictive strength of the interactions of insight and the alliance or patient variables. Regression models of increasing complexity were tested in successive fashion.

The first exploratory analysis investigated the therapeutic alliance and insight as joint predictors of outcome. In the first step, the alliance variable was entered, followed by insight. The multiplicative product of the two variables was entered last. The rationale for entering the alliance variable first was based on the posited relationship between the therapeutic alliance and insight noted in the clinical literature. By providing an external support to help reduce the patient's anxiety, the alliance can promote the exploration of events and feelings (Lovinger, 1985). The findings revealed that no significant interaction effects involving insight and the therapeutic alliance emerged in the four analyses.

The next exploratory analysis investigated the therapeutic alliance, concentration of transference interpretations, and insight as joint predictors of outcome. In the first step, the alliance variable was entered, followed by concentration of transference interpretations. Insight was entered in the third step. In the fourth step, the product of the alliance and insight variables was entered. In the fifth step, the product of the concentration of transference interpretations and insight variables was entered. In the last step, the product of the alliance and concentration variables was entered. The order of entry of the variables was based on an understanding of the process of psychotherapy. Lovinger (1985) argued that the therapist's interpretations do not exist in a vacuum, but rather within the ongoing relationship between the patient and therapist which contributes to their effectiveness. Establishing an alliance early in therapy fosters the patient's receptivity to the therapist's anxiety-provoking interventions (Binder, 1998), thereby

leading to increased self-exploration and insight. A significant interaction effect was identified between insight and concentration of transference interpretations for the mature defenses residual gain score outcome variable. No other interaction effects were identified.

The final exploratory regression analysis investigated the patient characteristics PM and QOR, the therapeutic alliance, concentration of transference interpretations, and insight as joint predictors of outcome. In the first step of each analysis, either PM or QOR was entered, followed by the alliance variable, the concentration variable, and lastly, insight. In the fifth step, the product of concentration and insight was entered. In the final step, the following set of interactions were entered: PM or QOR \times insight, alliance \times insight, PM or QOR \times concentration, and alliance \times concentration. On this last step, the set of variables rather than each interaction were tested for significance. No interaction effects were identified, except between insight and concentration of transference interpretations for the outcome variable mature defenses.

Summary of Results from the Exploratory Phase

No significant interaction effects were found between the alliance variables and insight, or between the patient characteristics PM and QOR and insight. The interaction effect between insight and concentration of transference interpretations in predicting the mature defenses residual gain scores was significant in each of the exploratory analyses. The combination of high insight and high concentration of transference interpretations was associated with negative treatment outcome. This finding reinforces the results from the hypothesis-testing phase of the study. Thus, the addition of the other predictor variables did not contribute to the prediction of treatment outcome, but the key

interaction between insight and concentration of transference interpretations remained significant even with the inclusion of other variables in the equations.

Summary of Results

- 1) Analyses from the psychometric phase of the study indicated that a single factor best represented the items of the Insight Rating Scale, bar item 1 which did not load on the factor. In addition, it was determined that reliable ratings could be obtained with the use of the average of two rater's judgments and that item consistency was high.
- 2) There was no significant change in the development of insight over the course of therapy. The change in level of insight across therapy was not differentially associated with treatment outcome.
- 3) Insight was found to be significantly associated with gender.
- 4) No significant correlations were found between overall insight and any of the transference-focused technique variables. Late therapy insight ratings were associated with late therapy scores on the ISTS item 8 (subjective impression of the therapist) and with concentration of transference interpretations in the early phase of therapy.
- 5) Insight, alone, was not found to be significantly associated with treatment outcome.
- 6) Insight was significantly associated with the VPPS subscales Patient Exploration and Patient Hostility. Insight was also significantly associated with the therapist-rated alliance within each phase of therapy.
- 7) A significant interaction effect was found between insight and concentration of transference interpretations for the mature defenses residual gain score variable.
- 8) No significant correlations were found between insight and the patient characteristics PM and QOR.

9) Insight did not interact with any of the personality or alliance variables in analyses examining the prediction of post-therapy outcome.

DISCUSSION

The present investigation represented an effort to fulfill several objectives for improved research on the concept of patient insight:

a) An observer-rated measure of insight for psychodynamic psychotherapy was developed.

b) The psychometric properties (rater reliability, internal consistency, factor structure) of the Insight Rating Scale were determined using two independent samples.

c) The predictive validity of the insight measure was examined by testing a number of hypotheses involving the therapists' focus on transference, the therapeutic alliance, the patient characteristics psychological mindedness and quality of object relations, and treatment outcome.

The present study had several methodological improvements relative to previous investigations in the literature. First, the raters were provided with an operationalized definition of insight and criteria for rating the insight items were clearly outlined in a training manual. Second, the data involved ratings from representative completed therapy cases. Third, the psychometric properties of the insight measure were assessed and cross-validated with two independent samples. Fourth, insight was measured at multiple time periods during therapy (early, middle, late sessions). Lastly, the interactions of insight with technique, relationship, and patient variables were examined as potential predictors of post-therapy outcome.

Discussion of the findings of the present study will focus on the results of each analysis in turn (scale development, hypothesis testing, exploratory analyses). The

general limitations of the investigation will then be reviewed, concluding with a discussion of the clinical implications of the present findings.

Determining the Psychometric Properties of the Insight Rating Scale

An observer-based measure of patient insight that addressed both intellectual and affective aspects of the phenomena was developed. The psychometric properties (rater reliability, internal consistency, factor structure) of the measure were assessed during the psychometric phase of the project, and again during the hypothesis-testing phase. The results of the psychometric phase revealed that moderate to high rater reliability for the measure and each subscale was possible only with an averaging of two rater's judgments. Using the average score of two raters increases the number of raters and the time needed to collect insight ratings for each patient, thereby decreasing the efficiency of the rating scale. The ICC reliability coefficients for the insight measure are consistent with reliability coefficients reported in the literature (e.g., Kivlighan et al., 2000).

High levels of internal consistency were found for the measure across each sample, indicating that the items of the Insight Rating Scale fit together well as a measure of insight. The alpha coefficients compare favourably with those of other insight measures reported in the literature (e.g., Connolly, et al., 1999).

The common factor analysis demonstrated that a single factor most clearly represented the variance of the item ratings. The intellectual and emotional subscales, defined conceptually, were not substantively differentiated in analysis of the data. Item 1 (identifying something new about oneself) did not load on this factor; the poor reliability and exclusion of this item from the insight factor was largely a function of the low base rate for the behaviour assessed by this variable. The factor structure highlights that

features of both intellectual and emotional insight were represented in one large insight factor, which is inconsistent with the rationale for distinguishing between two different kinds of insight.

The results from the hypothesis-testing phase of the study revealed that the reliability coefficients were congruent with the findings from the psychometric phase, suggesting that the Insight Rating Scale can be used reliably. The common factor analysis reinforced that the insight items loaded on one factor. The unitary nature of the insight structure has important implications for how affect and cognition during insight phenomena are understood. Insight has often been viewed by two different theories. One theory suggests that insight is cognitive and is accompanied by affect, while others have proffered the view that insight is affective, an experience derived from intense emotional experience, and is accompanied by cognitions. Still others contend that affect and cognition are on a continuum and constantly interacting (Miller, 1992). The findings from the current study suggest that neither affect nor cognition assumes precedence in the phenomenon, but that both appear equally important. This finding therefore substantiates the position that cognitive insight and emotional insight are not differentiated, but rather, interdependent aspects of insight.

The assessment of the psychometric properties of the Insight Rating Scale indicate that the items represent the concept of insight as intended and that it is a reliable measure. Lovinger (1985) underscores that "any discussion of the cognitive or affective components of insight risks emphasizing a separation, as though these components were not interwoven facets of the same individual" (p. 63). Thus, conceiving of intellectual insight and emotional insight as continually interacting appears to be a more valid

position than viewing them as separate processes. The results seem to suggest that insight as a phenomenon embodies the different components that clinicians and researchers have been proposing, namely, cognitions and affect.

Hypothesis-Testing

Assessing the Pattern of Insight Across Therapy. The findings of the study demonstrated that there was no significant change in the development of insight over the course of therapy. Furthermore, the pattern of insight across therapy was not differentially associated with good or poor outcome. In the psychotherapy literature, insight is thought to increase across treatment (Kivlighan et al., 2000). However, the empirical literature concerning the development of insight is scarce. Several investigations have found an increase in insight from early to late in therapy (Hohage & Kubler, 1988; Grenyer & Luborsky, 1996; Kivlighan et al., 2000), whereas others have found insight to follow a high-low-high pattern (O'Connor, et al., 1994). A possible explanation for the discrepant findings is the various insight measures employed in the studies. Kivlighan et al. (2000) used the Insight Rating Scale devised by Morgan et al. (1982), a general measure of insight, whereas others (e.g., Grenyer & Luborsky, 1996) used a measure of insight based on the patient's mastery of self-control and self-understanding in the context of interpersonal relationships. Alternative explanations may concern the number of measurement periods used to rate insight. O'Connor et al. (1994) and Kivlighan et al. (2000) both used multiple time periods to measure insight, whereas Hohage and Kubler (1988) and Grenyer and Luborsky (1996) assessed insight only at the beginning and end of therapy. In addition, the size of the sample in several of the studies was small (e.g., O'Connor et al., 1994; Kivlighan et al., 2000), and the patients involved may not have

been representative of an actual clinical population as inclusion criteria included having a history of positive relationships (e.g., O'Connor et al., 1994). The present study included a large sample of psychiatric outpatients who were representative of a clinical population. Although the current study assessed insight at multiple time periods, it is possible that insight developed at a more gradual pace for the patients, and 20 sessions of therapy may not have been enough to detect significant changes across time. Future studies should continue to examine the development of insight over the course of therapy, in both brief and long-term treatments, and in multiple sessions. Such investigations can help inform clinicians and researchers about how insight unfolds in psychotherapy.

Insight and Transference-Focused Technique. The present study found that item 8 of the ISTS (subjective impression of therapist), rated in the late phase of therapy, was significantly related to late phase insight ratings. An emphasis on the patient's subjective impression of the therapist late in therapy was directly associated with the patient's level of insight in the late phase. In other words, when the therapist attended to the patient's subjective impression of him or her late in treatment, the higher the patient's level of insight. Graff and Luborsky (1977) found that transference increases during the course of therapy and approaches its highest level during the latter phase of treatment. Researchers have suggested that the patient's reactions to the transference progressively come under the patient's control, such that the patient gains increasing insight into the transference as counselling proceeds (Gelso & Carter, 1985; Gelso, Hill, & Kivlighan, 1991).

The study also found that concentration of transference interpretations early in therapy was associated with patient insight in the late phase of therapy. The emphasis on the here-and-now experience of the transference relationship early in therapy may have

helped the patient formulate his or her insights throughout the course of treatment, so by the end of therapy, the patient was able to come to a better understanding of his or her relationship conflicts. Thus, the process engaged in by the patient and therapist early in therapy can stimulate further patient exploration, so that by termination, the patient has gained increased insights into his or her problems.

Overall level of insight, however, was not found to be significantly associated with the therapist's transference focus. This finding is consistent with Gelso et al. (1997) who found no significant relationship between overall insight and transference in dynamic therapy.

The patient's transference relationship with the therapist is considered an important component for interpretive work. The interpretation of transference is a central defining technique of psychodynamic psychotherapy. The immediacy and intensity of this relationship make it uniquely advantageous as a vehicle for exploring and understanding the patient's conflicts and difficulties. Although the interpretive approach serves to stimulate a progressive process of understanding and change, the experiential component of this approach also tends to heighten anxiety and precipitate regressive reactions. It is possible that in the present study, the patient resisted the pressure to work, associated with a time-limited therapy, due to the consequent anxiety. Resistances against insight can also arise from a lack of trust in the therapist or from fear of facing the insight beyond a certain extent (Sternbach, 1989). Lovinger (1985) suggests that if a therapist tries to extract the content of highly charged experiences, rather than explore the resistance, insights may be hampered.

Therapist interventions can help regulate the pace at which a patient proceeds through emotional material. However, the skill with which the therapist provides the interventions can facilitate or hinder patient insight. Interventions that are too complex, too frequent, out of context, or come too soon in therapy may have a negative effect on the development of insight. In the current study, the therapist's competence may have moderated any effect of the transference interpretations on insight. It is possible that the therapist provided excessive or complicated transference interpretations, and as a result, the patient may have felt criticized and more resistant to the work of therapy. The therapist's timing, quality of word choice, skill at handling resistances and defenses, and the ability to draw connections between underlying conflicts and symptoms are all relevant skills in psychotherapy (Barber, Crits-Christoph, & Luborsky, 1996) and the inability to master them can adversely affect the development of patient insight. This may explain why the relationships between insight and transference-focused technique were not stronger than observed.

Future studies should assess the relationships between insight and transference across the phases of therapy. It may be that the therapist's skillfulness with a transference-focused approach has a moderating effect on the development of insight.

Insight and Treatment Outcome. Contrary to the hypothesis, insight, on its own, was not found to be related to treatment outcome. A possible explanation may be that the outcome factors were too general to detect any significant differences. Insight may play a more specific role in mediating outcome, such as increasing interpersonal functioning and self-esteem, or decreasing symptomatic distress. Insight into a specific complaint may not show up in a global measure of outcome. Contrary to the current findings, Kivlighan and

colleagues (2000) found that gain in insight was followed by less target complaint distress. Conversely, less insight resulted in more distress. Target distress ratings, however, generally tend to be very sensitive to change, much more than standardized measures.

While psychoanalytic theory predicts that change in insight should lead to changes in symptoms (Greenson, 1967), researchers have shown (Connolly et al., 1999) that change in self-understanding is not necessarily associated with change in symptoms following dynamic psychotherapy. It has been suggested that in brief treatments, a longer time frame may be needed for self-understanding to impact on the symptom course. Høglend and colleagues (1994) found that the interaction of insight and treatment duration was related to outcome, but pre-treatment level of insight was not. Less insightful patients may have needed more treatment sessions for a better outcome, whereas more insightful patients did equally well with long and brief treatment. Thus, the insight phenomenon may initiate a process of change that only shows up as improvement on measures of functioning assessed sometime after treatment ends.

According to Brady (1967), the patient's awareness that he or she is experiencing psychological conflicts may be a starting point for favourable change. However, "neurotic patterns tend to persist and improvement does not usually follow immediately upon the acquisition of insight. This raises the whole issue of the temporal relationship between insight and improvement (p. 306)". This is not to say that insight is not a powerful facilitator of change, but perhaps time is required to translate the newly acquired perceptions and attitudes into more healthy patterns of behaviour. Therefore, rather than regard insight and improvement as discrete events, it may be more beneficial to view

them in a dynamic relationship whereby insight into some current difficulty may facilitate improvement in this area, and this in turn may allow further insight into related problem areas in the future.

Effect of Interaction Between Insight and Transference-Focused Technique. The regression analyses attempted to determine whether the interaction between insight and the therapist's focus on transference would contribute significantly to the prediction of treatment outcome. An interaction effect between insight and concentration of transference interpretations was identified for the mature defenses residual gain score outcome variable. High levels of insight and high concentration of transference interpretations was negatively associated with treatment outcome on this measure of intrapsychic functioning. This finding is contrary to that of Gelso et al. (1997) who found that high transference and high emotional insight was directly associated with treatment benefit in time-limited therapy. The finding from this study suggests that facilitating insight through the use of transference-focused work in brief therapy has the potential of disrupting the patient's internal functioning.

Researchers and clinicians have long considered that attending to the transference relationship in therapy is important because it is a way of illuminating the conflicts underlying the patient's presenting problem (Ferenczi, 1950; Luborsky, 1984; Strupp & Binder, 1984). However, researchers have found that high concentration of transference interpretations can produce negative treatment effects (Piper, Azim, Joyce, & McCallum, 1991). For example, Piper et al (1991) found that high QOR patients experienced a poor alliance and poor treatment outcome when there was a high proportion of transference interpretations in therapy. They suggest that the therapists may have expected more of

high QOR patients and may have believed that they could tolerate an intensive focus on the relationship. Similarly, therapists in the current study may have believed that insightful patients could tolerate more transference-centered interpretations aimed at exploring the patient's pathology in interpersonal relationships. The insight-outcome relationship suggests, however, that too much insight is not always a good thing.

In psychotherapy, increased awareness may not bring relief from distressing symptoms or mean that the patient can make the necessary changes in their life (Sudbery & Winstanley, 1998). Farber and Golden (1997) posit that intensive and constant examination of one's inner life can lead to painful self-consciousness and psychological distress. "Everything that we discover, that was hidden, was probably hidden because we did not want to know it" (Boorstein, 1994, p. 100). The feelings and thoughts that come to awareness when a person attempts to understand the world may exacerbate anxiety, depression, and paranoia (McCallum & Piper, 1997). Applebaum (1976) described this experience in individuals undergoing psychotherapy:

What does a person see when his awareness is expanded beyond those restrictions developed to narrow awareness? He sees part of himself which he does not approve, which may frighten, humiliate, and disgust him....He realizes that some of the choices, thus made, cannot be unmade (p. 203).

Negative effects in psychotherapy may arise from or become exacerbated by problems in the relationship between the patient and therapist. Particularly severe problems may result from destructive interpretations or from critical interpretations made before genuine trust and rapport have developed (Strupp & Hadley, 1985). Interpretations

may convey an implicit message of abnormality to the patient. According to Appelbaum (1972) this may lead to an “excessively deep and terrifying awareness of the person’s primitive longings and/or of the actual discrepancies between legitimate and instinctual needs and their likelihood of satisfaction in reality” (p. 53).

Misuses of interpretations are likely to have negative consequences when they are presented without adequate follow-up or opportunities for working through (Strupp & Hadley, 1985). In the current study, patients may have gained insight into their conflict by means of the therapist’s transference interpretation but the insight may not have been sufficiently developed. This is likely given the short duration of the treatment. As such, the patient may have become more anxious and frustrated. The therapist’s skill in timing, and the degree of appropriateness or competence in the delivery of interpretations, have important implications for treatment outcome (Piper, Joyce, McCallum, & Azim, 1993b; Barber, Crits-Christoph, & Luborsky, 1996). Failure to exercise these skills adequately may result in the patient experiencing intensified subjective distress. Future investigations should continue to assess insight in psychotherapy to determine how much insight is beneficial to treatment and how much is harmful, the importance of insight in time-limited versus long-term treatments, and whether certain patients are more susceptible to negative outcomes from increased self-awareness. It would also be useful to examine therapist variables, such as countertransference, interpretive skill and empathy. Providing interpretations without empathy and responding negatively to difficult patients may have negative consequences for the development of patient insight.

Insight and Psychotherapy Process. Insight was found to be directly associated with the VPPS variable Patient Exploration and inversely associated with Patient

Hostility. Thus, the more the patient engaged in the process of self-exploration, the more insight he or she developed. By the same token, the more hostility the patient exhibited, the less insight he or she developed. It is possible that an emphasis on self-exploration may have functioned as a means to greater insight into the patient's conflicts, whereas the patient's hostility was detrimental to this process. Expressing hostility and other oppositional behaviours in therapy are counterproductive to the development of insight. The relationship between insight and the VPPS variables also support the construct validity of the Insight Rating Scale.

Patient-rated alliance was not found to be associated with insight. Thus, the patient's perception of the therapeutic alliance was independent of his or her level of insight. One possible explanation for this finding is that the focus of the patient's alliance rating may be the relationship, whereas the insight ratings address the patient's learning about his or her self.

The therapist's perception of the alliance was however, found to be directly associated with insight. Thus, the greater the level of patient insight across therapy, the stronger the therapist perceived the alliance. A reverse explanation of this relationship is that a strong alliance, as perceived by the therapist, is facilitative of patient insight. According to Rachman (1981), the process of psychotherapy begins with the empathic phase in which the focus is on the establishment of a relationship between the patient and therapist. This is a necessary component for the analytic phase, where the development of insight and the analytic tools of transference interpretations are the primary ways of interaction. Rachman's theory has implications for the current study. The therapist may have thought that with a strong working alliance in place, the patient could better tolerate

the intense interpretive focus of psychotherapy. The existence of a strong alliance, as reported by the therapist, may facilitate the patient to more effectively utilize the therapist's treatment interventions in order to work toward greater self-understanding. Alternatively, observing a patient become more insightful as therapy progresses, may influence the therapist to report that a strong collaborative relationship has developed with the patient.

The quantitative method of sequential analysis enables researchers to establish the temporal proximity of an effect in the psychotherapy process. This method would help determine the sequence of the alliance-insight relationship in order to better understand whether the alliance leads to insight or whether insight helps establish a stronger alliance. It would also be useful to determine whether an interdependent cycle is suggested by this relationship. For example, does the therapeutic alliance contribute to the development of insight, which in turn strengthens the relationship, leading to greater insights? Uncovering the nature of this relationship would add to our knowledge of the important processes necessary for successful treatment.

The relationship between the therapist's perception of the alliance and patient insight also supports the construct validity of the insight measure. However, this association may be attenuated because of shared method variance. Both the therapist-rated alliance and observer-rated insight are based on ratings other than the patient's. Future investigators would be well advised to utilize reliable measures from a variety of sources (patient, therapist, observer) to ensure that a range of perspectives are represented.

Insight and Patient Personality. Contrary to the hypothesis, insight was not found to be related to the patient variable psychological mindedness. A possible explanation for this finding is that insight and PM are measuring two distinct constructs. In the present study, insight was defined as the patient's articulation of an increased intellectual and emotional understanding of conflict (intrapsychic and interpersonal) and the ways in which conflicts contribute to personal problems. This definition is consistent with the notion that insight involves a conscious awareness of some of the wishes, defenses, and compromises that have interacted to produce emotional conflict in the patient's psychological development (Kivlighan et al., 2000). Insight, therefore, involves a process of developing an understanding of one's self. Psychological mindedness, on the other hand, is a trait capacity to identify dynamic components and relate them to a person's difficulties (McCallum & Piper, 1997). It refers to an understanding of another person's psychological problems. Thus, understanding another individual's intrapsychic difficulties does not necessarily enhance the capacity for self-awareness, or vice versa.

While few studies have examined the relationship between PM and insight, this finding is similar to others reported in the literature. In an investigation of the reliability and validity of a measure of self-understanding of interpersonal patterns, Connolly et al. (1999) found that neither self-understanding nor recognition of interpersonal patterns was related to psychological mindedness. More research is needed to examine the relation between insight and PM in order to determine whether PM is a necessary prerequisite for attaining insight in psychotherapy.

It is interesting to note that although the correlations between insight and PM were not significant, the coefficients were all negative. It may be that certain patients

have the capacity to be insightful into other people's conflicts but lack the capacity to have awareness into their own conflicts (e.g., borderline patients).

The current study also found that QOR was not related to insight. Thus, one's life-long pattern of establishing certain types of relationships had no association with the development of insight. The interpretive emphasis of short-term dynamic psychotherapy encourages patients to explore conflictual aspects of their interpersonal relationships, thereby promoting insight into these patterns. However, the findings suggest that the patient's history of establishing certain types of relationships is unrelated to how insightful the patient is about how these patterns are replicated across situations. Thus, the capacity to be insightful appears to be independent from QOR.

It would be of interest for future research to address the relationship between personality traits and insight, taking into account possible moderating variables, such as life experience and age. Researchers have suggested that personality traits, such as PM, along with life experience, may be sufficient for an older population to attain higher levels of insight (Connolly et al., 1999).

A significant relationship was identified between insight and gender. Female patients had higher average insight scores than male patients. The relationship between insight and gender has received little attention in the clinical and research literature. In fact, reviews of the gender literature have concluded that, for the most part, there is no clear evidence of a gender effect in psychotherapy. The limitations of the available studies indicate that additional research is needed (Ogrodniczuk, Piper, Joyce, & McCallum, submitted manuscript).

In a study that examined the relationship of patient and therapist gender with the process and outcome of two forms (interpretive, supportive) of short-term psychotherapy, Ogrodniczuk and colleagues found that male patients improved more in interpretive therapy while female patients improved more in supportive therapy. Men benefited from interpretive therapy because the introspective approach provided them with a different approach to their problems, while women benefited more from supportive therapy because it offered them alternative ways of dealing with their conflicts, namely more action and less introspection. The current project found that female patients in interpretive therapy were more insightful than their male counterparts. Although female patients have been shown to benefit from a supportive approach, women may have a greater capacity for introspection and insightfulness.

Researchers have suggested that women tend to be less active and ruminate more on their mood than men (Nolen-Hoeksema, 1987), thus having a greater tendency toward introspection. In the current study the introspective approach of interpretive therapy may have encouraged the development of affective awareness and expression in the female patients. Women, therefore, may have a predisposition to be more insightful, independent of therapy approach. An interesting area for future research would be to examine the interactive effect of insight and gender on treatment outcome.

Exploratory Analyses

Effect of Interaction Between Insight and Other Predictor Variables. The exploratory analyses attempted to develop a predictive model of outcome by examining the interaction between insight and transference-focused technique, patient personality and the therapeutic alliance. No significant interaction effects were identified between

insight and either the patient variables psychological mindedness or quality of object relations and the therapeutic alliance on treatment outcome. A significant interaction effect between insight and concentration of transference interpretations was found for the mature defenses residual gain score outcome variable. This result reinforces the interaction finding because it remained significant despite the presence of other predictors in the equation.

While the clinical and research literature has provided evidence for direct relationships between patient variables, such as PM and QOR, and the therapeutic alliance with treatment outcome (Piper et al., 1998; Martin et al., 2000), little is understood about the interactive effect of these variables with insight in predicting outcome. The current project found that PM and QOR were not associated with insight. It is possible that other patient variables, such as psychological health, coping style, or defensive style, may have a mediating influence on the unfolding of insight and its relationship to therapy outcome. Examining the relationship between insight and these additional patient characteristics may have important implications for patient and therapy matching.

The present study also found that the therapist-rated alliance was associated with insight. However, the results of the exploratory analyses revealed that this relationship was not predictive of treatment outcome. This finding is similar to the Morgan et al. (1982) finding that insight, resistance, and therapist facilitative behaviours correlated with each other, but were unrelated to treatment outcome. Although the therapist-rated alliance and insight covary in the therapy process, these variables were not found to provide for a joint prediction of outcome. The relationship between insight and the therapeutic alliance

seems to be important to the establishment of the therapeutic process, and suggests that the patient and the therapist are working well together. This process, however, may not necessarily lead to behaviour change at the end of therapy. The lack of a relationship between alliance by insight and outcome implies that there may be other variables which moderate the effect of this pairing of process constituents on treatment benefit.

Given the exploratory nature of the analyses, future research should explore the relationships between insight and other important treatment variables to gain a better understanding of the mechanisms through which insight affects change.

Limitations of the Current Study

Interpretation of the findings of the present study must be qualified in light of several conceptual and methodological limitations.

The definition of what constituted insight was unique to the present study and closely aligned with the psychodynamic approach to therapy. As such, it is not directly comparable to definitions of insight derived from other theoretical perspectives.

A similar difficulty involves the measure of insight used in the current study. The insight items were derived primarily from the literature on psychodynamically oriented therapies, making the measure theory-bound. This limits the generalizability of the findings to other treatment approaches. Furthermore, the general nature of the insight measure means that the results of the present investigation are not readily comparable with other studies utilizing measures of insight specific to an independent criterion. Stalikas and colleagues (1996) have suggested that researchers should be aware of which definitions of insight are being used in their chosen instruments, and of the possible methodological restrictions inherent in the use of specific scales to identify insight.

Researchers should, therefore, apply discretion when interpreting inconsistent findings since these may be due to lack of consensus based on definitions or methodology, rather than an absence of insight in the therapy material. Different scales highlight different aspects of insight, thus, researchers should carefully choose the measure they wish to employ in light of their research questions.

Another limitation concerns the assessment of insight. Ratings of insight were derived from the perspective of an independent observer. Therefore, there is no way of knowing how therapist or patient ratings of insight relate to ratings made by the external judges. The data do not reveal what the therapist or patient considered to be indications of insight. Thus, generalizability of the findings to other perspectives must be made with caution.

A further shortcoming of the current project concerns the sampling procedure for rating the therapy sessions. Insight was measured for sessions from early, middle, and late in therapy. Although the present study had an advantage over previous studies by assessing insight across therapy, more than three sessions may have been needed to gain a better understanding of how insight develops across therapy. Furthermore, the demarcation of the sessions into three 5-minute segments may not have been sufficient to capture moments of insight in the session. Any patient-therapist interactions outside of the 5-minute segments were excluded from examination. Most phenomena under examination in psychotherapy research are multidimensional, and may occur in different ways and forms, with differential importance over the course of therapy (Elliot & Anderson, 1994). Assessing insight on only three occasions may have limited the

opportunity to fully comprehend the manifestation of insight and its various aspects (e.g., cognitive, affective, behavioural).

Interpretation of the findings must also be qualified in light of the sample size. In those analyses with scores available for only 33 of the 60 patients, the sample size was small in terms of statistical power. The estimated power for the reduced sample was determined to be approximately .40.

Another limitation concerns the low values and restricted ranges of the insight and concentration variables. The results indicated that there was little variability in the insight and concentration scores across the phases of therapy. It may be that the 5-minute segments were not long enough to detect the full range of insight. It is also possible that patient insight and the therapist's focus on transference do not occur that frequently during a session, nor in every session. Occurrences of insight and transference-focus may have appeared in sessions that were not rated. It is also possible that the insight measure was not sensitive enough to detect changes in insight. Collecting data from a broader range of treatment approaches (e.g., long-term therapy) may result in more variation in the concentration and insight distributions, and thus better estimates of their relations to outcome.

The measurement of the transference variable involved in the interaction was problematic. Although the interaction between insight and concentration was significant, 27 of the 60 concentration scores were estimated. Even though the correlation between the original and estimated scores was moderate ($r = .58$), further exploration of the association between insight and transference is required in order to determine the stability of this relationship.

Other limitations of the present project concern the statistical findings. Several correlational relationships were low in magnitude. The correlation between insight and the therapist-rated alliance accounted for only 7% of the variance, and the relationship between insight and ISTS item 8 accounted for 9%. The low magnitude of the correlations raises the possibility of potential influence from other variables. In addition, fewer relationships between the insight and technique variables were identified than would be expected by chance. Although, in general, the correlations were indicative of no relationship, the fact that only two significant relationships were found limits the confidence that could be placed on these findings.

Furthermore, of the correlational relationships that reached statistical significance, several may have been attenuated because of shared method variance. Ratings of insight, VPPS, and transference focus, were all derived from the perspective of an independent observer. Future studies should attempt to include ratings from other perspectives (e.g., patient, therapist) to test the stability of these relationships. Assessing these variables from other perspectives limits the influence of shared method variance.

The number of statistical tests conducted in the exploratory analyses and the resultant inflationary effect on Type I error rates was also a limitation of the study. Given the exploratory nature of part of the investigation, conventional significance levels were maintained for heuristic purposes. This resulted in a sacrifice of statistical validity. Even though the exploratory analyses were conceptually relevant, the possibility that some of the findings were due to error cannot be ruled out.

While the results do serve to highlight how insight relates to other treatment variables, the limitations of the study require that interpretation of the findings be subject

to qualification. Although the findings underscore the complex interaction involving insight and transference interpretations, more research is needed to replicate and extend these findings.

Clinical Implications of the Current Findings

The current study developed a reliable, observer-based, measure of insight, and examined those relationships involving transference-focused technique, patient characteristics, and the therapeutic alliance. Inferences about how insight and other treatment constructs affect the process and outcome of psychotherapy cannot be made with certainty without additional empirical study. Limitations notwithstanding, some theoretically meaningful implications can be entertained regarding insight in short-term, time-limited, psychodynamic psychotherapy.

Use of the Insight Rating Scale. The Insight Rating Scale developed for the current project demonstrated that it has the capacity to reliably measure insight in short-term psychotherapy. The results of applying this scale to the study sample revealed that it is an effective tool for assessing insight. The insight measure was initially intended to differentiate emotional insight and intellectual insight. However, the results of the investigation indicated that insight is one phenomena composed of different *aspects* of insight, not different *types* of insight. The construct of insight appears to include the different components that theorists and researchers have long been proposing, namely, cognitions and affect. Recent investigations (e.g., Stalikas et al., 1996) have proposed that the unfolding of insight may occur in various areas, including cognitions, affect, as well as behaviours, for different patients dealing with different issues. These components are all part of the same phenomena but we may be seeing its different manifestations across

different situations. Taking a more integrative approach to insight may be more beneficial to our comprehension of this clinical phenomena.

The Insight Rating Scale can be applied in several contexts, one being application in a research context. The insight measure has a number of distinct advantages in comparison to other published insight scales. First, the measure is brief, requiring approximately one hour per 50-minute therapy session for rating. Second, clinically inexperienced raters can be used to achieve reliable ratings. Raters were guided by a manual which clearly outlined the criteria for rating each item. Thus, ratings of the patient's behaviour did not require much inference. Third, raters can be trained in a group situation in a reasonable amount of time.

The Insight Rating Scale can also be applied in a clinical context, whereby practicing therapists could use the scale to monitor the development of their patient's insight. This information could highlight areas in which the therapist may be having difficulty facilitating the patient's insight, as well as areas that are difficult for the patient to experience. Thus, applying the insight measure in a clinical context can assist the therapist in recognizing what he or she is providing in therapy, and perhaps adjusting their technique accordingly.

Insight and Treatment Variables. The findings of the study revealed that insight was associated with a transference focus early and late in therapy and with the therapist-rated alliance. This has possible implications for therapists who practice interpretive psychotherapy. The existence of a strong collaboration with the patient, as perceived by the therapist, is an important consideration if the therapist's intention is to facilitate patient insight. In addition, focusing on transference early and late in treatment can

promote insight in the late phase of therapy. An early transference focus may set into motion the patient's process of exploring his or her conflicts. In the latter part of therapy, these same conflicts may reemerge as a result of termination. Focusing on the transference in the late phase of treatment may encourage the patient to explore the conflicts re-emerging in response to the impending termination, and gain greater insight as a function of working this through.

Therefore, the two elements that appear to be important to the occurrence of insight are a strong alliance throughout therapy, as perceived by the therapist, and a focus on the transference, particularly early and late in the treatment.

An examination of the interaction between insight and the TIRS variable concentration indicated that a combination of high insight and high concentration of transference interpretations was negatively related to a measure of intrapsychic functioning. This finding may have important consequences for the use of transference-focused techniques in brief psychotherapy. Although transference interpretations can offer the patient a new understanding of his or her maladaptive patterns, this new understanding can have a destabilizing effect on the patient's internal functioning. Facilitating greater self-understanding and internal reflection through the use of a transference focus can have a negative effect on a patient's treatment. The intensity of the feelings that are associated with this new insight can exacerbate depression and anxiety. Thus, judicious use of transference interpretations is recommended to ensure that a therapeutic level of insight is attained, one that the patient is able to work through.

Themes for Future Psychotherapy Process Research

Finally, themes for future investigations will be considered.

1. An important area of future research is the validation of the scale developed in the present project. While the use of the Insight Rating Scale revealed that insight can be reliably measured, it is a new scale and its validity has yet to be sufficiently determined. The Insight Rating Scale needs to be compared with other insight scales as well as unrelated constructs to assess its convergent and discriminant validity. Researchers have suggested that it may be prudent, when investigating aspects of psychotherapy process, to use more than one measure to identify the same variable. Thus, if discrepancies between findings appear they may help clarify the construct under investigation (Stalikas et al., 1996). These factors should be considered in future studies to ensure that insight, and not another construct, is being measured.
2. Different modalities of psychotherapy (e.g., group, family) make use of different therapeutic interventions. One measure, therefore, may not suffice in capturing the same phenomena under these various conditions. It is recommended that future research attempt to develop insight measures for application in different therapy modalities. Modifying the Insight Rating Scale for application to group therapy, for example, may contribute to a greater understanding of how insight unfolds in different situations (e.g., in the transference with the therapist and group members).
3. What is unknown from the present study is what patient comments or actions the therapist considered to be indicators of insight, or the patient's own perspective concerning his or her insights. It is recommended that researchers adopt a multidimensional perspective on assessing patient insight. Inquiring into therapist and patient perceptions of insight would be useful in understanding how insight unfolds and determining what aspects of insight are important for change.

4. Therapist and patient variables can have a significant effect on the process and outcome of psychotherapy, but little is known of their impact on insight. An important area for research is to examine characteristics of the therapist (e.g., skillfulness) that may be related to the facilitation or hindering of patient insight. Patient characteristics, such as coping, ego strength, or defense style, may have an effect on the patient's ability to develop insight and cope with this self-awareness. Examining how patient and therapist dimensions influence the development of insight has implications for the kind of help a patient needs and how it might best be provided.
5. An important question that requires further examination is the relationship between insight and treatment outcome. Process research should move to a more focused examination of the impact of insight on outcome in order to understand the specific effects of therapy. Examining how insight affects a patient's interpersonal and intrapsychic functioning months or years after treatment can shed light on the usefulness of acquiring insight in psychotherapy and its impact on wellbeing.
6. A further theme for researchers is the optimal size of the rated unit of measurement (whole sessions, segments of sessions) for sampling. It is recommended that investigators use a variety of sampling procedures to measure patient insight to gain a better understanding of which method of sampling best captures the emergence of insight in therapy and provides the best representation of the process.
7. Future investigations would benefit from studying which other types of interventions bring about the greatest gains in insight and which impede the unfolding of insight. Comparisons of transference versus nontransference, and accurate versus inaccurate

interpretations could be made in terms of the effects on insight. An important task is to empirically examine what patient cognitions, feelings, and behaviours are set in motion by what therapist intervention and at what particular points in therapy. This may provide a clearer understanding of the conception, manifestation, and measurement of insight.

By presenting clear definitions and a reliable measure of patient insight, the present study will hopefully facilitate more defined research that clarifies the relationship between insight and the process and outcome of psychotherapy.

Table 1

Patient Axis I and Axis II Diagnostic Information¹ (N = 60)

| Axis I Diagnoses | N | % |
|-----------------------------------|----|------|
| Major Depressive Episode | 39 | 69.0 |
| Dysthymic Disorder | 7 | 12.0 |
| Depressive Disorder NOS | 1 | 2.0 |
| Anxiety Disorder | 3 | 5.0 |
| Alcohol Abuse | 1 | 2.0 |
| Adjustment Disorder | 1 | 2.0 |
| Physical or Sexual Abuse of Adult | 2 | 4.0 |
| Relational Problem NOS | 1 | 2.0 |
| Bereavement | 1 | 2.0 |

Axis II Diagnoses

| | | |
|--------------------------|---|------|
| Paranoid | 0 | 0 |
| Schizotypal | 0 | 0 |
| Antisocial | 0 | 0 |
| Borderline | 2 | 7.0 |
| Histrionic | 1 | 4.0 |
| Narcissistic | 3 | 11.0 |
| Avoidant | 4 | 15.0 |
| Dependent | 6 | 22.0 |
| Obsessive-Compulsive | 6 | 22.0 |
| Passive-Aggressive | 0 | 0 |
| Self-Defeating | 0 | 0 |
| Personality Disorder NOS | 5 | 19.0 |

¹ Assessed using the computerized version of the Structured Clinical Interview for DSM-III-R (SCID) and validated in a clinical interview

Note: 4 cases did not receive an Axis I diagnosis and 33 cases did not receive an Axis II diagnosis

Table 2

Patient Information: Demographic Variables (N = 60)

| | | | |
|------------------------------|--|-----------|----|
| Age | <u>M</u> = 35.2 <u>SD</u> = 10.1 range = 19 - 57 years | | |
| | | Frequency | % |
| Sex | female | 35 | 58 |
| | male | 25 | 42 |
| Marital Status | single | 22 | 37 |
| | married/partner | 24 | 40 |
| | separated/divorced | 14 | 23 |
| Employment | employed | 45 | 75 |
| | unemployed | 15 | 25 |
| Education | educated beyond high school | 41 | 68 |
| Previous Psychiatric History | yes | 48 | 80 |
| | no | 12 | 20 |
| Previous Hospitalization | yes | 2 | 3 |
| | no | 58 | 97 |

Table 3

Rater Reliabilities^{a,b} of the Insight Rating Scale: Training Phase

| | Sample I | | Sample II | | Sample III | |
|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| | ICC (2,1) | ICC (2,2) | ICC (2,1) | ICC (2,2) | ICC (2,1) | ICC (2,2) |
| Item 1 | .29 | .47 | .40 | .58 | .68 | .80 |
| Item 2 | .56 | .71 | .57 | .69 | .47 | .62 |
| Item 3 | .40 | .55 | .40 | .56 | .58 | .76 |
| Item 4 | .70 | .82 | .42 | .62 | .60 | .74 |
| Item 5 | .73 | .84 | .62 | .77 | .53 | .69 |
| Item 6 | .72 | .84 | .43 | .63 | .40 | .52 |
| Item 7 | .60 | .75 | .68 | .82 | .24 | .31 |
| Average | .57 | .72 | .50 | .66 | .50 | .63 |
| Cognitive | .58 | .74 | .53 | .68 | .72 | .84 |
| Emotional | .75 | .85 | .64 | .79 | .46 | .60 |

^a Rater reliability assessed using Shrout & Fleiss's (1979) ICC method.

^b K = 4 raters, N = 12 cases

Table 4

Outcome Factors, Variables, and Loadings

| Outcome Factor and Variables | Loading |
|---|---------|
| 1. General Symptomatology and Dysfunction (42% of Variance) | |
| Anxiety | .84 |
| General symptomatic distress | .80 |
| Depression | .78 |
| Self-esteem | -.75 |
| Interpersonal distress | .74 |
| Life satisfaction | -.72 |
| Target severity (assessor-rated) | .63 |
| Maladaptive defenses | .59 |
| Target severity (patient-rated) | .62 |
| 2. Social-Sexual Maladjustment (9.6% of Variance) | |
| Social dysfunction | .84 |
| Sexual dysfunction | .74 |
| 3. Nonuse of Mature Defenses and Family Dysfunction (8.7% of Variance) | |
| Mature defenses | -.74 |
| Family dysfunction | .47 |

Table 5

Rater Reliabilities^a for Insight Rating Scale: Psychometric Phase

| | Sample I ^b | | Sample II ^c | | Sample I&II ^d ICC (2,2) |
|-----------------------|-----------------------|-----------|------------------------|-----------|---------------------------------------|
| | ICC (2,1) | ICC (2,2) | ICC (2,1) | ICC (2,2) | |
| Item 1 | .62 | .73 | .55 | .51 | .53 |
| Item 2 | .60 | .77 | .34 | .69 | .65 |
| Item 3 | .36 | .60 | .54 | .71 | .61 |
| Item 4 | .54 | .70 | .51 | .69 | .74 |
| Item 5 | .60 | .73 | .70 | .83 | .76 |
| Item 6 | .63 | .77 | .52 | .67 | .70 |
| Item 7 | .74 | .86 | .52 | .69 | .75 |
| Intellectual subscale | .58 | .72 | .65 | .78 | .76 |
| Emotional subscale | .73 | .85 | .62 | .77 | .84 |
| Average (items 1-7) | .57 | .74 | .53 | .68 | .67 |

^a Rater reliability assessed using Shrout & Fleiss's (1979) ICC method

^b K = 4 raters, N = 36 cases (Piper et al., 1990); ^c K = 3 raters, N = 36 cases (Piper et al., 1998); ^d K = 3 raters, N = 72 cases

Table 6

Internal Consistency^{a,b} of Insight Rating Scale: Psychometric Phase

| | Sample I ^c | Sample II ^d | Sample I & II |
|---------------|-----------------------|------------------------|---------------|
| Item 1 | .81 | .89 | .86 |
| Item 2 | .79 | .86 | .83 |
| Item 3 | .75 | .82 | .79 |
| Item 4 | .79 | .84 | .82 |
| Item 5 | .67 | .80 | .76 |
| Item 6 | .70 | .81 | .77 |
| Item 7 | .73 | .86 | .82 |
| Cognitive | .35 | .68 | .58 |
| Emotional | .87 | .36 | .72 |
| Average Alpha | .78 | .86 | .83 |

^a Internal consistency assessed using Chronbach's alpha coefficient (1951)

^b alpha if item deleted

^c Piper et al. (1990)

^d Piper et al. (1998)

Table 7

Common Factor Analysis^a of Insight Rating Scale: Psychometric Phase

| Insight Factor and Variables | Loadings |
|------------------------------|----------|
| Insight (53.3 % of Variance) | |
| Item 1 | - |
| Item 2 | .46 |
| Item 3 | .79 |
| Item 4 | .58 |
| Item 5 | .98 |
| Item 6 | .85 |
| Item 7 | .60 |

^aN = 72 cases

Table 8

Rater Reliabilities^a for Insight Rating Scale^b: Hypothesis-Testing Phase

| | Midpoint of Data Collection (15 sessions) | End of Data Collection (15 sessions) | Overall (30 sessions) |
|---------|---|--|--------------------------|
| Item 1 | .60 | .69 | .63 |
| Item 2 | .65 | .55 | .60 |
| Item 3 | .67 | .64 | .70 |
| Item 4 | .75 | .80 | .80 |
| Item 5 | .82 | .77 | .80 |
| Item 6 | .80 | .80 | .83 |
| Average | .72 | .71 | .73 |

^a Rater reliability assessed using Shrout & Fleiss's (1979) ICC (2,2) method averaged across all pairs of raters

^b Items 1-6 from the hypothesis-testing phase are the same as items 2-7 from the psychometric phase

Table 9

Common Factor Analysis^a of Insight Rating Scale: Hypothesis-Testing Phase

| Insight Factor and Variables | Loadings |
|------------------------------|----------|
| Insight (65.9 % of Variance) | |
| Item 1 | .70 |
| Item 2 | .86 |
| Item 3 | .58 |
| Item 4 | .99 |
| Item 5 | .93 |
| Item 6 | .75 |

^aN = 60

Table 10

Means and Standard Deviations for Overall and Phase-Based^a Insight Scores^b

| Insight | <u>M</u> | <u>SD</u> | Range |
|--------------|----------|-----------|-------------------|
| Overall | 1.59 | .43 | 1.96 (.52 - 2.48) |
| Early Phase | 1.63 | .49 | 2.15 (.59 - 2.74) |
| Middle Phase | 1.65 | .55 | 2.47 (.37 - 2.84) |
| Late Phase | 1.49 | .55 | 2.25 (.36 - 2.61) |

^a early phase = session 5, middle phase = session 11, late phase = session 19^b N = 60

Table 11

Intercorrelations of Insight Rating Scale Items^a

| | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 |
|--------|--------|--------|--------|--------|--------|--------|
| Item 1 | - | .68 | .55 | .63 | .56 | .50 |
| Item 2 | | - | .52 | .85 | .79 | .57 |
| Item 3 | | | - | .56 | .52 | .34 |
| Item 4 | | | | - | .93 | .79 |
| Item 5 | | | | | - | .78 |
| Item 6 | | | | | | - |

^aN = 60

Note: all correlations were significant at the 0.01 level (2-tailed)

Table 12

Correlations Between Insight and Transference-Focused Technique

| Frequency of Transference Interpretations (TIRS) (N = 33) | | | | |
|---|---------|-------------|--------------|------------|
| Insight | Overall | Early Phase | Middle Phase | Late Phase |
| Early Phase | -.16 | .02 | -.31 | -.16 |
| Middle Phase | .17 | .23 | -.06 | .20 |
| Late Phase | .22 | .32 | .05 | .17 |
| Overall | .10 | .25 | -.14 | .09 |

| Concentration of Transference Interpretations (TIRS) (N = 33) | | | | |
|---|---------|-------------|--------------|------------|
| Insight | Overall | Early Phase | Middle Phase | Late Phase |
| Early Phase | -.22 | -.09 | -.23 | -.18 |
| Middle Phase | .21 | .30 | .03 | .19 |
| Late Phase | .31 | .47** | .10 | .22 |
| Overall | .14 | .30 | -.09 | .11 |

** p < .01

Table 12 continues

Table 12 (continued)

| Item 8 (ISTS) (N = 60) | | | | |
|-------------------------|---------|-------------|--------------|------------|
| Insight | Overall | Early Phase | Middle Phase | Late Phase |
| Early Phase | .11 | .10 | .09 | .11 |
| Middle Phase | .21 | .08 | .25 | .23 |
| Late Phase | .22 | .09 | .23 | .26* |
| Overall | .23 | .11 | .23 | .24 |
| Item 12 (ISTS) (N = 60) | | | | |
| Insight | Overall | Early Phase | Middle Phase | Late Phase |
| Early Phase | .20 | .18 | .13 | .18 |
| Middle Phase | .09 | .07 | -.09 | .22 |
| Late Phase | .13 | .20 | .03 | .08 |
| Overall | .17 | .18 | .03 | .20 |

* $p < .05$

Table 12 continues

Table 12 (continued)

| Patient-Rated Item 6 (PTS) | | | | |
|----------------------------|---------------------|-------------------------|--------------------------|------------------------|
| Insight | Overall (N = 59) | Early Phase (N = 57) | Middle Phase (N = 58) | Late Phase (N = 57) |
| Early Phase | -.12 | -.04 | -.17 | -.01 |
| Middle Phase | .14 | .19 | .13 | .16 |
| Late Phase | -.14 | .01 | -.09 | -.06 |
| Overall | -.05 | .07 | -.05 | .04 |

| Therapist-Rated Item 6 (PTS) (N = 60) | | | | |
|---------------------------------------|---------|-------------|--------------|------------|
| Insight | Overall | Early Phase | Middle Phase | Late Phase |
| Early Phase | .01 | .07 | -.04 | -.01 |
| Middle Phase | .02 | .04 | -.02 | .02 |
| Late Phase | .09 | .07 | .02 | .16 |
| Overall | .04 | .07 | -.02 | .07 |

Table 13

Correlations Between Insight and Treatment Outcome

| Insight | Outcome Factors (N = 59) | | |
|--------------|--------------------------|-----|------|
| | I | II | III |
| Early Phase | .03 | .09 | .05 |
| Middle Phase | .09 | .06 | .17 |
| Late Phase | .03 | .09 | -.07 |
| Overall | .07 | .15 | .06 |

Note: I = General Symptomatology and Dysfunction;
 II = Social-Sexual Maladjustment; III = Nonuse of Mature
 Defenses and Family Dysfunction

Table 14

Regression Analysis on Mature Defenses Residual Gain Score for Insight and Concentration of Transference Interpretations Interaction

| Step | DV Entered | IV Entered | R | R^2 | R^2 Change | Partial F | df | p \leq |
|------|-----------------|-------------------------|-----|-------|--------------|-----------|------|----------|
| 1 | mature defenses | gender | .10 | .007 | .007 | .42 | 1,57 | .52 |
| 2 | | concentration | .22 | .049 | .042 | 2.45 | 1,56 | .12 |
| 3 | | insight | .23 | .051 | .002 | .13 | 1,55 | .71 |
| 4 | | concentration x insight | .36 | .133 | .082 | 5.09 | 1,54 | .02 |

Note: DV = dependent variable entered; IV = independent variable entered; R = multiple regression coefficient; R^2 = square of the multiple regression coefficient; R^2 change = change in R squared statistic by adding or deleting an IV
F = used in testing significance of regression equation; df = degrees of freedom; p = level of significance

Table 15

Correlations Between Insight, Patient-Rated Alliance, and Therapist-Rated Alliance

| Insight | Patient-Rated Alliance | | | |
|--------------|------------------------|-------------------------|--------------------------|------------------------|
| | Overall (N = 59) | Early Phase (N = 45) | Middle Phase (N = 45) | Late Phase (N = 45) |
| Early Phase | -.07 | -.16 | .16 | .07 |
| Middle Phase | .18 | -.01 | .17 | .19 |
| Late Phase | .02 | .06 | .25 | .27 |
| Overall | .06 | -.04 | .27 | .22 |

| Insight | Therapist-Rated Alliance (N = 60) | | | |
|--------------|-----------------------------------|-------------|--------------|------------|
| | Overall | Early Phase | Middle Phase | Late Phase |
| Early Phase | .17 | .29* | .36** | .17 |
| Middle Phase | .10 | .11 | .30* | .25 |
| Late Phase | .28* | .36** | .40** | .37** |
| Overall | .22 | .31* | .43** | .33* |

* p < .05

** p < .01

Table 16

Correlations Between Insight, PM, and QOR^a

| Insight | PM | QOR |
|--------------|------|------|
| Early Phase | -.05 | .04 |
| Middle Phase | -.09 | -.14 |
| Late Phase | -.23 | .08 |
| Overall | -.15 | -.02 |

^aN = 60

Table 17
 Correlations Between Insight, Concentration of Transference Interpretations, Therapeutic Alliance,
 PM, and QOR^{a,b}

| | insight | concentration | alliance (patient) | alliance (therapist) | PM | QOR |
|----------------------|---------|---------------|--------------------|----------------------|------|------|
| insight | - | .15 | .06 | .22 | -.15 | -.02 |
| concentration | | - | .05 | .22 | -.15 | -.21 |
| alliance (patient) | | | - | .51** | -.13 | -.08 |
| alliance (therapist) | | | | - | -.16 | -.00 |
| PM | | | | | - | -.10 |
| QOR | | | | | | - |

^a N = 60

** p < .01

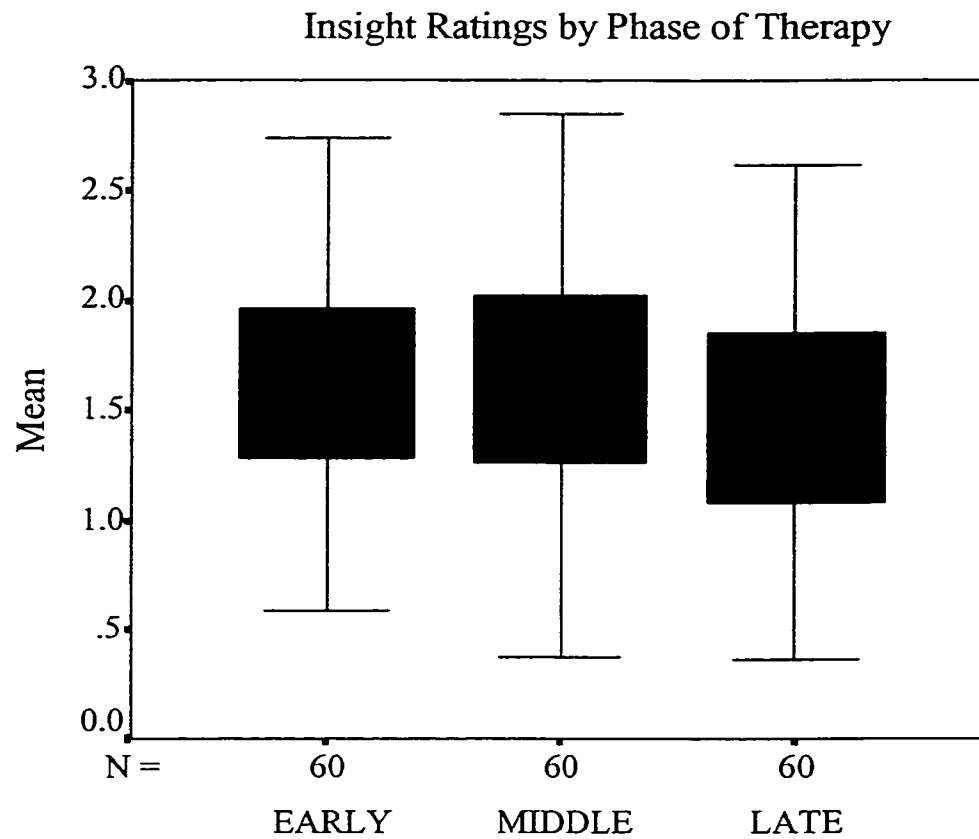


Figure 1. Insight ratings by phase of therapy. 95% confidence intervals displayed. No significant change in the level of insight was found across the phases of interpretive therapy.

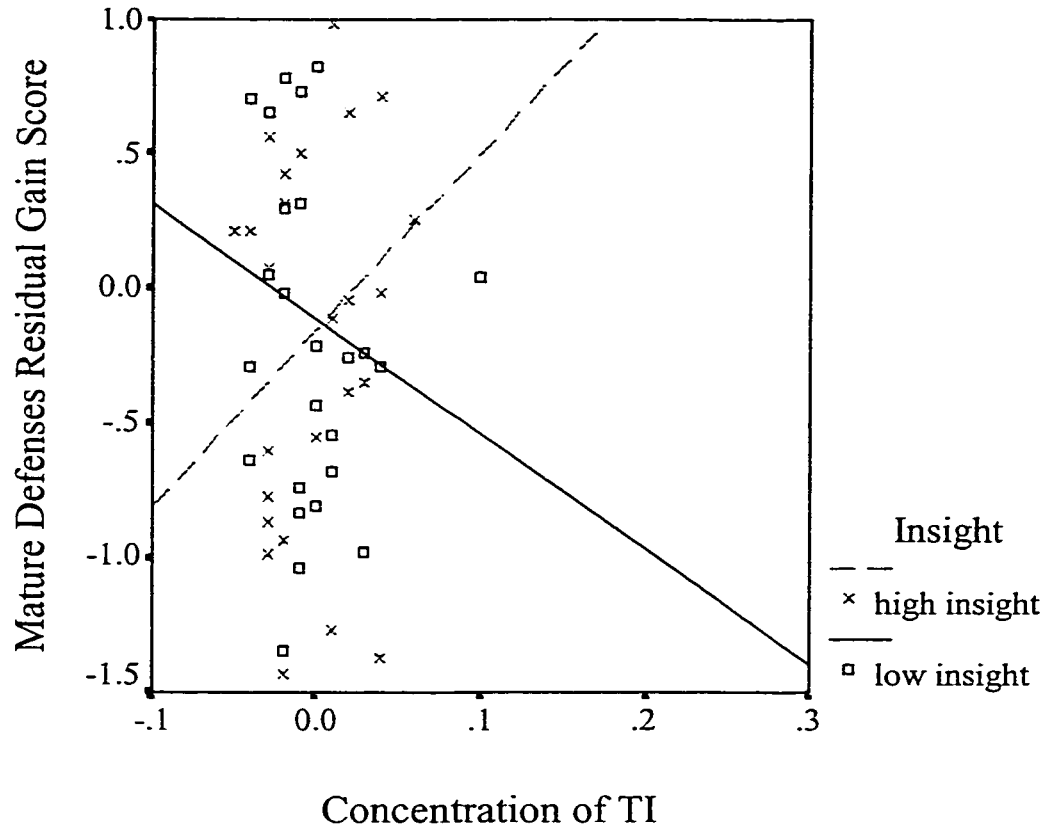


Figure 2. Interaction effect between insight and concentration of transference interpretations in predicting mature defenses residual gain score outcome measure. Negative scores for mature defenses represent good outcome.

BIBLIOGRAPHY

Appelbaum, A. (1972). A critical-examination of the concept of 'motivation for change' in psychoanalytic treatment. International Journal of Psychoanalysis, 53, 51-59.

Appelbaum, A. (1976). The dangerous edge of insight. Psychotherapy: Theory, Research, and Practice, 13, 202-206.

Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage Publications.

Andrews, G., Singh, M., & Bond, M. (1993). The defense style questionnaire. Journal of Nervous and Mental Disease, 181, 246-256.

Azim, H. R. A., Piper, W. E., Segal, P. M., Nixon, G. W. H., & Duncan, S. C. (1991). The quality of object relations scale. Bulletin of the Menninger Clinic, 55, 323-343.

Barber, J. P., Crits-Christoph, P., & Luborsky, L. (1996). Effects of therapist adherence and competence on patient outcome in brief dynamic therapy. Journal of Consulting and Clinical Psychology, 64, 619-622.

Beck, A. T., & Beck, R. W. (1972). Screening depressed patients in family practice A rapid technic. Postgraduate Medicine, 52, 81-85.

Beck, A. T., Steer, R. A. (1987). Beck Depression Inventory manual. New York: Harcourt Brace Jovanovich.

Binder, J. L. (1998). The therapeutic alliance in the relational models of time-limited dynamic psychotherapy. In J. D. Safran & J. C. Muran (Eds.), The therapeutic alliance in brief psychotherapy (pp. 3-15). Washington: American Psychological Association.

Boorstein, S. (1994). Insight: Some considerations regarding its potential and limitations. The Journal of Transpersonal Psychology, 26, 95-105.

Brady, J. P. (1967). Psychotherapy, learning theory, and insight. Archives of General Psychiatry, 16, 304-311.

Carek, D. J. (1990). Affect in psychodynamic psychotherapy. American Journal of Psychotherapy, 114, 274-283.

Chronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.

Cohen, J. (1988). Statistical power analysis for the behavioural sciences (2nd ed.). New Jersey: Lawrence Erlbaum Associates, Publishers.

Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioural sciences. Hillsdale, NJ: Lawrence Erlbaum Associates.

Connolly, M. B., Crits-Christoph, P., Shelton, R. C., Hollon, S., Kurtz, J., Barber, J. P., Butler, S. F., Baker, S., & Thase, M. E. (1999). The reliability and validity of a measure of self-understanding of interpersonal patterns. Journal of Counseling Psychology, 46, 472-482.

Constable, M. S. G., Lopez-Ibor, I., Kemp, R., & David, A. S. (1998). A comparative study of insight scales and their relationship to psychopathological and clinical variables. Psychological Medicine, 28, 437-446.

Crits-Christoph, P., & Luborsky, L. (1990). The measurement of self-understanding. In L. Luborsky & P. Crits-Christoph (Eds.), Understanding transference: The core conflictual relationship theme method (pp. 189-196). New York: Basic Books.

Crits-Christoph, P., Barber, J. P., Miller, N. E., & Beebe, K. (1993). Evaluating insight. In N. E. Miller, L. Luborsky, J. P. Barber, & J. P. Docherty (Eds.), Psychodynamic treatment research: A handbook for clinical practice (pp. 407-422). New York: Basic Books.

Crown, S. (1988). Supportive psychotherapy: A contradiction in terms? British Journal of Psychiatry, 152, 266-269.

Derogatis, L. R. (1977). SCL-90 Administration, scoring, and procedures manual-I for the revised version. Baltimore Clinical Psychometrics Research.

Dymond, R. (1948). A preliminary investigation of the relation of insight and empathy. Journal of Consulting Psychology, 12, 228-233.

Elliott, R., & Anderson, C. (1994). Simplicity and complexity in psychotherapy research. In R. L. Russell (Ed.), Reassessing psychotherapy research (pp. 65-113). New York: Guilford Press.

Elliott, R., Shapiro, D. A., Firth-Cozens, J., Stiles, W. B., Hardy, G. E., Llewelyn, S. P., Margison, F. R. (1994). Comprehensive process analysis of insight events in cognitive-behavioural and psychodynamic-interpersonal psychotherapies. Journal of Counseling Psychology, 41, 449-463.

Eskey, A. (1958). Insight and prognosis. Journal of Clinical Psychology, 14, 426-429.

Farber, B. A., & Golden, V. (1997). Psychological mindedness in psychotherapists. In M. McCallum & W. E. Piper (Eds.), Psychological mindedness: A contemporary understanding (pp. 211-235). New Jersey: Lawrence Erlbaum Associates, Publishers.

Ferenczi, S. (1950). Further contributions to the theory and technique of psychoanalysis. London: Hogarth Press.

First, M. B., Gibbon, M., Williams, J. B. W., & Spitzer, R. L. (1990). Mini-SCID. Toronto, Ontario: Multi-Health Systems Inc.

First, M. B., Gibbon, M., Williams, J. B. W., & Spitzer, R. L. (1991). SCID-II PQ and AutoSCID II. Toronto, Ontario: Multi-Health Systems Inc.

Floyd, F. S., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. Psychological Assessment, 7, 286-299.

Fried, D., Crits-Christoph, P., & Luborsky, L. (1992). The first empirical demonstration of transference in psychotherapy. Journal of Nervous and Mental Disease, 180, 326-331.

Frieswyk, S. H., Allen, J. G., Colson, D. B., Coyne, L., Gabbard, G. O., Horwitz, L., & Newsom, G. (1986). Therapeutic alliance: Its place as a process and outcome variable in dynamic psychotherapy research. Journal of Consulting and Clinical Psychology, 54, 32-38.

Gelso, C. J., & Carter, J. A. (1985). The relationship in counseling and psychotherapy: Components, consequences, and theoretical antecedents. The Counseling Psychologist, 13, 155-243.

Gelso, C. J., Hill, C. E., & Kivlighan, D. M. (1991). Transference, insight, and the counselor's intentions during a counseling hour. Journal of Counseling and Development, 69, 428-433.

Gelso, C. J., Kivlighan, D. M., Wine, B., Jones, A., & Friedman, S. C. (1997). Transference, insight and the course of time-limited therapy. Journal of Counseling Psychology, 44, 209-217.

Glucksman, M. L. (1993). Insight, empathy, and internalization: Elements of clinical change. Journal of the American Academy of Psychoanalysis, 21, 163-181.

Graff, H., & Luborsky, L. L. (1977). Long-term trends in transference and resistance: A report on a quantitative-analytic method applied to four psychoanalyses. Journal of the American Psychoanalytic Association, 25, 471-490.

Greenson, R. (1967). The technique and practice of psychoanalysis. New York: International Universities Press.

Greyner, B. F. S., & Luborsky, L. (1996). Dynamic change in psychotherapy: Mastery of interpersonal conflicts. Journal of Consulting and Clinical Psychology, 64, 411-416.

Hjogland, P., Engelstad, V., Sprbye, O., Heyerdahl, O., & Amlo, S. (1994). The role insight in exploratory psychodynamic psychotherapy. British of Journal of Medical Psychology, 67, 305-317.

Hogage, R., & Kubler, J. C. (1988). The Emotional Insight Rating Scale. In H. Dahl, H. Kachele, & H. Thoma (Eds.), Psychoanalytic process research strategies (pp. 243-265). Heidelberg, Germany: Springer-Verlag.

Horowitz, L. M., Rosenberg, S. E., Baer, B. A., Ureño, G., & Villaseñor, V. S. (1988). Inventory of interpersonal problems: Psychometric properties and clinical applications. Journal of Consulting and Clinical Psychology, 56, 885-892.

Joseph, B. (1985). Transference: The total situation. International Journal of Psychoanalysis, 66, 447-454.

Kiesler, D. J. (1996). Contemporary interpersonal theory and research: Personality, psychopathology, and psychotherapy. New York: Wiley.

Kiesler, D. J., Mathieu, P. L., & Klein, M. H. (1963). Sampling from the recorded therapy interview: A comparative study of different segment lengths. Journal of Consulting Psychology, 28, 349-357.

Kivlighan, D. M., Multon, K. D., & Patton, M. J. (2000). Insight and symptom reduction in time-limited psychoanalytic counseling. Journal of Counseling Psychology, 47, 50-58.

Kraemer, H. C., & Thiemann, S. (1987). How many subjects? Statistical power analysis in research. Newbury Park: Sage Publications.

Kris, E. (1956). On some vicissitudes of insight in psycho-analysis. International Journal of Psychoanalysis, 37, 445-455.

Kuiken, D., Carey, R., & Nielson, T. (1986-87). Moments of affective insight: Their phenomenology and relations to selected individual differences. Imagination, Cognition, and Personality, 6, 341-364.

Lahey, M. A., Downey, R. G., & Saal, F. E. (1983). Intraclass correlations: There's more there than meets the eye. Psychological Bulletin, 93, 586-595.

Lind9n, J. (1984). Insight and its classification. Psychoanalysis and Contemporary Thought, 7, 99-114.

Loewald, H. W. (1960). On the therapeutic action of psychoanalysis. International Journal of Psychoanalysis, 41, 16-33.

Lovinger, R. J. (1985). Insight revisited. Dynamic Psychotherapy, 3, 59-65.

Luborsky, L. (1984). Principles of psychoanalytic psychotherapy: A manual for supportive-expressive treatment. New York: Basic Books.

Luborsky, L., & Crits-Christoph, P. (1990). Understanding transference: The core conflictual relationship theme method. New York: Basic Books.

Mahrer, A. R., & Nadler, W. P. (1986). Good moments in psychotherapy: A preliminary review, a list, and some promising research avenues. Journal of Consulting and Clinical Psychology, 54, 10-15.

Malan, D. H. (1979). Individual psychotherapy and the science of psychodynamics. London: Butterworth & Co. Publishers Ltd.

Markov, I. S., & Berrios, G. E. (1992). The meaning of insight in clinical psychiatry. British Journal of Psychiatry, 160, 850-860.

Martin, D. J., Carske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. Journal of Consulting and Clinical Psychology, 68, 438-450.

McCallum, M., & Piper, W. E. (1997). The psychological mindedness assessment procedure. In M. McCallum & W. E. Piper (Eds.), Psychological mindedness: A contemporary understanding (pp. 27-58). New Jersey: Lawrence Erlbaum Associates.

Menninger, K. (1958). Theory of psychoanalytic technique. New York: Basic Books.

Miller, S. B. (1992). Insight and other psychotherapy change processes. Journal of the American Academy of Psychoanalysis, 20, 611-632.

Morgan, R., Luborsky, L., Crits-Christoph, P., Curtis, H., & Solomon, J. (1982). Predicting the outcomes of psychotherapy by the Penn Helping Alliance Rating Scale. Archives of General Psychiatry, 39, 397-402.

Myerson, P. G. (1960). Awareness and stress: Post-psycho-analytic utilization of insight. International Journal of Psychoanalysis, 41, 147-155.

Nolen-Hoeksema, S. (1987). Sex differences in unipolar depression: Evidence and theory. Psychological Bulletin, 101, 259-282.

O'Connor, L. E., Edelstein, S., Berry, J. W., & Weiss, J. (1994). Changes in the patient's level of insight in brief psychotherapy: Two pilot studies. Psychotherapy, 31, 533-544.

Ogrodniczuk, J. S., & Piper, W. E. (1999). Measuring therapist technique in psychodynamic psychotherapies: Development and use of a new scale. Journal of Psychotherapy Practice and Research, 8, 142-154.

Ogrodniczuk, J. S., Piper, W. E., Joyce, A. S., & McCallum, M. (1999). Gender differences in the therapeutic alliance and outcome for two forms of dynamically-oriented individual psychotherapy. Submitted manuscript, University of British Columbia, Department of Psychiatry, Vancouver.

Piper, W. E., Azim, H. F. A., Joyce, A. S., & McCallum, M. (1991). Transference interpretations, therapeutic alliance, and outcome in short-term individual psychotherapy. Archives of General Psychiatry, 48, 946-953.

Piper, W. E., Azim, H. F. A., McCallum, M., & Joyce, A. S. (1990). Patient suitability and outcome in short-term individual psychotherapy. Journal of Consulting and Clinical Psychology, *58*, 475-481.

Piper, W. E., Debbane, E. G., de Carufel, F. L., & Bienvenu, J. P., (1987). A system for differentiating therapist interpretations from other interventions. Bulletin of the Menninger Clinic, *51*, 532-550.

Piper, W. E., Joyce, A. S., McCallum, M., & Azim, H. F. A. (1993a). The perception of technique scale. Unpublished manuscript, University of Alberta, Department of Psychiatry, Edmonton.

Piper, W. E., Joyce, A. S., McCallum, M., & Azim, H. F. A. (1993b). Concentration and correspondence of transference interpretations in short-term therapy. Journal of Consulting and Clinical Psychology, *61*, 586-595.

Piper, W. E., Joyce, A. S., McCallum, M., & Azim, H. F. A. (1998). Interpretive and supportive forms of psychotherapy and patient personality variables. Journal of Consulting and Clinical Psychology, *66*, 558-567.

Plutchik, R., & Conte, H. R. (1989). Self-report scales for the measurement of depression. Psychiatric Annals, *19*, 367-371.

Plutchik, R., Conte, H. R., Spence, W., Buckley, P., & Karasu, T. B. (1990). Development of a scale for the measurement of symptom change in an outpatient clinic. Comprehensive Psychiatry, *31*, 134-139.

Rachman, A. W. (1981). Humanistic analysis in groups. Psychotherapy: Theory, Research, and Practice, *18*, 457-577.

Reid, J. R., & Finesinger, J. E. (1952). The role of insight in psychotherapy. American Journal of Psychiatry, 108, 726-734.

Roback, H. B. (1974). Insight: A bridging of the theoretical and research literatures. The Canadian Psychologist, 15, 61-88.

Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.

Safran, J. D. (1989). Insight and action in psychotherapy. Journal of Integrative and Eclectic Psychotherapy, 8, 233-239.

Sargent, H. D. (1953). The insight test: A verbal projective test for personality study. New York: Grune & Stratton.

Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. Psychological Bulletin, 86, 420-428.

Suh, C. S., Strupp, H. H., & O'Malley, S. S. (1986). The Vanderbilt process measure. In L. Greenberg & W. Pinsoff (Eds.), The psychotherapeutic process: A research handbook (p. 285-323). New York: Guilford.

Spielberger, C. D. (1983). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.

Stalikas, A., Rogan, K., & Berkovic, M. S. (1996). Insight in counseling and psychotherapy: Measurement and conceptual issues. Journal of Psychotherapy Integration, 6, 265-279.

Steiner, D. L. (1994). Figuring out factors: The use and misuse of factor analysis. Canadian Journal of Psychiatry, 39, 135-140.

Sternbach, O. (1989). Problems of insight in psychoanalysis. Modern Psychoanalysis, 14, 163-170.

Strachey, J. (1934). The nature of the therapeutic action of psycho-analysis. International Journal of Psychoanalysis, 15, 127-159.

Strupp, H. H., & Binder, J. L. (1984). Psychotherapy in a new key: A guide to time-limited dynamic psychotherapy. New York: Basic Books.

Strupp, H. H., & Hadley, S. W. (1985). Negative effects and their determinants. In D. T. Mays & C. M. Franks (Eds.), Negative outcome in psychotherapy and what to do about it (pp. 21-55). New York: Springer Publishing Company.

Sudbery, J., & Winstanley, I. (1998). Applying psychodynamic insights in brief counselling. Psychodynamic Counselling, 4, 367-381.

Tinsley, M. E. A., & Tinsley, D. J. (1987). Uses of factor analysis in counseling psychology research. Journal of Counseling Psychology, 34, 414-424.

Tolor, A., & Reznikoff, M. (1960). A new approach to insight: A preliminary report. The Journal of Nervous and Mental Disease, 130, 286-296.

Wallerstein, R. S., & Robbins, L. L. (1956). IV. Concepts. Bulletin of the Menninger Clinic, 20, 239-262.

Weissman, M. M., Paykel, E. S., Siegal, R., & Klerman, G. L. (1971). The social role performance of depressed women: A comparison with a normal sample. American Journal of Orthopsychiatry, 41, 390-405.

Appendix A

Patient Insight Manual – Original

The Patient Insight rating form is an observer-based measure of insight that can be used to identify episodes of increased patient self-understanding during sessions of brief psychodynamic therapy. Insight is defined as the patient's articulation of an increased intellectual and emotional understanding of conflict (intrapsychic and interpersonal) and the ways in which conflicts contribute to personal problems. Intellectual insight refers to the acquisition of a rational understanding of personal conflict, including the identification of connections between internal experiences and behaviour with others and oneself, and the identification of parallels in relationship patterns. Emotional insight refers to the articulation of the affective implications of personal conflict and the here and now experience of those feelings.

Items on the Patient Insight rating form address observable behaviours commonly associated with the patient's experience of insight. The ratings reflect the degree to which each patient behaviour was present during the therapy interaction. The insight rating form consists of 6 items that are rated on a 4-point Likert-type scale, ranging from "0 = absent" to "3 = clearly present." Half ratings, scored as 1.5, 2.5, etc. are permitted. The six items address the salient characteristics of intellectual (4 items) and emotional insight (3 items).

The items that address intellectual insight consider the patient's development of a rational understanding of his/her personal conflict. The intellectual insight items include: 1) the patient identifies something new about him or herself; 2) the patient articulates the distinction between what the patient brings to his or her problems and what is contributed by external factors; 3) the patient identifies a connection between elements of functioning

of the self and/or of the self and others; 4) the patient identifies patterns within and across relationships.

The items that address emotional insight consider the quality of the patient's articulation of the affective implications associated with an emerging cognitive understanding. The emotional insight items include: 5) the patient displays an openness to examining internal experiences with the therapist; 6) the patient expresses feelings associated with a developing rational understanding of his or her conflict; and 7) the patient experiences feelings in the here and now that are congruent with the articulation of a conceptual understanding.

Ratings for the insight items are assigned for a five minute segment from each 15-17 minute "third" of therapy sessions (5-10 minute segment, 20-25 minute segment, and 30-35 minute segment). For each of the five minute segments, ratings are assigned for the intellectual and emotional insight items. Scores for intellectual insight and emotional insight are calculated for each segment and for the entire session. A score for overall insight, based on an average of the two subscales, is calculated for the entire session. It is recommended that while listening to each recorded segment, the rater makes notes of the material that provides evidence for the subsequent rating of each item.

The rating of patient insight involves:

1. Identifying aspects of cognitive and affective insight behaviour for each five minute segment, and assigning a rating for those items.
2. Aggregating ratings across the items to obtain segment scores on cognitive, affective, and overall insight.

3. Aggregating scores across segments to obtain session scores on cognitive, affective, and overall insight.

How to Rate Patient Insight

1. The rater's focus is on a five minute segment from each third of the therapy session: 5-10 minute segment, 20-25 minute segment, and 30-35 minute segment.
2. Each five minute segment is rated for the presence of behaviours represented by the insight items (1 to 7). The insight items identified in each segment are rated according to the guidelines in the patient insight rating manual. The absence of evidence for an item in a segment defines a rating of "zero" for that item.
3. At the conclusion of each 5-minute segment, the rater calculates the average level of insight for each set of cognitive and affective items, and an overall insight score. This is done by a) summing all of the insight ratings for the cognitive items (including "zero" ratings) and dividing this sum by the total number of cognitive items (4), b) summing all of the insight ratings for the affective items (including "zero" ratings) and dividing this sum by the total number of affective items (3), and c) averaging the two subscale scores to get an overall insight score for that segment.

Patient Insight Rating Items

Cognitive Elements

1) The patient something new about him or herself.

To rate this item, there must be evidence that the patient has expressed that he or she has gained a new awareness of some aspect of his or her internal functioning. This new awareness may refer to aspects of behaviour, feelings, conflicts, motivations, or relationship patterns. The patient clearly indicates that he or she has realized or

recognized something new or different about him or herself. This sense of discovering something new about oneself can be expressed in the form of an observable expression of surprise (i.e., "aha" experience).

A clear example of what this item is measuring is found in the following verbalization, "The things we (therapist) talked about showed me a lot. I realized I use lying to get closer to people, but I have some questions about why I continue to lie." In order to merit a high rating (3), the patient verbalization must be specific regarding aspects of behaviour (i.e., lying), feelings, etc. so that the therapist does not have to probe the patient further in order to find out what this new realization is about. It must be clear to the rater that the patient has expressed something new about him or herself, or that the patient has recognized something about him or herself in a new way.

A patient verbalization that merits a moderate rating (2) is less specific in terms of what the new realization is about, for example, "I started to notice I'm very disapproving of others."

A patient verbalization that merits a low rating (1) is found in the following example, "I found some answers but I still have lots of questions." In this example, the new realization is very general in terms of what aspect of internal functioning this new awareness is about. The patient does not clearly identify that he or she has learned something new about him or herself.

2) The patient articulates the distinction between what the patient brings to his or her problems and what is contributed by external factors.

The patient's contributions to his or her problems can include internal dynamics, such as wishes, impulses, motivations, fears, or defensive processes used by the

patient, or the patient's own behaviours. External factors refer to factors outside of the patient that affect the patient, such as other's behaviour, job circumstances, or random events. External factors do not refer to the patient's own behaviour. To rate this item the patient must clearly differentiate between what the patient contributes to his or her problems in comparison to the contributions of external factors, either past or present. The patient must also identify the problem or issue that he or she is concerned about. The rater must have no doubt about the nature of the problem or issue that is being addressed by the patient.

In order for the patient verbalization to merit a high rating (3), the patient must clearly identify his or her problem, and the distinction between what the patient brings to his or her problems and what external factors contribute must be explicitly clear. The patient must clearly articulate what he or she contributes (e.g., motivations, behaviours) to his or her conflicts in contrast to factors outside of the patient. For example, a patient might say "I get mad at my girlfriends a lot when they want to spend time with their friends, that's their right, I suppose, but I end up feeling ignored. I know it's not their fault, but I pick a fight with them anyway...I almost *want* to fight with them." The patient is specific about what the external factors are (girlfriends spending time with their friends) and what he or she contributes (picking fights with them), makes a clear distinction between them, and identifies a problem that is of concern to him or her (feeling ignored). If the patient clearly differentiates between his or her contribution compared to external factors, but the problem is not clearly identified then a rating of "2.5" is merited. A verbalization that merits this rating is "I just can't help it when I yell at my kids but they're always running around

the house screaming and knocking things over.” In this example, the patient is clear about what she contributes (yelling at the kids) and what the external factors are (kids screaming and knocking things over), however the problem is not clearly identified (i.e., the problem may be that the patient has difficulty controlling her anger but this is not clearly articulated).

Moderate ratings (2) are merited if the patient is less clear about his or her problem, and the distinction between what the patient contributes to his or her problems in contrast to factors outside the patient is not clearly articulated. A verbalization that merits a moderate rating is “I wish I could have played sports, but it wasn’t my fault I couldn’t do those things, we were poor.” In this example, the patient’s problem is not clearly identified and the utterance is less informative about what the patient contributes to his or her problem (“it wasn’t my fault”) compared to what external factors contribute (“we were poor”).

Low ratings (1) are merited if the patient does not clearly identify his or her problem, and the patient only identifies either his or her contribution to the problem or what external factors contribute to the problem. An example of a verbalization that merits a low rating is “My boyfriend is a really affectionate guy and I know I hurt his feelings a lot when I don’t return the affection, but I’m not a cuddly person.” In this example, the patient’s problem is not clearly stated and she only identifies her contribution. If the patient’s problem is more clearly identified then a rating of “1.5” is merited. An example of a verbalization that merits a 1.5 rating is “I told my sister I have to study for exams next week but she’s going away on a holiday and hired the painters to come paint the house while she’s gone. And now I’m worried because I

don't know how I'm going to get any studying done." In this example the patient clearly articulates his or her problem (i.e., the problem is that the patient won't be able to study for exams) but only identifies an external factor that contributes to the problem.

3) The patient identifies a connection between elements of functioning of the self and/or of the self and others.

To rate this item, the patient must (1) identify ways an element of functioning (e.g., feelings, wishes, motivations, behaviours, perceptions, etc.) is connected to another element of functioning, *or* (2) identify ways in which an element of the patient's functioning is connected to elements of another person's functioning (the connection may be in either direction). There is a clear sense of connection or link, and this connection may involve reasons or causes. Thus the two types of connections are : within the patient and between the patient and others. Examples of connections involving elements of the patient's functioning only include: "I get depressed so I eat," "I slapped my daughter and afterwards I felt very guilty about what I had done." Examples of connections involving an element of the patient's functioning in interaction with elements of another person's functioning include: "My dad was never around when we were young, and when he was all he did was drink. And I still feel a lot of anger and resentment toward him because of that," "My son's grades have been falling in school ever since the divorce and I feel like I'm at fault." The connection has to be evident within the five minute segment. The absence of behaviours, e.g., "I was angry so I didn't go to the movies," are also rated.

In order for the patient verbalization to merit a high rating (3) both types of connection must be clearly expressed and they must be linked. That is, the two types of connections expressed must both be related to the same idea, topic, or thought process. For example, the patient might say "My parents fought so much when I was growing up that I'm afraid to get too close to someone, so I end up sabotaging my relationships." In this example the patient identifies connections within him or herself ("I'm afraid to get too close...I end up sabotaging my relationships") and in interaction with another person ("My parents fought...I'm afraid to get too close to someone"). Both elements are linked to the patient's fear of getting close. Or the patient might say "The thing that upset me also was because somebody else had to go to counseling because of me. I thought it was my fault and that really upset me. Because I was flying I hold myself responsible". In this example, the patient identifies a connection within him or herself ("Because I was flying I hold myself responsible) and in interaction with another person ("Somebody else had to go to counseling because of me...and that really upset me"). Both elements are related to the patient's "upset". Similar verbalizations qualify for high ratings. If the patient identifies both types of connections and the link they share but does not clearly articulate the elements or their relationship then a rating of "2.5" is merited.

Moderate ratings (2) are warranted if the patient identifies (1) one type of connection (either within the patient or between the patient and others) and it is clearly expressed, *or* (2) both types of connections but they are not linked. If both types of connections are identified but not linked, at least one of the connections has to be clearly articulated to merit a rating of "2". Patient verbalizations that merit a

moderate rating are: "I'm not outspoken when I feel angry...I don't want to hurt his feelings and I'm afraid the relationship will change if I express how I feel...so I cut myself instead," or "My mother was so overprotective of me when I was young, she never let me do anything on my own. And I think because of that I don't have a lot of confidence in myself." In the first example the patient's behaviour (cutting) is related to the experience of anxiety. This is an example of a "within patient" connection. Since there is no "between patient and other" connection linked to it, it only warrants a moderate rating. In the second example, the patient's low self-confidence is related to mother's overprotectiveness. This is an example of a "between patient and other" connection. Since there is no "within patient" connection linked to it, it only merits a moderate rating. However, in both situations, the patient is clear and specific about the connections.

A low rating (1) is assigned if the patient identifies (1) one type of connection (either within the patient or between the patient and others) but his or her articulation of the connection is not explicitly clear or the elements of the connection are not clearly expressed, or (2) both types of connections but they are not linked. If both types of connections are identified but not linked and they are not clearly articulated then a low rating is warranted. For example, a patient might say "I felt bad so I didn't call him," or "My ex-husband had a lot of affairs. I don't trust men." In the first example, although the connection is clear, the patient is vague about the elements (i.e., felt bad) of the connection. Also, there is no "between patient and other" connection linked to it, therefore it only merits a low rating. In the second example,

the patient makes a connection but it is vague and less informative, and there is no "within patient" connection linked to it so once again a low rating is warranted.

4) The patient identifies patterns within and across relationships.

This item is concerned with the patient's articulation of patterns within and across relationships, past or present. In order to rate this item the patient must (1) identify patterns in relationships with others and clearly make links/parallels between different relationships (e.g., behaves with person A as he/she does with person B), or (2) recognize patterns in others that are enacted by self (e.g., reflecting an identification with person A). The patterns may have to do with thoughts, expectations, behaviours, motivations, or feelings. Links may be between *past/past*, *past/present*, or *present/present*. The patient does not have to verbalize both types of patterns to merit a rating, i.e., *either* type of pattern qualifies for a rating on this item.

A higher rating (3) is merited if the patient (1) identifies a pattern and clearly articulates links between self and *two* specific people, *or* (2) clearly identifies a pattern within self that closely resembles the pattern clearly identified as belonging to another person. Verbalizations that merit a rating of "3" are: "My mother used to criticize me, and I would get so upset and defensive. And when my boss criticizes my work I often feel the same way" (linking mother and boss), "My dad would always leave the house when my parents argued, and I find that when my husband and I fight I do the same thing. I leave, not wanting to talk things through" (identification with father), or "I have a hard time apologizing when I'm wrong, and I often shift the blame to someone else, just like my mother who never accepts that sometimes it's her fault" (identification with mother). In the first example, the patient is specific about

the pattern and clearly makes a parallel between self and two specific people. Half ratings, such as 2.5, would be warranted if the patient makes a parallel between different relationships, but is only specific about one person. In the next two examples, the patient recognizes similar patterns in him or herself and in another person, and is specific about the pattern they have identified and internalized (e.g., leave the house, apologize).

A moderate rating (2) is merited if the patient (1) identifies a pattern and articulates a link between self and others, but only in general terms, *or* (2) recognizes a pattern in self and in others but is *vague regarding the pattern* they have identified and internalized. Verbalizations that provide a less definite example are “I don’t talk about my feelings, *I do that all the time with people,*” or “I handle my anger just like my mother.” In former example, the patient is clear and specific about the pattern, but is vague regarding parallels across the different relationships and does not make any links with regard to other specific people. In the latter example, the patient recognizes a similar pattern in self and in an other (mother), but is less specific about what the pattern is and expresses it in more general terms (e.g., handle anger).

Lower ratings (1) are merited if the patient (1) articulates a pattern in relationships but does not make any parallels between different relationships, *or* (2) recognizes a pattern in oneself and another person(s) but *does not articulate the specific pattern* they have identified and internalized. For example, a patient might say “I lie to manipulate my wife to act towards me how I want,” or “I’m just like my mother.” In the first example, the patient is clear and specific about his behaviour or motivations with others (wife) and how these constitute a pattern in his relationship, but he does

not make any links across to other relationships. In the second example, the patient indicates that in some way he or she behaves, feels, etc. in a parallel way to his or her mother, but *does not express what the specific pattern is*.

Half ratings, for example .5 may be given if the patient is not as specific about the elements of the pattern but indicates how this pattern is evident within a relationship. For example, a patient might say “I say what I think my boyfriend wants to hear.” Half ratings are also merited if the patient only identifies a pattern but does not indicate how this pattern is evident within a relationship, such as in the following example “I’ve always been the type of person to hide my feelings.”

Affective Items

In order to rate the following affective items an affective component has to be present within the five minute segment. Affective components include verbal and non-verbal expressions of affect. Examples of non-verbal expressions of affect include speech disturbances such as crying, weeping, raising the voice, sighing, etc. The rater is able to hear the emotion in the patient’s voice. However, these items also require that the patient must verbalize the feelings he or she is experiencing.

5) The patient displays an openness to examining internal experiences with the therapist.

This item addresses the degree of *openness* the patient exhibits concerning his or her problem and how *engaged in the process of therapy* the patient seems to be. A patient who is willing to examine internal experiences seems to want to get better and may question why he or she behaves or feels a certain way. Such a patient appears to be engaged in the process of self-observation (e.g., discussing affects, attitudes,

memories). A patient who is not open to examining internal experiences may be resistant to the therapist's probes or seems uninterested in focusing on internal dynamic components. The degree of openness that the patient displays can range from not disclosing anything about feelings to the therapist (a "zero" rating) to continuing to open up and talk about conflicts even if containing feelings appears to be difficult (a rating of "3").

Higher ratings (3) are merited if the patient seems to be willing to open up to the therapist and discuss his or her internal experiences (i.e., wishes, fears, etc.), and also talks freely about his or her feelings. For example, a patient might say "I started to notice I'm very negative and I feel bad about that," or "I get angry at myself talking about my lies and I feel guilty, I don't like making people feel bad." In these examples, the patients are specific about their fears/worries, are opening up to the therapist about the issues that are troubling them, and are expressing the feelings associated with their internal experience.

An example of a patient verbalization that merits a low rating (1) is "Well, I guess it bothers me mom left us, but I don't really think about it that much." In this example, the patient is reluctant about disclosing his or her internal experiences or the feelings associated with this issue. This patient appears to be dismissing the therapist, suggesting he or she is not willing to disclose anything too distressing or personal. As such, the patient's statement merits a low rating.

6) The patient expresses feelings associated with a developing rational understanding of his or her conflict.

To rate this item, the patient must disclose the emotions associated with a developing rational understanding of, e.g., a distinction between what the patient brings to his or her problems and external factors, a connection between internal experiences and external behaviour, or the identification of patterns within and/or between relationships. The patient is aware of and discloses the feelings or emotional processes underlying his or her concerns. The patient must disclose the emotions associated with an intellectual understanding of his or her personal conflict and/or self, behaviour patterns, motivations, etc. and clearly articulate those feelings. That is, the patient discloses the emotional reverberations of his or her cognitive understanding.

Higher ratings (3) are merited if the patient discloses his or her feelings and is clear and specific about what these feelings are, and articulates a deeper appreciation of internal dynamics (i.e. feelings, motivations) and their meaning to the patient's relationship to self or to others. There must be a compelling emotional quality to the patient's disclosure.

A low rating (1) is merited if the patient makes disclosures of the emotional implications associated with the cognitive understanding of his or her conflict, but the patient talks about these feelings in less concrete, vague, more general terms. The rater is aware that an emotional "punch" is absent from the patient's disclosure.

7) The patient expresses feelings in the here and now that are congruent with the articulation of a conceptual understanding.

In order to rate this item, the patient must display an immediate expression of affect that is congruent with a developing rational understanding, i.e., a distinction

between what the patient brings to his or her problems and external factors, a connection between internal experience and external behaviour, the identification of patterns in relationships, or the identification of parallel patterns. The patient is *experiencing* feelings in the present moment that are consistent with the patient's disclosure of the emotional implications associated with an intellectual understanding of a conflict and/or self. The patient must also *verbalize the feelings* he or she is experiencing and be clear and specific about what those feelings are.

A higher rating (3) is merited if the patient is emotionally involved in what he or she is saying and the expression of affect is immediate, clear, and parallels what the patient is describing. The patient is expressing feelings, *verbally and non-verbally*, that are congruent with what he or she is articulating. For example, a patient who is crying as he or she is talking about an abusive parent must also articulate that he or she is feeling "sad".

A moderate rating (2) is merited if the patient is experiencing feelings (non-verbally) in the present moment that are congruent with what he or she is discussing, but his or her articulation of those feelings into words is not clearly expressed. The patient may be vague or not very specific as to what those feelings are.

A lower rating (1) is merited if the patient is only expressing feelings non-verbally (e.g., crying) but does not articulate these feelings into words, or if the patient is expressing feelings verbally but without any emotional quality. However, the expression of affect, whether verbal or non-verbal, must be congruent with what the patient is discussing. A rating of "0" is merited if there is no expression of affect,

either verbal or non-verbal, or if the expression of affect is not consistent with what the patient is discussing.

Appendix B

Interpretive-Supportive Technique Scale

| 0 | 1 | 2 | 3 | 4 |
|----------------|-------------------|----------------------|--------------------------|-------------------|
| No Emphasis | Minor Emphasis | Moderate Emphasis | Considerable Emphasis | Major Emphasis |

The Therapist Attempted To:

1. gratify the patient, i.e., make the patient feel good rather than anxious in the session.
2. maintain pressure on the patient to talk, i.e., by at times remaining passive, by not breaking pauses, by not answering questions.
3. make noninterpretive interventions, i.e., reflections, questions, provisions of information, clarifications, and confrontations.
4. encourage the patient to explore uncomfortable emotions.
5. provide guidance similar to the role of family doctor, i.e., advise a course of action more appropriate to healthy functioning regarding self-care, life skills, or interpersonal behaviour.
6. make interpretations.
7. engage in problem solving strategies with the patient, i.e., generating and evaluating alternative solutions to external life problems.
8. direct attention to the patient's subjective impression of the therapist.
9. offer explanations that locate the responsibility for the patient's difficulties outside him- or herself, i.e., in the patient's environment, as a function of interpersonal transactions, or in the patient's body chemistry or physiology.
10. make links between the patient's relationship with the therapist and the patient's relationship with others.
11. praise the patient.
12. focus on the patient and therapist in the treatment situation rather than the patient and significant others outside the treatment situation.
13. display personal information, opinions, or values.
14. direct attention to the patient's subjective impression of others outside the treatment situation.

Appendix C

Patient Insight Manual – Revised

The Patient Insight rating form is an observer-based measure of insight that can be used to identify episodes of increased patient self-understanding during sessions of brief psychodynamic therapy. Insight is defined as the patient's articulation of an increased intellectual and emotional understanding of conflict (intrapsychic and interpersonal) and the ways in which conflicts contribute to personal problems. Intellectual insight refers to the acquisition of a rational understanding of personal conflict, including the identification of connections between internal experiences and behaviour with others and oneself, and the identification of parallels in relationship patterns. Emotional insight refers to the articulation of the affective implications of personal conflict and the here and now experience of those feelings.

Items on the Patient Insight rating form address observable behaviours commonly associated with the patient's experience of insight. The ratings reflect the degree to which each patient behaviour was present during the therapy interaction. The insight rating form consists of 6 items that are rated on a 4-point Likert-type scale, ranging from "0 = absent" to "3 = clearly present." Half ratings, scored as 1.5, 2.5, etc. are permitted. The six items address the salient characteristics of intellectual (3 items) and emotional insight (3 items).

The items that address intellectual insight consider the patient's development of a rational understanding of his/her personal conflict. The intellectual insight items include:

- 1) the patient articulates the distinction between what the patient brings to his or her problems and what is contributed by external factors;
- 2) the patient identifies a

connection between elements of functioning of the self and/or of the self and others; 3) the patient identifies patterns within and across relationships.

The items that address emotional insight consider the quality of the patient's articulation of the affective implications associated with an emerging cognitive understanding. The emotional insight items include: 4) the patient displays an openness to examining internal experiences with the therapist; 5) the patient expresses feelings associated with a developing rational understanding of his or her conflict; and 6) the patient experiences feelings in the here and now that are congruent with the articulation of a conceptual understanding.

Ratings for the insight items are assigned for a five minute segment from each 15-17 minute "third" of therapy sessions (5-10 minute segment, 20-25 minute segment, and 30-35 minute segment). For each of the five minute segments, ratings are assigned for the intellectual and emotional insight items. Scores for intellectual insight and emotional insight are calculated for each segment and for the entire session. A score for overall insight, based on an average of the two subscales, is calculated for the entire session. It is recommended that while listening to each recorded segment, the rater makes notes of the material that provides evidence for the subsequent rating of each item.

The rating of patient insight involves:

1. Identifying aspects of cognitive and affective insight behaviour for each five minute segment, and assigning a rating for those items.
2. Aggregating ratings across the items to obtain segment scores on cognitive, affective, and overall insight.

3. Aggregating scores across segments to obtain session scores on cognitive, affective, and overall insight.

How to Rate Patient Insight

1. The rater's focus is on a five minute segment from each third of the therapy session: 5-10 minute segment, 20-25 minute segment, and 30-35 minute segment.
2. Each five minute segment is rated for the presence of behaviours represented by the insight items (1 to 6). The insight items identified in each segment are rated according to the guidelines in the patient insight rating manual. The absence of evidence for an item in a segment defines a rating of "zero" for that item.
3. At the conclusion of each 5-minute segment, the rater calculates the average level of insight for each set of cognitive and affective items, and an overall insight score. This is done by a) summing all of the insight ratings for the cognitive items (including "zero" ratings) and dividing this sum by the total number of cognitive items (3), b) summing all of the insight ratings for the affective items (including "zero" ratings) and dividing this sum by the total number of affective items (3), and c) averaging the two subscale scores to get an overall insight score for that segment.

Patient Insight Rating Items

Cognitive Elements

- 1) The patient articulates the distinction between what the patient brings to his or her problems and what is contributed by external factors.**

The patient's contributions to his or her problems can include internal dynamics, such as wishes, impulses, motivations, fears, or defensive processes used by the patient, or the patient's own behaviours. External factors refer to factors outside of the patient that affect the patient, such as other's behaviour, job circumstances, or random events. External factors do not refer to the patient's own behaviour. To rate this item the patient must clearly differentiate between what the patient contributes to his or her problems in comparison to the contributions of external factors, either past or present. The patient must also identify the problem or issue that he or she is concerned about. The rater must have no doubt about the nature of the problem or issue that is being addressed by the patient.

In order for the patient verbalization to merit a high rating (3), the patient must clearly identify his or her problem, and the distinction between what the patient brings to his or her problems and what external factors contribute must be explicitly clear. The patient must clearly articulate what he or she contributes (e.g., motivations, behaviours) to his or her conflicts in contrast to factors outside of the patient. For example, a patient might say "I get mad at my girlfriends a lot when they want to spend time with their friends, that's their right, I suppose, but I end up feeling ignored. I know it's not their fault, but I pick a fight with them anyway...I almost *want* to fight with them." The patient is specific about what the external factors are (girlfriends spending time with their friends) and what he or she contributes (picking fights with them), makes a clear distinction between them, and identifies a problem that is of concern to him or her (feeling ignored). If the patient clearly differentiates between his or her contribution compared to external factors, but the problem is not

clearly identified then a rating of “2.5” is merited. A verbalization that merits this rating is “I just can’t help it when I yell at my kids but they’re always running around the house screaming and knocking things over.” In this example, the patient is clear about what she contributes (yelling at the kids) and what the external factors are (kids screaming and knocking things over), however the problem is not clearly identified (i.e., the problem may be that the patient has difficulty controlling her anger but this is not clearly articulated).

Moderate ratings (2) are merited if the patient is less clear about his or her problem, and the distinction between what the patient contributes to his or her problems in contrast to factors outside the patient is not clearly articulated. A verbalization that merits a moderate rating is “I wish I could have played sports, but it wasn’t my fault I couldn’t do those things, we were poor.” In this example, the patient’s problem is not clearly identified and the utterance is less informative about what the patient contributes to his or her problem (“it wasn’t my fault”) compared to what external factors contribute (“we were poor”).

Low ratings (1) are merited if the patient does not clearly identify his or her problem, and the patient only identifies either his or her contribution to the problem or what external factors contribute to the problem. An example of a verbalization that merits a low rating is “My boyfriend is a really affectionate guy and I know I hurt his feelings a lot when I don’t return the affection, but I’m not a cuddly person.” In this example, the patient’s problem is not clearly stated and she only identifies her contribution. If the patient’s problem is more clearly identified then a rating of “1.5” is merited. An example of a verbalization that merits a 1.5 rating is “I told my sister I

have to study for exams next week but she's going away on a holiday and hired the painters to come paint the house while she's gone. And now I'm worried because I don't know how I'm going to get any studying done." In this example the patient clearly articulates his or her problem (i.e., the problem is that the patient won't be able to study for exams) but only identifies an external factor that contributes to the problem.

2) The patient identifies a connection between elements of functioning of the self and/or of the self and others.

To rate this item, the patient must (1) identify ways an element of functioning (e.g., feelings, wishes, motivations, behaviours, perceptions, etc.) is connected to another element of functioning, *or* (2) identify ways in which an element of the patient's functioning is connected to elements of another person's functioning (the connection may be in either direction). There is a clear sense of connection or link, and this connection may involve reasons or causes. Thus the two types of connections are : within the patient and between the patient and others. Examples of connections involving elements of the patient's functioning only include: "I get depressed so I eat," "I slapped my daughter and afterwards I felt very guilty about what I had done." Examples of connections involving an element of the patient's functioning in interaction with elements of another person's functioning include: "My dad was never around when we were young, and when he was all he did was drink. And I still feel a lot of anger and resentment toward him because of that," "My son's grades have been falling in school ever since the divorce and I feel like I'm at fault." The connection

has to be evident within the five minute segment. The absence of behaviours, e.g., "I was angry so I didn't go to the movies," are also rated.

In order for the patient verbalization to merit a high rating (3) both types of connection must be clearly expressed and they must be linked. That is, the two types of connections expressed must both be related to the same idea, topic, or thought process. For example, the patient might say "My parents fought so much when I was growing up that I'm afraid to get too close to someone, so I end up sabotaging my relationships." In this example the patient identifies connections within him or herself ("I'm afraid to get too close...I end up sabotaging my relationships") and in interaction with another person ("My parents fought...I'm afraid to get too close to someone"). Both elements are linked to the patient's fear of getting close. Or the patient might say "The thing that upset me also was because somebody else had to go to counseling because of me. I thought it was my fault and that really upset me. Because I was flying I hold myself responsible". In this example, the patient identifies a connection within him or herself ("Because I was flying I hold myself responsible) and in interaction with another person ("Somebody else had to go to counseling because of me...and that really upset me"). Both elements are related to the patient's "upset". Similar verbalizations qualify for high ratings. If the patient identifies both types of connections and the link they share but does not clearly articulate the elements or their relationship then a rating of "2.5" is merited.

Moderate ratings (2) are warranted if the patient identifies (1) one type of connection (either within the patient or between the patient and others) and it is clearly expressed, *or* (2) both types of connections but they are not linked. If both

types of connections are identified but not linked, at least one of the connections has to be clearly articulated to merit a rating of "2". Patient verbalizations that merit a moderate rating are: "I'm not outspoken when I feel angry...I don't want to hurt his feelings and I'm afraid the relationship will change if I express how I feel...so I cut myself instead," or "My mother was so overprotective of me when I was young, she never let me do anything on my own. And I think because of that I don't have a lot of confidence in myself." In the first example the patient's behaviour (cutting) is related to the experience of anxiety. This is an example of a "within patient" connection. Since there is no "between patient and other" connection linked to it, it only warrants a moderate rating. In the second example, the patient's low self-confidence is related to mother's overprotectiveness. This is an example of a "between patient and other" connection. Since there is no "within patient" connection linked to it, it only merits a moderate rating. However, in both situations, the patient is clear and specific about the connections.

A low rating (1) is assigned if the patient identifies (1) one type of connection (either within the patient or between the patient and others) but his or her articulation of the connection is not explicitly clear or the elements of the connection are not clearly expressed, or (2) both types of connections but they are not linked. If both types of connections are identified but not linked and they are not clearly articulated then a low rating is warranted. For example, a patient might say "I felt bad so I didn't call him," or "My ex-husband had a lot of affairs. I don't trust men." In the first example, although the connection is clear, the patient is vague about the elements (i.e., felt bad) of the connection. Also, there is no "between patient and other"

connection linked to it, therefore it only merits a low rating. In the second example, the patient makes a connection but it is vague and less informative, and there is no "within patient" connection linked to it so once again a low rating is warranted.

3) The patient identifies patterns within and across relationships.

This item is concerned with the patient's articulation of patterns within and across relationships, past or present. In order to rate this item the patient must (1) identify patterns in relationships with others and clearly make links/parallels between different relationships (e.g., behaves with person A as he/she does with person B), or (2) recognize patterns in others that are enacted by self (e.g., reflecting an identification with person A). The patterns may have to do with thoughts, expectations, behaviours, motivations, or feelings. Links may be between *past/past*, *past/present*, or *present/present*. The patient does not have to verbalize both types of patterns to merit a rating, i.e., *either* type of pattern qualifies for a rating on this item.

A higher rating (3) is merited if the patient (1) identifies a pattern and clearly articulates links between self and *two* specific people, *or* (2) clearly identifies a pattern within self that closely resembles the pattern clearly identified as belonging to another person. Verbalizations that merit a rating of "3" are: "My mother used to criticize me, and I would get so upset and defensive. And when my boss criticizes my work I often feel the same way" (linking mother and boss), "My dad would always leave the house when my parents argued, and I find that when my husband and I fight I do the same thing. I leave, not wanting to talk things through" (identification with father), or "I have a hard time apologizing when I'm wrong, and I often shift the blame to someone else, just like my mother who never accepts that sometimes it's her

fault” (identification with mother). In the first example, the patient is specific about the pattern and clearly makes a parallel between self and two specific people. Half ratings, such as 2.5, would be warranted if the patient makes a parallel between different relationships, but is only specific about one person. In the next two examples, the patient recognizes similar patterns in him or herself and in another person, and is specific about the pattern they have identified and internalized (e.g., leave the house, apologize).

A moderate rating (2) is merited if the patient (1) identifies a pattern and articulates a link between self and others, but only in general terms, *or* (2) recognizes a pattern in self and in others but is *vague regarding the pattern* they have identified and internalized. Verbalizations that provide a less definite example are “I don’t talk about my feelings, *I do that all the time with people,*” or “I handle my anger just like my mother.” In former example, the patient is clear and specific about the pattern, but is vague regarding parallels across the different relationships and does not make any links with regard to other specific people. In the latter example, the patient recognizes a similar pattern in self and in an other (mother), but is less specific about what the pattern is and expresses it in more general terms (e.g., handle anger).

Lower ratings (1) are merited if the patient (1) articulates a pattern in relationships but does not make any parallels between different relationships, *or* (2) recognizes a pattern in oneself and another person(s) but *does not articulate the specific pattern* they have identified and internalized. For example, a patient might say “I lie to manipulate my wife to act towards me how I want,” or “I’m just like my mother.” In the first example, the patient is clear and specific about his behaviour or motivations

with others (wife) and how these constitute a pattern in his relationship, but he does not make any links across to other relationships. In the second example, the patient indicates that in some way he or she behaves, feels, etc. in a parallel way to his or her mother, but *does not express what the specific pattern is*.

Half ratings, for example .5 may be given if the patient is not as specific about the elements of the pattern but indicates how this pattern is evident within a relationship. For example, a patient might say “I say what I think my boyfriend wants to hear.” Half ratings are also merited if the patient only identifies a pattern but does not indicate how this pattern is evident within a relationship, such as in the following example “I’ve always been the type of person to hide my feelings.”

Affective Items

In order to rate the following affective items an affective component has to be present within the five minute segment. Affective components include verbal and non-verbal expressions of affect. Examples of non-verbal expressions of affect include speech disturbances such as crying, weeping, raising the voice, sighing, etc. The rater is able to hear the emotion in the patient’s voice. However, these items also require that the patient *must verbalize the feelings* he or she is experiencing.

4) The patient displays an openness to examining internal experiences with the therapist.

This item addresses the degree of *openness* the patient exhibits concerning his or her problem and how *engaged in the process of therapy* the patient seems to be. A patient who is willing to examine internal experiences seems to want to get better and may question why he or she behaves or feels a certain way. Such a patient appears to

be engaged in the process of self-observation (e.g., discussing affects, attitudes, memories). A patient who is not open to examining internal experiences may be resistant to the therapist's probes or seems uninterested in focusing on internal dynamic components. The degree of openness that the patient displays can range from not disclosing anything about feelings to the therapist (a "zero" rating) to continuing to open up and talk about conflicts even if containing feelings appears to be difficult (a rating of "3").

Higher ratings (3) are merited if the patient seems to be willing to open up to the therapist and discuss his or her internal experiences (i.e., wishes, fears, etc.), and also talks freely about his or her feelings. For example, a patient might say "I started to notice I'm very negative and I feel bad about that," or "I get angry at myself talking about my lies and I feel guilty, I don't like making people feel bad." In these examples, the patients are specific about their fears/worries, are opening up to the therapist about the issues that are troubling them, and are expressing the feelings associated with their internal experience.

An example of a patient verbalization that merits a low rating (1) is "Well, I guess it bothers me mom left us, but I don't really think about it that much." In this example, the patient is reluctant about disclosing his or her internal experiences or the feelings associated with this issue. This patient appears to be dismissing the therapist, suggesting he or she is not willing to disclose anything too distressing or personal.

As such, the patient's statement merits a low rating.

5) The patient expresses feelings associated with a developing rational understanding of his or her conflict.

To rate this item, the patient must disclose the emotions associated with a developing rational understanding of, e.g., a distinction between what the patient brings to his or her problems and external factors, a connection between internal experiences and external behaviour, or the identification of patterns within and/or between relationships. The patient is aware of and discloses the feelings or emotional processes underlying his or her concerns. The patient must disclose the emotions associated with an intellectual understanding of his or her personal conflict and/or self, behaviour patterns, motivations, etc. and clearly articulate those feelings. That is, the patient discloses the emotional reverberations of his or her cognitive understanding.

Higher ratings (3) are merited if the patient discloses his or her feelings and is clear and specific about what these feelings are, and articulates a deeper appreciation of internal dynamics (i.e. feelings, motivations) and their meaning to the patient's relationship to self or to others. There must be a compelling emotional quality to the patient's disclosure.

A low rating (1) is merited if the patient makes disclosures of the emotional implications associated with the cognitive understanding of his or her conflict, but the patient talks about these feelings in less concrete, vague, more general terms. The rater is aware that an emotional "punch" is absent from the patient's disclosure.

6) The patient expresses feelings in the here and now that are congruent with the articulation of a conceptual understanding.

In order to rate this item, the patient must display an immediate expression of affect that is congruent with a developing rational understanding, i.e., a distinction

between what the patient brings to his or her problems and external factors, a connection between internal experience and external behaviour, the identification of patterns in relationships, or the identification of parallel patterns. The patient is *experiencing* feelings in the present moment that are consistent with the patient's disclosure of the emotional implications associated with an intellectual understanding of a conflict and/or self. The patient must also *verbalize the feelings* he or she is experiencing and be clear and specific about what those feelings are.

A higher rating (3) is merited if the patient is emotionally involved in what he or she is saying and the expression of affect is immediate, clear, and parallels what the patient is describing. The patient is expressing feelings, *verbally and non-verbally*, that are congruent with what he or she is articulating. For example, a patient who is crying as he or she is talking about an abusive parent must also articulate that he or she is feeling "sad".

A moderate rating (2) is merited if the patient is experiencing feelings (non-verbally) in the present moment that are congruent with what he or she is discussing, but his or her articulation of those feelings into words is not clearly expressed. The patient may be vague or not very specific as to what those feelings are.

A lower rating (1) is merited if the patient is only expressing feelings non-verbally (e.g., crying) but does not articulate these feelings into words, or if the patient is expressing feelings verbally but without any emotional quality. However, the expression of affect, whether verbal or non-verbal, must be congruent with what the patient is discussing. A rating of "0" is merited if there is no expression of affect,

either verbal or non-verbal, or if the expression of affect is not consistent with what the patient is discussing.

Appendix D

Summary of Hierarchical Regression Analyses

Outcome Factor 1: General Symptomatology and Dysfunction

| Step | IV Entered | R^2 | R^2 Change | Partial F | df | p < | B |
|------|----------------------------|-------|--------------|-------------|------|-----|------|
| 1 | frequency of TI (TIRS) | .04 | .02 | .76 | 1,30 | .39 | .01 |
| 2 | insight | .06 | .02 | .74 | 1,29 | .40 | .20 |
| 3 | frequency x insight | .07 | .01 | .33 | 1,28 | .60 | .06 |
| 1 | concentration of TI (TIRS) | .09 | .06 | 1.83 | 1,30 | .29 | .00 |
| 2 | insight | .13 | .05 | 1.53 | 1,29 | .23 | .46 |
| 3 | concentration x insight | .21 | .08 | 2.80 | 1,28 | .11 | .21 |
| 1 | item 8 (ISTS) | .04 | .001 | .07 | 1,56 | .80 | .00 |
| 2 | insight | .04 | .001 | .04 | 1,55 | .84 | .03 |
| 3 | item 8 x insight | .10 | .06 | 3.50 | 1,54 | .07 | .21 |
| 1 | item 12 (ISTS) | .05 | .01 | .66 | 1,56 | .42 | -.07 |
| 2 | insight | .05 | .001 | .06 | 1,55 | .80 | .05 |
| 3 | item 12 x insight | .06 | .01 | .65 | 1,54 | .43 | .11 |

Appendix D continues

Appendix D (continued)

| Step | IV Entered | R ² | R ² Change | Partial F | df | p < | B |
|------|--------------------------|----------------|-----------------------|-----------|------|-----|------|
| 1 | item 6 (patient) (PTS) | .04 | .01 | .65 | 1,55 | .42 | .08 |
| 2 | insight | .04 | .00 | .002 | 1,54 | .96 | -.16 |
| 3 | item 6 x insight | .05 | .01 | .48 | 1,53 | .49 | .08 |
| 1 | item 6 (therapist) (PTS) | .05 | .01 | .68 | 1,56 | .42 | .11 |
| 2 | insight | .05 | .001 | .03 | 1,55 | .86 | .23 |
| 3 | item 6 x insight | .06 | .01 | .42 | 1,54 | .52 | -.11 |

Outcome Factor II: Social-Sexual Maladjustment

| | | | | | | | |
|---|-------------------------|-----|-----|------|------|-----|------|
| 1 | frequency | .14 | .12 | 4.28 | 1,30 | .05 | .04 |
| 2 | insight | .20 | .06 | 2.14 | 1,29 | .16 | .26 |
| 3 | frequency x insight | .21 | .01 | .44 | 1,28 | .51 | .06 |
| 1 | concentration | .16 | .16 | 5.87 | 1,30 | .02 | 3.33 |
| 2 | insight | .20 | .04 | 1.39 | 1,29 | .25 | .16 |
| 3 | concentration x insight | .21 | .02 | .60 | 1,28 | .45 | 3.38 |
| 1 | item 8 | .01 | .01 | .63 | 1,56 | .43 | .07 |
| 2 | insight | .03 | .02 | 1.19 | 1,55 | .28 | .09 |
| 3 | item 8 x insight | .05 | .02 | .91 | 1,54 | .35 | .11 |

Appendix D continues

Appendix D (continued)

| Step | IV Entered | R^2 | R^2 Change | Partial F | df | p< | B |
|------|--------------------|-------|--------------|-------------|------|-----|------|
| 1 | item 12 | .01 | .01 | .52 | 1,56 | .47 | .04 |
| 2 | insight | .03 | .02 | 1.28 | 1,55 | .26 | .07 |
| 3 | item 12 x insight | .05 | .01 | .68 | 1,54 | .41 | -.13 |
| 1 | item 6 (patient) | .004 | .002 | .09 | 1,55 | .77 | -.02 |
| 2 | insight | .03 | .02 | 1.17 | 1,54 | .29 | -.08 |
| 3 | item 6 x insight | .04 | .01 | .64 | 1,53 | .43 | .09 |
| 1 | item 6 (therapist) | .002 | .00 | .03 | 1,56 | .87 | .03 |
| 2 | insight | .03 | .03 | 1.46 | 1,55 | .23 | .28 |
| 3 | item 6 x insight | .03 | .01 | .27 | 1,53 | .61 | -.09 |

Outcome Factor III: Nonuse of Mature Defenses and Family Dysfunction

| | | | | | | | |
|---|-------------------------|-----|------|------|------|------|-------|
| 1 | frequency | .01 | .001 | .02 | 1,29 | .89 | .00 |
| 2 | insight | .16 | .19 | 2.31 | 1,28 | .14 | .39 |
| 3 | frequency x insight | .19 | .00 | .02 | 1,27 | .90 | -.12 |
| 1 | concentration | .02 | .02 | .48 | 1,29 | .50 | -1.73 |
| 2 | insight | .24 | .23 | 8.66 | 1,28 | .006 | .43 |
| 3 | concentration x insight | .31 | .07 | 2.78 | 1,27 | .11 | 7.67 |

Appendix D continues

Appendix D (continued)

| Step | IV Entered | R^2 | R^2 Change | Partial F | df | p < | B |
|------|--------------------|-------|--------------|-----------|------|-----|------|
| 1 | item 8 | .04 | .00 | .14 | 1,54 | .72 | .08 |
| 2 | insight | .04 | .00 | .01 | 1,53 | .91 | .03 |
| 3 | item 8 x insight | .09 | .04 | 2.49 | 1,52 | .12 | .20 |
| 1 | item 12 | .06 | .02 | 1.02 | 1,54 | .32 | -.78 |
| 2 | insight | .06 | .001 | .06 | 1,53 | .80 | .06 |
| 3 | item 12 x insight | .08 | .02 | 1.07 | 1,52 | .31 | .16 |
| 1 | item 6 (patient) | .13 | .09 | 5.65 | 1,53 | .02 | .24 |
| 2 | insight | .13 | .00 | .02 | 1,52 | .89 | .37 |
| 3 | item 6 x insight | .17 | .04 | 2.44 | 1,51 | .12 | -.19 |
| 1 | item 6 (therapist) | .05 | .01 | .69 | 1,54 | .41 | .12 |
| 2 | insight | .05 | .00 | .04 | 1,53 | .84 | -.38 |
| 3 | item 6 x insight | .07 | .02 | 1.03 | 1,52 | .31 | .21 |

Note: Gender was included in each analysis but is not reported.

IV = independent variable; R^2 = square of the multiple correlation coefficient; R^2 Change = change in R square statistic by adding or deleting an IV; F = used in testing significance of regression equation; df = degrees of freedom;

p = level of significance; B = unstandardized regression coefficients

Appendix E

Summary of Hierarchical Regression Analyses with Estimated Concentration of Transference Interpretations Scores

Outcome Factor I: General Symptomatology and Dysfunction

| Step | IV Entered | R^2 | R^2 Change | Partial F | df | p < | B |
|------|-------------------------|-------|--------------|-------------|------|-----|------|
| 1 | concentration of TI | .04 | .001 | .03 | 1,56 | .86 | -.78 |
| 2 | insight | .04 | .00 | .12 | 1,55 | .90 | .01 |
| 3 | concentration x insight | .10 | .06 | 3.45 | 1,54 | .07 | 5.49 |

Outcome Factor II: Social Sexual Maladjustment

| | | | | | | | |
|---|-------------------------|-----|-----|------|------|-----|------|
| 1 | concentration of TI | .08 | .08 | 5.10 | 1,56 | .03 | 2.89 |
| 2 | insight | .10 | .02 | .77 | 1,55 | .38 | .08 |
| 3 | concentration x insight | .14 | .05 | 3.14 | 1,54 | .08 | 4.82 |

Outcome Factor III: Nonuse of Mature Defenses and Family Dysfunction

| | | | | | | | |
|---|-------------------------|-----|-----|------|------|-----|------|
| 1 | concentration of TI | .01 | .01 | .30 | 1,55 | .58 | .28 |
| 2 | insight | .01 | .00 | .16 | 1,54 | .69 | .05 |
| 3 | concentration x insight | .04 | .03 | 1.70 | 1,53 | .20 | 4.12 |

Appendix E (continued)

| Step | IV Entered | R^2 | R^2 Change | Partial F | df | $p <$ | B |
|--|-------------------------|-------|--------------|-------------|------|-------|------|
| Outcome Measure: Mature Defenses | | | | | | | |
| 1 | concentration of TI | .05 | .04 | 2.45 | 1,56 | .12 | 2.09 |
| 2 | insight | .05 | .002 | .13 | 1,55 | .72 | .04 |
| 3 | concentration x insight | .13 | .08 | 5.09 | 1,54 | .02 | 8.42 |
| Outcome Measure: Role Family Dysfunction | | | | | | | |
| 1 | concentration of TI | .06 | .06 | 3.16 | 1,54 | .08 | 4.17 |
| 2 | insight | .07 | .02 | .88 | 1,53 | .35 | .12 |
| 3 | concentration x insight | .07 | .002 | .09 | 1,52 | .77 | 1.23 |

Note: Gender was included in each analysis but is not reported.

IV = independent variable; R^2 = square of the multiple correlation coefficient; R^2 Change = change in R square statistic by adding or deleting an IV; F = used in testing significance of regression equation; df = degrees of freedom; p = level of significance; B = unstandardized regression coefficients