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**RELATIONSHIP BETWEEN PREMATURE TERMINATION AND
CLIENT PERSONALITY VARIABLES**

By

Kenneth N. Murray

A THESIS

**Submitted to
Michigan State University
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ABSTRACT

RELATIONSHIP BETWEEN PREMATURE TERMINATION AND CLIENT PERSONALITY VARIABLES

By

Kenneth N. Murray

It is common for Psychotherapists to experience a rate of client attrition that exceeds 50%. The negative implications for those individuals who have terminated prematurely include their future psychological well being, increased need for medical services, and lower economic potential. This study examines the relationship of the interpersonal constructs of dominance and submission with premature termination. Demographic variables and psychiatric symptomatology are also examined. Clients from a Psychological training clinic were divided into an Early Dropout group (after 1 to 3 sessions; $N = 35$), a Late Dropout group (after 8-12 sessions; $N = 35$), and a Persister group (remaining in therapy at least 18 sessions; $N = 45$). A significant curvilinear interaction between level of dominance and gender was discovered ($F(2,107) = 4.04$, $p < .05$). Men who terminated early on in therapy revealed higher levels of dominance than men who terminated later in therapy and men who persisted. Women displayed a curvilinear pattern of termination in which those women who terminated therapy at an early stage as well as those women who persisted in therapy displayed lower levels of dominance than those who terminated after 8 to 12 sessions. Differences in gender socialization are discussed as a possible explanation for these results.

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INTRODUCTION

Premature termination, dropout, and client attrition are all phrases used to identify clients who terminate psychotherapy prior to the therapist's expectations of treatment duration necessary for a therapeutic gain. It is common for psychotherapists in independent practice as well as outpatient mental health facilities to experience a rate of premature termination of services, without prior therapist knowledge, that exceeds 50%. Pekarik (1983) found that 30% - 60% of outpatient psychotherapy clients terminate prematurely. Twenty percent of clients seen in Community mental health settings and forty percent of private practice clients terminate by the second session (Pekarik & Wierzbicki, 1986), and 20% to 25% of all people who show up for an intake session do not show up for any follow-up services (Epperson, Bushway, & Warman, 1983). This premature termination has a devastating effects upon an individual's future psychological well being, need for medical services, and economic potential (Pekarik, 1992). This is particularly disturbing considering only 25% of the people in the U.S. with a diagnosable mental disorder seek treatment of any kind (Regier, Narrow, Rae, Manderscheid, Locke, & Goodwin, 1993). Greater understanding of the root causes of these enormous attrition rates is necessary in order to provide therapists with information from which more effective therapeutic strategies may be fashioned.

Until very recently, most studies on psychotherapy dropout have focused on the easily obtainable demographic characteristics of clients and therapists. Among the variables that have been consistently found to be linked to attrition are race, education and socio-economic status (SES). In a 1993 article, Wierzbicki and Pekarik called for a more complex analysis of the variables involved in premature termination. This call has

been heeded by a number of studies (Beckham, 1994; Dahlsgaard, Beck, & Brown, 1998; Guze & Robins, 1970; Tryon, 1990; Tryon 1985; Frayn, 1992; Levinson, McMurray, Podell, & Weiner, 1978; Hilsenroth, et al., 1995; Piper, Joyce, Azim, & Rosie, 1994; Chisholm, Crowther, & Ben-Porath, 1997; Vaughn & Nowicki, 1999; Lorr, 1991). While these studies vary greatly with regard to treatment setting and the measures employed, in total they point towards the possibility of an underlying personality style present within the client that may be implicated in early termination from psychotherapy. They also indicate that the level of awareness of others personality styles as well as the degree of psychological impairment are also potential predictors of premature termination. While these studies do suggest that an underlying personality style might be one of the causative factors involved in premature termination this idea has not been thoroughly explored within the framework of a cohesive theory of personality. In furtherance of the work put forward in these studies a comprehensive personality theory that encompasses both pathological and healthy aspects of human beings should be utilized to explore the formation of the therapeutic alliance.

Harry Stack Sullivan's (1953) Interpersonal Theory of Personality as operationalized in Timothy Leary's (1957) Interpersonal Circumplex provides a format within which this exploration may take place. The foundation of Sullivan's work is rooted in the belief that human beings "become themselves in relation to others," such that, "growth, motivation, adjustment, and disturbances can be understood only within their social inter-relationships (Wolman, 1973)." Leary used this understanding provided by Sullivan to create a circumplex model of personality. Leary's circumplex is primarily used to investigate how traits and emotions are structurally similar. The underlying

assumption crucial to this view is that a relatively seamless circular ordering, or circumplex, is the most economical description of the relations among human traits and emotions.

In addition to demographic factors such as race, education and SES, it is posited that interpersonal style, interpersonal sensitivity, level of distress, as well as levels of anxiety and depression are all good predictors of client attrition. Information on the interpersonal styles that facilitates treatment and those that inhibit attendance to treatment is vital in devising new methods of intervention. It is hoped that this information will prove useful in developing new intake procedures and alliance building strategies that will foster adherence to therapeutic treatment. This in turn should decrease the general distress of those who feel the need for help but are not being adequately served.

Consequences of Attrition:

In the largest survey on psychosocial treatment ever conducted, Seligman (1995) found that 7,000 people who responded to a survey published by Consumer Reports reported incidences of psychological problems for which they sought help. Two thousand nine hundred of these individuals reported seeking some form of professional help. Of these respondents, Seligman reported that as the length of treatment increased client satisfaction with problem resolution increased. While this study has been criticized for its use of a broad, self-report survey sent out to the middle class subscribers of “Consumer Reports” of which only a fraction chose to respond, these results would seem to indicate that the length of treatment has a significant impact on the perceived effectiveness of that treatment.

High rates of attrition have devastating effects upon an individual's future psychological well being, need for medical services, and economic potential. Pekarik (1992) found that individuals who terminated early on in therapy (after one or two visits) reported significantly higher levels of distress on the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982) than clients who dropped out later in the course of treatment (three or more visits) and those who completed treatment. It is probable that this effect of premature termination may have greater negative effects upon those individuals who are experiencing a high level of distress at the time of termination.

In their meta-analytic review of 18 studies investigating the economic impact of therapy conducted between 1984 and 1994, Gabbard et al. (1997) found that psychosocial interventions have a significant impact on costs associated with clients such that inpatient treatments were significantly reduced as were work related impairments. The populations found to benefit most from this early intervention were those individuals experiencing schizophrenic disorders, bipolar affective disorder, and borderline personality disorder. Not only were future hospitalizations substantially decreased but job functioning increased as well, enhancing economic potential for these individuals.

Chiles, Lambert, and Hatch (1999) reported on a meta-analysis of 91 studies conducted between 1967 and 1997 that looked at the economic impact of psychosocial treatment on future medical costs. They found that the implementation of a wide array of psychosocial treatments decreased medical expenditures by an average of 20%. These cost savings were greater than the cost of the psychosocial intervention implemented in a large number of the studies analyzed.

More important than cost is the relationship between dropping out of therapy prematurely and the effect that has on clients who are prone to suicide. Few studies have examined the specific relationship between premature termination and suicide. Guze and Robins (1970) estimated a 15% lifetime probability for suicide among psychiatric patients with affective disorder. This suggests that a high number of at-risk patients who have received treatment did not remain in treatment long enough to receive benefit. Dahlsgaard, Beck, and Brown (1998) investigated response to cognitive therapy as a predictor of suicide. Their study include 17 outpatients who committed suicide and 17 matched outpatients suffering from similar mood disorders that did not commit suicide. Those who did commit suicide attended significantly fewer therapy sessions when compared to those who didn't commit suicide. In addition, more individuals who committed suicide were rated by their therapists as terminating prematurely from therapy (88%) as compared to those who did not commit suicide (53%). This study suggests that an inadequate response to therapy coupled with premature termination has an "unfavorable prognostic significance for eventual suicide (p. 197)."

Up to 40% of people seeking professional help for psychological difficulties drop out of treatment after two sessions (Pekarik & Wierzbicki, 1986). These first sessions are the point at which the therapeutic alliance forms and it is upon this alliance that treatment depends. While many studies have been undertaken to better understand the variables involved in premature termination the vast majority have been limited to demographic variables that account for dropout rates.

Factors Involved in Premature Termination

Until very recently, most studies on psychotherapy dropout have focused on the easily obtainable demographic characteristics of clients and therapists. While securing this datum is relatively easy, the information that it presents can hardly be called definitive. Increased risk for dropout has been found to be associated with minority race, less education, and low socio-economic status (SES). It should be noted that effect sizes for most of these studies have been relatively small.

Wierzbicki and Pekarik (1993) conducted a meta-analysis of 125 psychotherapy dropout studies. In this analysis the mean dropout rate was 46.86%, falling within the previously cited range of premature termination (30% - 60%). They found that only two variables were consistently related to dropout in these studies. The first was the definition of psychotherapeutic dropout that was used. Dropout was defined by either therapist judgment, number of sessions attended, or the failure to attend a scheduled session. Failure to attend a scheduled session was the definition that recorded the least amount of dropout presumably because it required a client to schedule an appointment and then miss the appointment to be classed a dropout from psychotherapy. If the client did not schedule an appointment, even if highly symptomatic, the person was not considered a dropout. Wierzbicki and Pekarik concluded that the most flexible measure of dropout, therapist judgment, is the superior method because the therapist has the best idea of where the client is in the treatment course. The psychometric difficulty with this position is one of internal as well as external validity. The subjectivity of individual therapist's judgment does not allow for a consistency between therapists or even between clients within one therapist's practice. It would seem that number of sessions attended

provides a rough compromise between these two definitions. This definition takes the subjective element of both the client and the therapist out of the equation and allows for a precise operationalization of dropout criterion. While the cut-off points for this definition might be somewhat arbitrary, the advantage to internal consistency is pronounced.

The other class of variable that accounted for higher dropout rates in the Wierzbicki and Pekarik study were those variables related to minority racial status, lower education, and low SES. They conclude that this information does not shed much light on dropout rates and that more complex psychological variables should be examined.

Beckham (1994) found that a negative impression of the therapist by the patient was an essential predictor of dropout in his study of attrition at a medical school outpatient mental health clinic. Suggested in this article was a sensitivity factor in which people who dropout may be more sensitive to the therapist's personality and style than are those who remain in therapy. Missed and canceled appointments early in treatment were also negatively prognostic for staying in treatment.

Tryon (1990) speculates that the factors involved in premature termination vary with respect to the point at which termination occurs. Premature termination was found to be influenced by the level of disturbance, such that people who were experiencing greater levels of distress were more likely to remain in therapy, as well as those who had a high motivation to change. In a 1985 paper, Tryon postulates that the first few sessions are a period in which the client and therapist become engaged with one another. If this engagement process is successful, a therapeutic alliance is formed and the client is likely to continue treatment.

The strength of the therapeutic alliance was found to be a significant factor in client dropout in a study conducted by Frayn (1992). In this article he states:

It appears that patients who tend to do poorly, bring negative dynamic factors to the treatment situation that persist across hours of psychotherapy rather than just being episodic misunderstandings. These resistance factors and nonfacilitating qualities may be intransigent to the therapist's efforts to alter the impending termination or resolve the stalemate (p. 251).

That same study found clinical functioning, levels of introspection, frustration tolerance, and impulse control to be significant predictors of client attrition. While this study was small and the measures not in widespread use, the results would seem to indicate that there are personality traits predictive of premature termination.

In a descriptive study of thirty private practice patients who dropped out prematurely, Levinson, McMurray, Podell, and Weiner (1978) found that reactive factors were common (e.g., fear of loss of defenses, fear of dependence, fear of aggression, transference) as well as intrinsic factors (e.g., masochism, negativism, paranoia). Reactive factors were found in 87% of the patients that dropped out, while intrinsic factors were influential 57% of the time.

Hilsenroth, et al. (1995) used the Rorschach in an effort to find indices of premature termination. They found that individuals who dropped out of therapy before the eighth session tended to provide responses that included more cooperative movement responses, fewer texture responses, and fewer aggressive movement responses compared with patients staying in treatment. The authors suggest that this pattern of response is indicative of an individual who has less need for close interpersonal contact. Piper, Joyce, Azim, and Rosie (1994) found that in a day treatment setting for psychiatric outpatients, psychological mindedness and quality of object relations (which

characterizes the patient's lifelong pattern of relationships) were the best predictors of patients remaining in and benefiting from the program. They further reported that patients who were married and who had a more mature history of relationships were more likely to stay in treatment.

In their article on the utility of the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, et al., 1989), Chisholm, Crowther, and Ben-Porath (1997) found the anxiety scale to be of some utility in predicting dropout. This limited utility may be explained by the diagnostic orientation of the MMPI-2 (Laforge, Freedman, & Wiggins, 1985). This orientation does not provide an opportunity to test for the full range of an individual's interpersonal orientation.

While these studies vary greatly with regard to the measures employed as well as the treatment setting, in total they point towards the possible impact of an underlying personality style that may be implicated in early termination from psychotherapy. Some studies also indicate that the degree of awareness of the therapists personality style that a client possesses (Beckham, 1994) as well as the degree of clinical impairment present in a client are also potential predictors of premature termination (Tryon, 1990). What seems called for is a more comprehensive personality theory on interpersonal factors that has been operationalized in such a way as to allow measurement of the factors that may be implicated in premature termination. Consequently the Leary Interpersonal Circumplex Model was utilized to investigate possible personality factors implicit in premature termination.

The Interpersonal Circumplex

Harry Stack Sullivan's Interpersonal Theory of Psychiatry (1953) introduced a theory of personality development that expanded the investigation beyond the internal workings of the individual to include the social interactions of the individual. He defined psychiatry as "the field of study of interpersonal relations, emphasis being placed upon the interaction of the participants in a social situation, rather than being centered exclusively on the private economy of either one of those participants (p. ix, Sullivan, 1954)". It was his belief that an understanding of an individual's motivation, growth, adjustment, and disturbances can be fully realized only within the social inter-relationships that the individual participates in. Sullivan theorized that there exists within man two basic needs. These are the need for security and the need for satisfaction. Emotional disturbances occur when a conflict arises between these two needs. This being the case, Sullivan felt that the unit of clinical study of most import was that of a client's interpersonal relationships at a given point in time (Klerman, et al., 1984).

Within Sullivan's theory, relationships are characterized by complementary personality styles. The conceptual framework underlying his theory suggests that individuals interact with other people in an attempt to reduce anxiety. This anxiety reduction is accomplished through seeking affirmation of self-concept within the contact established with others. When these goals are attained, the interaction is complementary. However, he did not offer ways to measure and categorize the types of interactions that produced complementarity.

The Interpersonal Circumplex was devised by Leary (1957) as a means of operationalizing Sullivan's (1953) theory. This circumplex model of personality is

primarily used to investigate how traits and emotions are structurally similar. The underlying assumption crucial to this view is that a relatively seamless circular ordering, or circumplex, is the most economical description of the relations among human traits and emotions. “The circumplex model allows a broader view of personality and of the interpersonal relationships integral to understanding just what makes a personality the way it is” (p. 3, Plutchik & Conte, 1997). In Leary’s circumplex model, interpersonal behaviors are laid out on two separate axes (see fig. 1). One of these axes is used to represent a status dimension that is indicative of the level of dominance or submissiveness present in a relationship. The other axis is used to represent an affiliation dimension. This affiliation axis affords a measurement on a continuum from hostility to friendliness. These two orthogonal dimensions allow personality styles to be arranged into 4, 8, 16, and 32 divisions that are differentiated from one another by greater or lesser degrees of

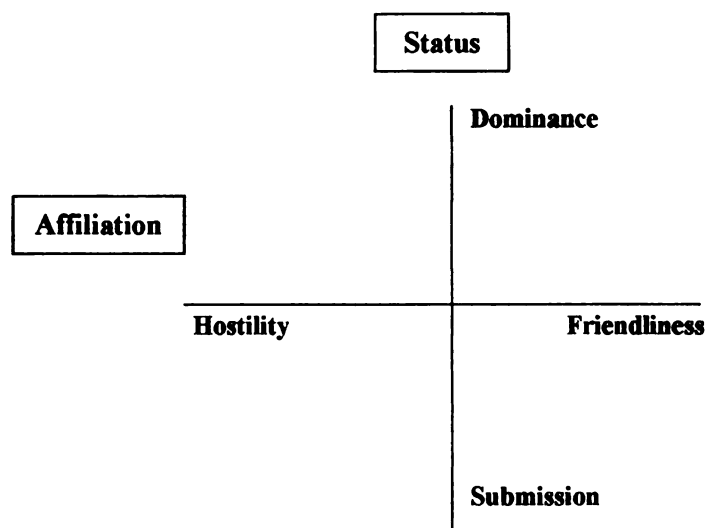


Fig. 1
Axes of Interpersonal Domains (Laforge, et al, 1954)

status and affiliation (fig. 2). Leary held that 16 divisions (sixteenths) was the optimal number of categories needed to represent the interpersonal schemas of clinicians. Much work has been completed in searching for the optimal number of categorical divisions which provide the maximum amount of information while still providing the most categorically distinct information (Wiggins, 1985). Lorr and McNair (1965) found that sixteenths held the factor structure put forth by Leary.

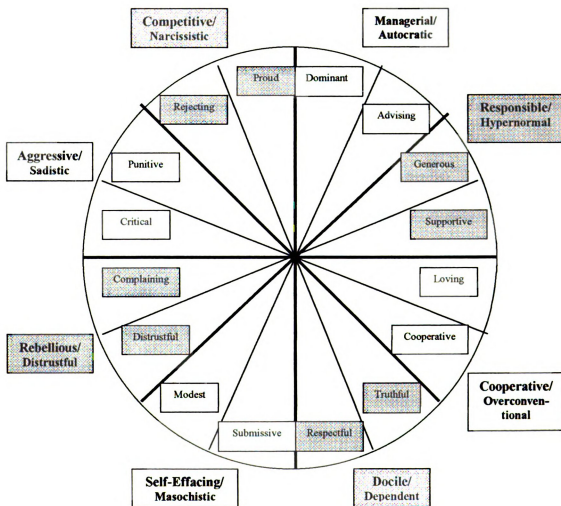


Fig. 2
The Interpersonal Circumplex (Leary, 1957)

Truckenmiller and Shaie (1979) found that the factor structure as posited by Leary held better when divided into octants, or the division of the circumplex into eight divisions, and stronger still when divided into the four quadrants which represent the original two orthogonal dimensions. The Interpersonal Circumplex Model, developed by Leary (1957) and others, provides a theoretical viewpoint through which a greater range of interpersonal orientations may be examined (Vaughn & Nowicki, 1999).

Within a circumplex model, complementarity is defined by personality styles that are opposite on the status dimension and similar on the affiliation dimension. Therefore, a friendly-dominant personality style would be the complement of a friendly-submissive style, and a hostile dominant style would serve the same function for a hostile-submissive style. In contrast, anticomplementarity is defined by personality styles that are similar on the status dimension and different on the affiliation continuum. According to interpersonal theory, complementary interpersonal styles maximize the reduction of anxiety and confirm self-concepts, whereas anticomplementary personality styles increase anxiety and do not confirm self-concepts (Carson, 1969).

This idea of complimentary and anti-complimentary styles is important to Leary's model because he suggested that they are expressed reflexively in an involuntary, automatic, spontaneous manner. Furthermore, he posited that psychologically healthy, or adaptive individuals, have more conscious control of their interpersonal style allowing them to regulate their feelings of anxiety. Maladaptive individuals exhibit less flexibility in their interpersonal style, remaining wedded to one style that is used within almost all of their interpersonal situations. The interactions engendered by these maladaptive individuals tend to elicit responses that reinforce the use of that style. In other words,

“interpersonal reflexes tend to initiate or invite interpersonal responses from the other person in the interaction that lead to a repetition of the original reflex (p. 123; Leary, 1957).”

Studies Involving Leary's Model

In a study of 24 male and 24 female college students, Vaughn and Nowicki, (1999) used the Interpersonal Adjective Scale-Revised (IAS-R; Wiggins, 1991) to assess interpersonal style. This scale is based upon Leary's Circumplex Model and includes 64 interpersonal adjectives to assess individual interpersonal styles. They found that women described close, same-gender relationships as being different from themselves in status. This was particularly evident when comparisons were made with relationships that were characterized as being “not close”. In contrast, men did not report a significant relationship between the closeness of their relationships and the degree of affiliation or status.

Lorr (1991) found that the submissiveness quadrants of the Circumplex compliment the dominant end of the continuum when the individual is in a relationship with a superordinate (e.g. parent or employer). As the therapeutic alliance forms the perception of the relationship by the client moves from one of submission to an authority figure to that of an egalitarian relationship. Lorr goes on to explain that as a relationship moves towards this egalitarian stance, submissive behaviors transform themselves into non-directive behaviors. The heart of some views of the therapeutic alliance, in a host of theoretical clinical orientations, revolves around this idea of establishing a non-directive relationship.

Summary

Premature termination, dropout, and client attrition are all phrases used to identify clients who terminate psychotherapy prior to the therapist's expectations of duration necessary for a therapeutic gain. Pekarik (1983) found that 30% - 60% of outpatient psychotherapy clients terminate prematurely. High rates of attrition have devastating effects upon an individual's future psychological well being, need for medical services, and economic potential (Pekarik, 1992).

Until very recently, most studies on psychotherapy dropout have focused on the easily obtainable demographic characteristics of clients and therapists. In a 1993 article, Wierzbicki and Pekarik called for a deeper analysis of the variables involved in premature termination. This call has been heeded by a number of studies which have found that aside from race, education and SES, other variables point towards a underlying personality style that is more prone to premature termination. These factors include increased interpersonal sensitivity and anxiety, decreased levels of distress and need for close interpersonal contact, as well as the degree to which the individual is dominant or submissive.

Harry Stack Sullivan's (1953) Interpersonal Theory of Personality as operationalized in Timothy Leary's (1957) Interpersonal Circumplex in conjunction with the Symptom Check List of Derogatis (1983) provides an excellent format within which this exploration may take place. Given the previous literature the following hypotheses are proffered.

HYPOTHESIS

1. There will be a statistically significant difference in interpersonal style between the Early Dropout Group, the Late Dropout Group and the Persisters such that those remaining in therapy longer will have begun therapy in a more submissive stance than those who dropped out at an earlier point in therapy (as measured by the Status dimension of the ICL).

Rationale:

As discussed by Lorr (1991) the client begins the therapeutic process by projecting onto the therapist the role of an authoritarian figure. This representation gradually becomes replaced with an egalitarian relationship as the therapeutic alliance strengthens. Individuals shape relationships in ways that reduce anxiety. The complementarity portion of the Interpersonal Circumplex model posits that individuals who are submissive will experience anxiety reduction when relating to another who is dominant such as an authority figure. Individuals who are dominant will experience elevated levels of anxiety when relating to a dominant authority figure. This elevated level of anxiety is aversive and will precipitate premature termination.

2. Exploratory analysis will be employed to examine how both octants and sixteenths from the ICL will bear out the general conclusion from hypotheses 1.

Rationale:

There is some question as to the optimal number of categorical divisions that provide the maximum amount of information while still providing the most categorically distinct information. This being the case, it seems prudent to examine not only

respondents with respect to interpersonal quadrants but to also look at the relationships that appear within the octants and sixteenths as well.

3. For those people who rate themselves as being more submissive on the ICL, distress level (as measured by the GSI scale of the SCL-90-R) will be higher in the Persisters than the Late Dropout Group, and both groups will be experiencing a higher level of distress than the Early Dropout Group. This relationship will be reversed for those who rate themselves as dominant such that initial distress levels will be lower for individuals who remain in therapy longer.

Rationale:

Leary posited that maladaptive individuals exhibit less flexibility in their interpersonal style, remaining wedded to one style that is used within almost all of their interpersonal situations. More adaptive, psychologically healthier individuals have more control of their interpersonal style. Tryon (1990) found premature termination to be influenced by the level of disturbance, such that people who were experiencing greater levels of distress were more likely to remain in therapy. Those individuals who are more submissive will find the initial stages of therapy to be anxiety reducing and so will tend to remain, especially if their level of distress outside of therapy is great. Those people who are more dominant with respect to interpersonal style will be more likely to remain in therapy if they are experiencing lower levels of distress because they will be better able to modulate their interpersonal style to fit the therapeutic situation.

4. This study will examine the factor structure of the SCL-90-R.

Rationale:

The SCL-90-R was developed to elicit client distress within nine symptom factors. This factor structure has been questioned in the literature and so will be examined in this study. It has been noted that as distress level increases the factor structure of the SCL-90-R deteriorates. Should the nine-factor model originally posited by Derogatis (1983) hold then all of the subscales will be examined for correlations to client attrition.

5. It is hypothesized that the Interpersonal Sensitivity subscale, Anxiety subscale, and Depression subscale of the SCL-90-R will all be significant predictors of premature termination as will minority racial status, lower education, and low SES

Rationale:

This hypothesis is raised to replicate the findings of Beckham (1994), Chisholm, Crowther, and Ben-Porath (1997), and Wierzbicki and Pekarik (1993). Beckham suggested the importance of a sensitivity factor in which people who dropout may be more sensitive to the therapist's personality and style than are those who remain in therapy. Chisholm, Crowther, and Ben-Porath found the anxiety scale of the MMPI-2 to be of utility in predicting premature termination. In their meta-analysis of 125 studies, Wierzbicki and Pekarik (1993) found that the most common variables found to be responsible for premature termination were race, education and socio-economic status (SES).

METHODS

Participants:

Data for this study were obtained from the Michigan State University (MSU) Psychological Clinic, a teaching and research facility associated with the Psychology Department at MSU. The Michigan State University (MSU) Psychological Clinic is an income adjusted, fee for service, non-profit serving the general population of the greater Lansing area. The clients seen are predominantly working and middle class people who present with a wide variety of psychopathology including, but not limited to moderate to severe depression and anxiety, eating disorders, anger control difficulties, and interpersonal relationship difficulties.

One Hundred and Fifteen participants participated in this study, 35 of whom were in the Early Dropout Group (premature termination after 1 to 3 therapy sessions), 35 of whom were in the Late Dropout Group (premature termination after 8 to 13 therapy sessions) and 45 of whom were in the Persister Group (completing at least 18 therapy sessions). Of those who participated 35 were males and 80 were females. The mean age of the participants was 30.5 years of age ($SD = 9.42$) with a mean education level of 14.46 years ($SD = 2.40$) and a mean income level of \$13,602 ($SD = \$10,851$). The vast majority of this sample was Caucasian ($N = 98$), with 6 African American, 5 Hispanic, 1 Asian, participants. Three participants classified themselves as Other with respect to race.

Therapists:

The therapists utilized for this study were graduate students working towards a degree in clinical psychology within the Michigan State University (MSU) Psychology Department. All student therapists included in this study were working in the MSU Psychological Clinic at the time data were collected. Second to fourth year trainees as well as advanced trainees with several years of post-masters experience were be utilized for this study. The therapists had all completed graduate courses in assessment procedures as well as in theories of psychotherapy. The majority of therapists had a psychodynamic orientation with other treatment orientations being represented to a lesser extent. Since this study was be conducted after therapy had been completed, both therapists and clients were blind to the hypotheses and purposes of this study.

Procedures

During the initial intake interview at the MSU Psychological Clinic, potential participants were asked to take part in the ongoing MSU Psychotherapy Research Project. They were informed that their choice to participate or not participate will not affect the services they were to receive. A small incentive was offered. If they chose to participate and complete the necessary pre- and post-therapy forms, they were given a refund equal to ten percent of their fees paid for therapy up to a maximum of eighty dollars. Clients who agreed to participate were asked to complete a consent form, the Interpersonal Check List (ICL), the Symptom Checklist 90 Revised (SCL90-R) as well as a demographic questionnaire prior to their first therapy session.

All clients were assigned student clinicians with experience ranging from one to three years of formal training in psychological assessment and intervention. Participants who completed the battery of questionnaires, returned them at their first session of psychotherapy, and then dropped out of treatment prior to a third therapy session, were entered into the “Early Dropout” group. Those who dropped out of therapy after 8 to 12 sessions were entered into the “Late Dropout” group. Research participant who persisted in treatment beyond eighteen sessions of therapy were entered in a “Persister” comparison group.

Measures:

Interpersonal Check List (ICL): The ICL (La Forge & Suczek, 1955) is one of the most widely used instrument to operationalize interpersonal theory. Developed by Leary and colleagues (Laforge, Leary Naboisek, Coffey, & Freedman, 1954; Laforge & Suczek, 1955; Leary & Coffey, 1955) it has been used in well over 200 studies (LaForge, 1977; Paddock, 1982). The Leary (1957) circumplex model is designed to measure interpersonal style on two major domains of interpersonal behavior. The first of these domains varies along a continuum between dominance and submissiveness. The second domain varies along a continuum of affiliation and hostility. When scored, it yields two summary indices representing the two major dimensions of interpersonal style: status (dominance-submissiveness, or Dom.) and affiliation (hostility-friendliness, or Lov.). These may be further divided to form 16 different interpersonal styles. The questionnaire examines each of these styles by injecting eight different adjectives into questions designed to focus on each domain.

The ICL is comprised of 128 items constructed of 8 unique adjectives or adjective phrases which are keyed to 16 interpersonal variables (Paddock & Nowicki, 1986). Each variable has, “one intensity 1 item which reflects a mild or necessary amount of the trait ... three items refer to intensity 2, a moderate or appropriate amount of the trait ... three words reflect intensity 3, a marked or inappropriate amount of the trait, and one word expresses intensity 4, and extreme amount of the trait” (Leary, 1957, p.455).

Several studies have reported an adequate level of test-retest reliability for self-report ratings of the DOM and LOV summary scores ($r > .70$) (Laforge, 1977; Laforge & Suczek, 1955). Internal consistency has not been reported in studies for either octants or sixteenths. Concurrent validity has been established in studies utilizing mothers ratings of 360 normal children and 65 severely disturbed children (Guerney, Meininger, & Stover, 1973). In a study by Paddock, et al. (1984) in which normal high school students were compared to severely emotionally disturbed high school students revealed that the use of the ICL correctly classified 65 and 75% of the normal and severely emotionally disturbed students respectively. Several studies have related ICL scores to other psychometric instruments such as the California Personality Inventory, Cattell’s 16 Personality Factor Questionnaire, and the MMPI in order to establish convergent and discriminant validity (Gynther, Miller, & Davis, 1962; Hamilton, 1971; Laforge, 1977; Leary & Coffey, 1955). While accounting for a relatively small proportion of the variance in these studies, the predicted relationships were statistically significant.

Symptom Checklist 90 Revised (SCL-90-R): The SCL-90-R (Derogatis, 1983) is a self-report measure of the test taker's psychological distress and associated symptoms

that will be used to measure participants' level of psychopathology at the time of their entering therapy. It is a 90 item self-administered questionnaire composed of nine subscales measuring nine symptom dimensions: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Participants are asked questions about the symptoms they are experiencing. These questions are designed to elicit the degree of distress they are experiencing over this range of symptoms (e.g., headaches, nervousness, shakiness, etc.) by having them rate each item on a Likert type scale that ranges from 0, not at all, to 4, extremely. Means are then computed for each of the nine subscales. A Global Severity Index (GSI) is computed as the sum of all item responses divided by 90. According to Derogatis (1983), the GSI is the best single indication of the current level of psychological distress.

Validity and reliability of the SCL-90-R are discussed at length in the Administration, Scoring and Procedures Manual (Derogatis, 1983). Internal Consistency and test-retest reliability were the methods employed to ascertain the instruments reliability. Internal consistency was established using a sample of 219 symptomatic individuals. Coefficient alphas obtained from this sample ranged from a low of .77 for psychoticism to a high of .90 for depression. All coefficients were within satisfactory limits (Derogatis, Rickels & Rock, 1976). A test-retest reliability study was performed utilizing 94 psychiatric outpatients. Participants were administered the instrument twice with a one week time span between testing. Coefficients ranged from .78 for hostility to .90 for phobic anxiety (Derogatis, Rickels & Rock, 1976).

Criterion and construct validity of the SCL-90-R has also received attention. Criterion validity has been established in a number of studies (Prusoff, Weissman, Klerman & Rounsaville, 1980; Derogatis, Meyer & King, 1981; Derogatis, 1977). These studies have found the SCL-90-R capable of measuring the type and severity of psychological symptomatology experienced by the individuals under study. Construct validity has also received significant attention. Derogatis, Rickels and Rock (1976) compared the dimension scores of 119 symptomatic individuals on the SCL-90 with their scale scores on the MMPI. This study found that each dimension of the SCL-90 correlated to the greatest degree with a like construct on the MMPI. Similar results have been found in other studies (Prusoff, Weissman, Klerman & Rounsaville, 1980; Derogatis, Meyer & King, 1981; Derogatis, 1977).

Derogatis and Cleary (1977) performed a confirmatory factor analysis utilizing a stratified sample of 1002 outpatient psychiatric patients from a diverse community in a large eastern state. The results confirmed the hypothesized structure of the instrument. This factor structure has been questioned in more recent literature. Vassend and Skrandal (1999) have found that the factor structure of the instrument collapses as distress increases such that at high levels of distress the only factor remaining is a negative-affect factor. This factor structure will also be examined in this study.

The instrument has been well accepted in the field of clinical assessment. An earlier version of the SCL-90-R (the SCL-90) was, at one time included in an NIMH standard psychotherapy outcome research test battery (Waskow & Parloff, 1975). The instrument has proven itself valid and reliable with subject comparable to the current study. While there is some concern regarding its ability to discriminate between

symptom domains in people at high levels of distress, the GSI scale is an excellent measure of overall distress. Towards this end, the primary scale used for this study will be the GSI. A factor analysis will be run and if the factor structure holds within reasonable bounds then the nine subscales will be utilized.

Demographics (Derogatis, 1977). Demographics were collected using the intake-rating portion of the SCL-90-R. Demographic information collected include age, sex, ethnicity, marital status, source of income, income level, educational level, and occupational level.

RESULTS

One Hundred and Fifteen participants participated in this study, 35 of whom were in the Early Dropout Group (premature termination after 1 to 3 therapy sessions), 35 of whom were in the Late Dropout Group (premature termination after 8 to 13 therapy sessions) and 45 of whom were in the Persister Group (completing at least 18 therapy sessions). Of those who participated 35 were males and 80 were females. The mean age of the participants was 30.5 years of age ($SD = 9.42$) with a mean education level of 14.46 years ($SD = 2.40$) and a mean income level of \$13,602 ($SD = \$10,851$). The vast majority of this sample was Caucasian ($N = 98$), with 6 African American, 5 Hispanic, 1 Asian, participants. Three participants classified themselves as Other with respect to race.

The first hypothesis stated that there would be a statistically significant difference in interpersonal style between the Early Dropout Group, the Late Dropout Group and the

Persisters such that those remaining in therapy longer would have begun therapy in a more submissive stance than those who dropped out at an earlier point in therapy (as measured by the Status dimension of the ICL). A One-way ANOVA with trend analysis was run to test this hypothesis. While the main effect ($F(2,110) = 2.29, p > .05$) and the linear trend ($F(1,110) = .237, p > .05$) were not significant the quadratic trend was significant, $F(1,110) = 4.22, p < .05$ (see Table 1). This hypothesis was partially supported by the significant quadratic trend such that the Late Dropout Group displayed greater levels of dominance ($M = -1.64$) than the Persisters ($M = -11.21$). The curvilinear trend was revealed in the results of the Early Dropout Group whose level of dominance ($M = -9.47$) was almost as low as the Persisters.

The relationship between level of dominance and point of termination was further explored with respect to gender with a Post Hoc test. A Two-way ANOVA (point of termination X Gender) was run. While no main effect was found for either point of termination ($F(2, 107) = 1.60, p > .05$) or gender ($F(1,107) = .035, p > .05$), a significant interaction was found between these two variables, $F(2,107) = 4.04, p < .05$ (see Table 1). This interaction revealed that men tended to follow the predicted relationship. The Early Dropout Group showed the highest level of dominance ($M = 2.48$), the Late Dropout Group displayed less dominance ($M = -10.63$), and the Persisters displayed the least amount of dominance ($M = -14.66$). Women displayed a pattern of dominance with respect to termination point that mirrors the results of the One-Way ANOVA trend analysis. Those in the Early Dropout Group showing relatively low levels of dominance ($M = -13.61$), those in the Late Dropout Group showing relatively high levels of

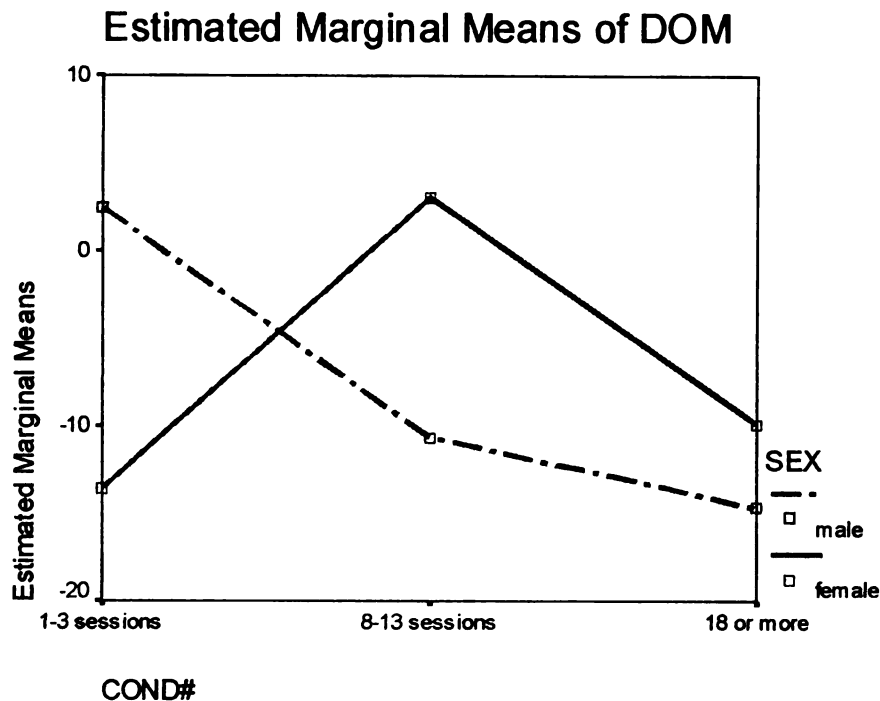
dominance ($M = 3.05$), and the Persisters revealing relatively low levels of dominance ($M = -9.88$) (see table 1).

The second Hypothesis called for an exploration of the Octants and Sixteenths contained within the Circumplex to see how these variables bare out the general conclusions from the first hypothesis. The first of the analyses regarding this hypothesis was employed to discover the relationship between the circumplex octants and point of termination using a One-way ANOVA with trend analysis. The only two octants found to be significant were the two that correspond most closely to the compiled status dimension of the circumplex. The managerial/autocratic octant corresponds to the dominant half of the status dimension and was a significant predictor of termination, $F(2,110) = 3.22, p < .05$ (see table 2). The self-effacing/masochistic octant

Table 1. Means and Standard Errors for Termination Point X Gender interaction with respect to level of Dominance

COND#	Sex	Mean	Std. Error
Early Dropout	<i>Male</i>	2.48	6.767
	<i>Female</i>	-13.61	3.981
	<i>Combined</i>	-9.47	4.24
Late Dropout	<i>Male</i>	-10.63	5.861
	<i>Female</i>	3.05	4.233
	<i>Combined</i>	-1.64	2.98
Persisters	<i>Male</i>	-14.658	5.861
	<i>Female</i>	-9.877	3.646
	<i>Combined</i>	-11.21	2.93

Figure 3. Means of Level of Dominance for Termination Point X Gender interaction



corresponds to the submissive half of the status dimension and was a significant predictor of termination, $F(2,110) = 3.76, p < .05$ (see table 2). As with the status dimension, both of these octants were found to have significant quadratic trends. The managerial/autocratic octant had a significant quadratic trend ($F(1,10) = 6.43, p < .05$) such that the mean of the Early Dropout Group was relatively low ($M = 9.77$), the mean of the Late Dropout Group was relatively high ($M = 13.86$), and the mean of the Persisters was roughly equivalent to the Early Dropout Group ($M = 9.84$). The self-effacing/masochistic octant had a significant quadratic trend ($F(1,10) = 6.90, p < .05$) such that the mean of the Early Dropout Group was relatively high ($M = 18.14$), the mean of the Late Dropout Group was relatively low ($M = 13.66$), and the mean of the Persisters was roughly equivalent to the Early Dropout Group ($M = 19.53$).

Table 2. Means and Standard Deviation of Significant Octant and Sixteenth Levels by Termination Point

COND	Autocratic/ Managerial (octant)	Self-Effacing/ Masochistic (octant)	Managerial (sixteenth)	Autocratic (sixteenth)	Self-Effacing (sixteenth)	Masochistic (sixteenth)
<u>Early</u>	M = 9.77	M = 18.14	M = 3.97	M = 5.80	M = 10.31	M = 7.83
Dropout	SD = 6.59	SD = 12.27	SD = 4.21	SD = 3.77	SD = 6.51	SD = 6.19
Late	M = 13.86	M = 13.66	M = 6.20	M = 7.66	M = 8.63	M = 5.03
Dropout	SD = 8.43	SD = 7.45	SD = 5.47	SD = 4.32	SD = 4.28	SD = 4.07
Persisters	M = 9.84	M = 19.53	M = 4.00	M = 5.84	M = 11.44	M = 8.09
	SD = 8.26	SD = 8.87	SD = 4.17	SD = 4.80	SD = 4.64	SD = 4.86

Figure 4. Means of Autocratic/Managerial Levels by Termination Point

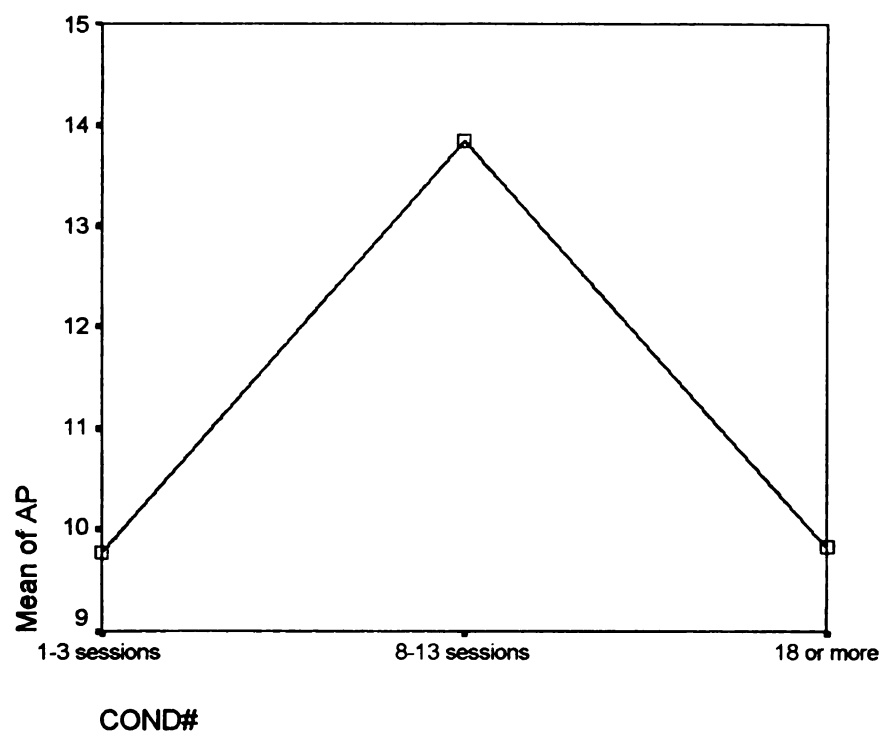
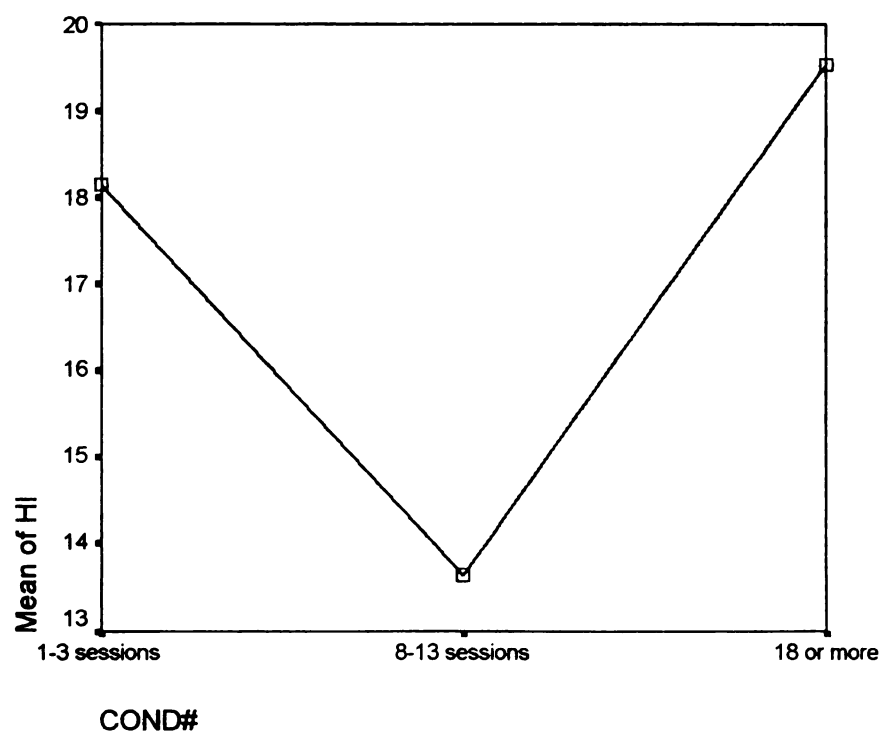


Figure 5. Means of Self-Effacing/Masochistic Level by Termination Point



These same relationships were then explored with respect to the circumplex sixteenths and point of termination using a One-way ANOVA with trend analysis. Four of the sixteenths were found to be significant. These four sixteenths combined to make up the two octants that were found to be significant and so shared the same correspondence to the status dimension of the circumplex as did the octants. The managerial sixteenth corresponds to the dominant half of the status dimension did not reveal a significant main effect ($F(2,110) = 2.77, p > .05$). It did show a significant curvilinear trend when a quadratic term was added ($F(1,110) = 5.23, p < .05$) such that the Early Dropout Group showed relatively low levels on the managerial sixteenth ($M = 3.97$), the Late Dropout Group showed relatively high levels ($M = 6.20$), and the Persisters revealed a roughly equivalent level on the managerial sixteenth to the Early Dropout Group ($M = 4.00$) (see table 2). The autocratic sixteenth corresponds to the dominant half of the status dimension as well and did not reveal a significant main effect ($F(2,110) = 2.15, p > .05$). It did show a significant curvilinear trend when a quadratic term was added ($F(1,110) = 4.29, p < .05$) such that the Early Dropout Group showed relatively low levels on the autocratic sixteenth ($M = 5.80$), the Late Dropout Group showed relatively high levels ($M = 7.66$), and the Persisters revealed a roughly equivalent level on the autocratic sixteenth to the Early Dropout Group ($M = 5.84$) (see table 2).

Figure 6. Means of Managerial Level by Termination Point

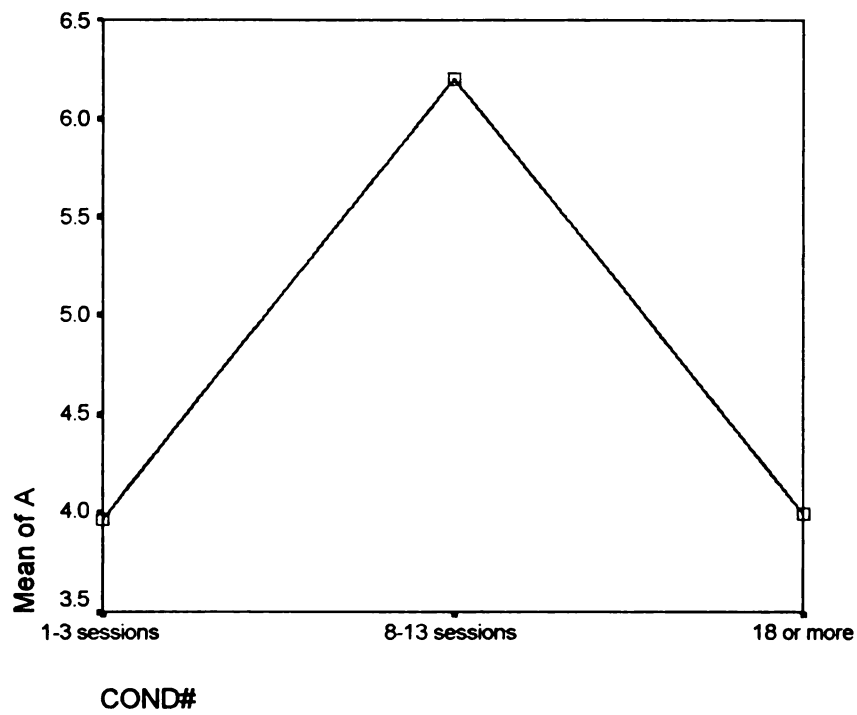
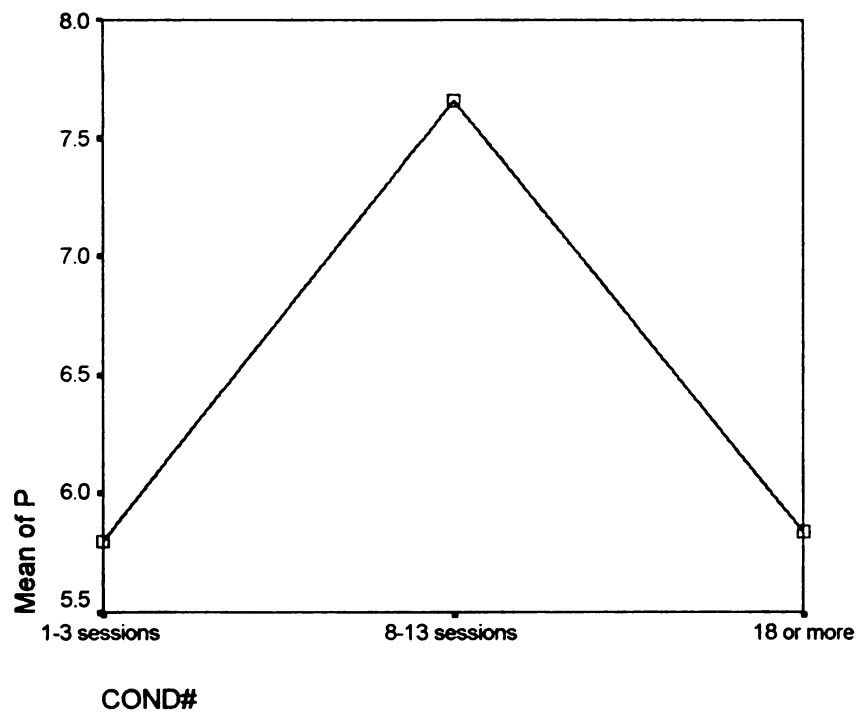


Figure 7. Means of Autocratic Level by Termination Point



The Self-effacing sixteenth corresponds to the submissive half of the status dimension did not reveal a significant main effect ($F(2,110) = 2.84, p > .05$), but did show a significant curvilinear trend when a quadratic term was added ($F(1,110) = 4.519, p < .05$) such that the Early Dropout Group showed relatively high levels on the self-effacing sixteenth ($M = 10.31$), the Late Dropout Group showed relatively low levels ($M = 8.63$), and the Persisters revealed relatively high levels on the self-effacing sixteenth ($M = 11.44$) (see table 2). The masochistic sixteenth corresponds to the submissive half of the status dimension as well and did reveal a significant main effect ($F(2,110) = 4.061, p < .05$), as well as revealing a significant curvilinear trend when a quadratic term was added ($F(1,110) = 7.97, p < .01$) such that the Early Dropout Group showed relatively high

Figure 8. Means of Self-Effacing Level by Termination Point

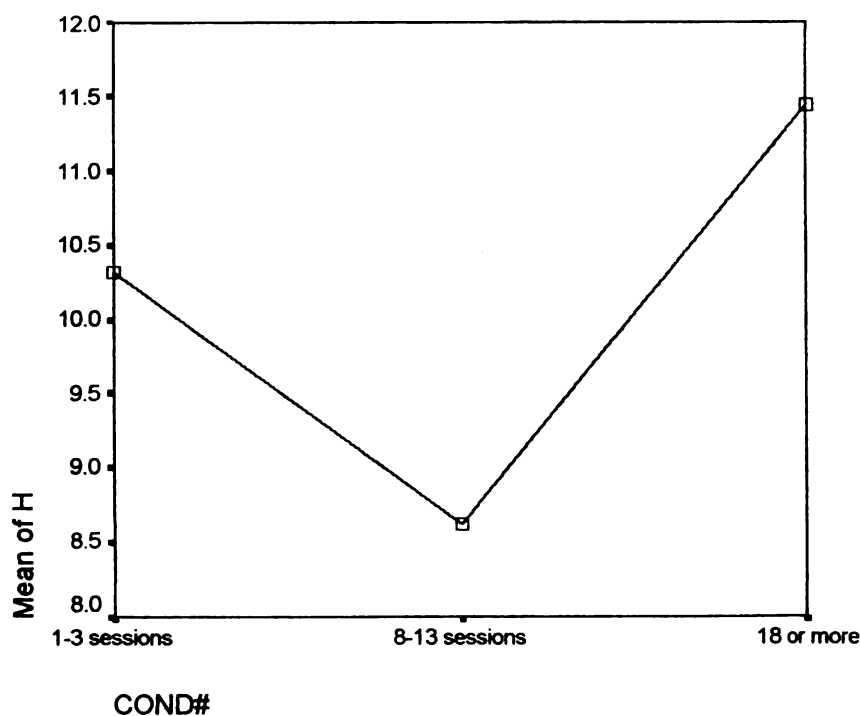
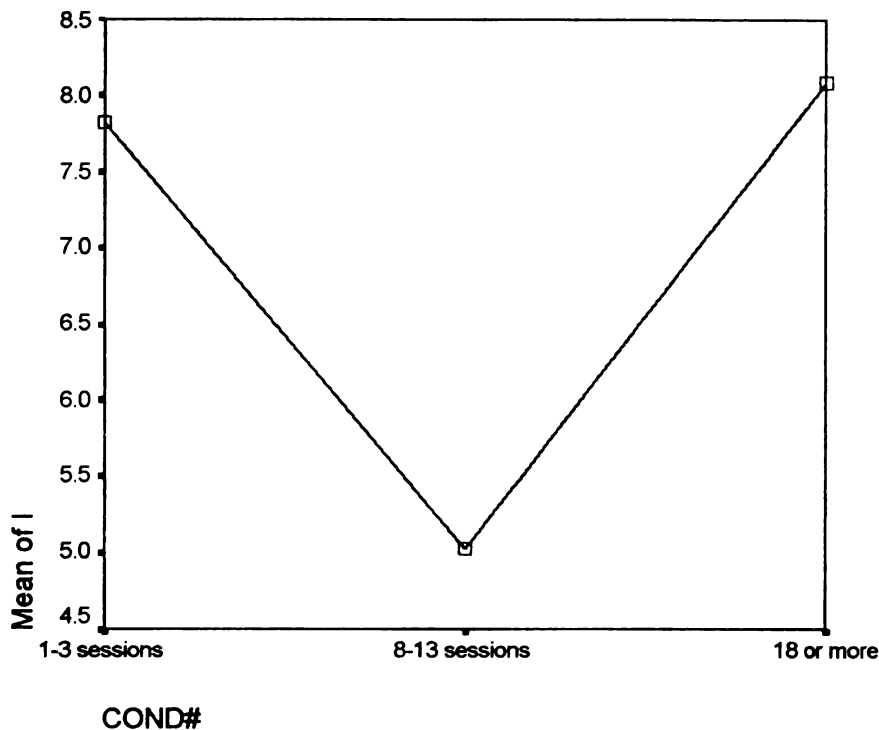


Figure 9. Means of Masochistic Levels by Termination Point



levels on the masochistic sixteenth ($M = 7.83$), the Late Dropout Group showed relatively low levels ($M = 5.03$), and the Persisters revealed a roughly equivalent level on the masochistic sixteenth to the Early Dropout Group ($M = 8.09$) (see table 2).

The third hypothesis stated that for those people who rate themselves as being more submissive on the ICL, distress level (as measured by the GSI scale of the SCL-90-R) will be higher in the Persisters than the Late Dropout Group, and both groups will be experiencing a higher level of distress than the Early Dropout Group. This relationship will be reversed for those who rate themselves as dominant such that initial distress levels will be lower for individuals who remain in therapy longer. These hypotheses were not supported by the data. Two One-way ANOVAs were utilized to analyze the effect of distress level on the point of termination for both the group characterizing itself as submissive and the group characterizing itself as dominant. There was no significant

relationship found for either the submissive group ($F(2,67) = 1.67, p > .05$), or the dominant group ($F(2,39) = .665, p > .05$).

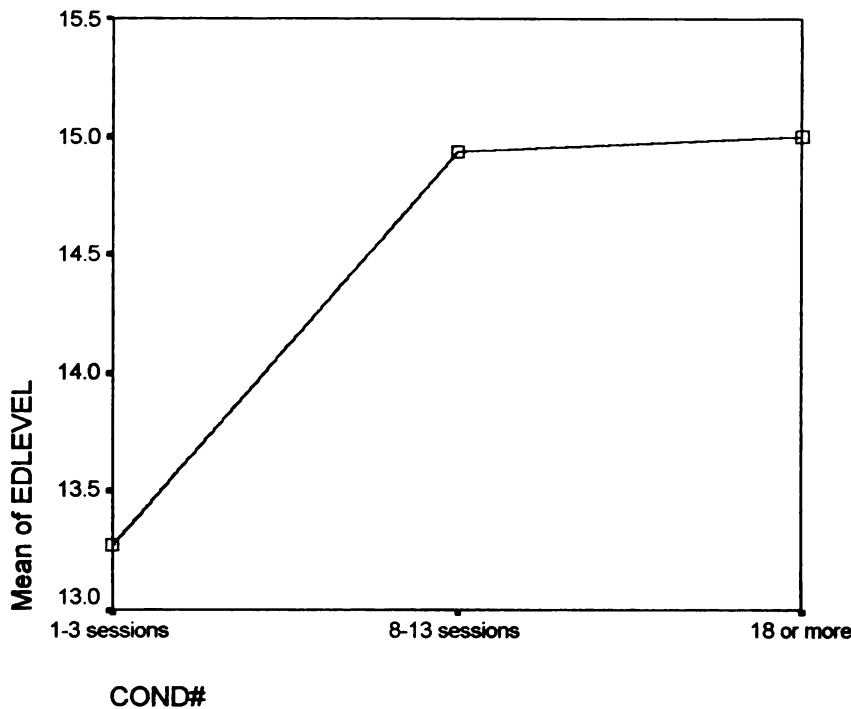
The fourth hypothesis stated that the Interpersonal Sensitivity subscale, Anxiety subscale, and Depression subscale of the SCL-90-R will all be significant predictors of premature termination as will minority racial status, lower education, and low SES.

Seven One-way ANOVAs were utilized to analyze the relationship between these variables and premature termination from therapy. The only above-mentioned variable that supported this hypothesis was that of education. A statistically significant relationship was found to exist between level of education and point of termination ($F(2,107) = 6.39, p < .01$) such that the Early Dropout Group had completed less years of education ($M = 13.27$) than both the Late Dropout Group ($M = 14.94$) and the Persisters ($M = 15.00$) (See table 3).

Table 3. Means and Standard Deviations of Years of Education by Termination Point

COND	Level of Education (in years)
<u>Early</u>	M= 13.27
Dropout	SD = 2.52
Late Dropout	M = 14.94 SD = 2.31
Persisters	M = 15.00 SD = 2.09

Figure 10. Means of Years of Education by Termination Point



Not found to be significant were Level of Interpersonal Sensitivity ($F(2,111) = 1.608, p > .05$), Level of Depression ($F(2,111) = .804, p > .05$), Level of Anxiety ($F(2,111) = .647, p > .05$), Racial Status ($F(2,110) = .349, p > .05$), Income ($F(2,102) = 1.48, p > .05$), and Occupation Level ($F(2,107) = 1.25, p > .05$).

The fifth hypothesis involved an examination of the factor structure of the SCL-90-R. An unrestricted, principle axis factor analysis yielded 20 factors with eigenvalues of greater than 1. The percentage of variance explained by each was as follows: 30.40%, 6.24%, 4.45%, 3.80%, 3.07%, 2.73%, 2.46%, 2.32%, 2.08%, 2.00%, 1.95%, 1.78%, 1.65%, 1.65%, 1.59%, 1.53%, 1.45%, 1.33%, 1.24%. Six factors were retained using the scree test criteria (Cattell, 1978). As a result, only six factors were rotated using orthogonal, varimax rotation. These six factors explained 50.96% of the variance. Only

variables that had factor loadings of at least .40 were selected to represent factors (see Tables 4 – 9). Eleven items did not meet this criterion and were excluded (see Table 10).

Factor 1, Depressed Interpersonal Sensitivity, explained the largest portion of the variance explained (30.40%). The items comprising this factor were primarily characterized by depressive thoughts and actions as well as items reflecting a withdrawal from interpersonal situations. Factor 2, Phobic Interpersonal Sensitivity, explained 6.24% of the variance and was comprised of a combination of phobic responses and items reflecting a withdrawal from interpersonal situations. Factor 3, Anxious Phobia, explained 4.45% of the variance and included a number of typically anxious and phobic responses. Factor 4, Somatization, explained 3.8% of the variance and contained only items that described physical complaints. Factor 5, Hostility, explained 3.07% of the variance and contained items that were characteristic of hostile, aggressive thoughts and actions. Factor 6, Obsessive/Compulsive, explained 3.01% of the variance and was characterized by items that had an obsessive/compulsive quality to them.

Table 4. Varimax Item Loadings on Factor 1 of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Loading	Original Factor
Factor 1: Depressed Interpersonal Sensitivity			
3.	Repeated thoughts that won't stop	.56	Obsess/Comp
5.	Loss of sexual interest or pleasure	.45	Depression
11.	Feeling easily annoyed	.47	Hostility
14.	Feeling low in energy or slowed down	.42	Depression
15.	Thoughts of ending your life	.48	Depression
18.	Feeling that most people cannot be trusted	.53	Paranoid
20.	Crying easily	.42	Depression
21.	Feeling shy or uneasy with the opposite sex	.41	Interpersonal
26.	Blaming yourself for things	.48	Depression
29.	Feeling lonely	.74	Depression
30.	Feeling blue	.75	Depression
31.	Worrying too much about things	.59	Depression
32.	Feeling no interest in things	.56	Depression
34.	Feelings being easily hurt	.49	Interpersonal
36.	Feeling others do not understand you	.58	Interpersonal
37.	Feeling that people are unfriendly	.52	Interpersonal
41.	Feeling inferior to others	.63	Interpersonal
46.	Difficulty making decisions	.48	Interpersonal
54.	Feeling hopeless about the future	.51	Depression
55.	Trouble concentrating	.52	Obsess/Comp
57.	Feeling tense or keyed up	.41	Anxiety
61.	Feeling uneasy when people are watching you	.41	Interpersonal
69.	Feeling very self-conscious with others	.57	Interpersonal
71.	Feeling everything is an effort	.55	Depression
77.	Feeling lonely even when you are with people	.67	Psychoticism
79.	Feeling worthless	.71	Depression
80.	Feeling something bad will to happen to you	.42	Anxiety
83.	Feeling that people will take advantage of you	.52	Paranoid
88.	Never feeling close to another person	.49	Psychoticism

Table 5. Varimax Item Loadings on Factor 2 of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Loading	Original Factor
Factor 2: Phobic Interpersonal Sensitivity			
13.	Feeling afraid in open spaces or on the street	.54	Phobic
21.	Feeling shy or uneasy with the opposite sex	.41	Interpersonal
25.	Feeling afraid to go out of your house alone	.54	Phobic
35.	Others being aware of your private thoughts	.45	Psychoticism
37.	Feeling that people are unfriendly	.60	Interpersonal
43.	Feeling that you are watched or talked about	.62	Paranoid
47.	Feeling afraid to travel	.40	Phobic
50.	Avoiding things, places, activities from fear	.53	Phobic
52.	Numbness or tingling in parts of your body	.45	Somatization
61.	Feeling uneasy when watched or talked about	.59	Interpersonal
62.	Having thoughts that are not your own	.43	Psychoticism
65.	Having to repeat the same action	.54	Obsess/Comp
68.	Having ideas or beliefs that others don't share	.53	Paranoid
69.	Feeling very self-conscious with others	.43	Interpersonal
70.	Feeling uneasy in crowds	.57	Phobic
73.	Feeling leery of eating or drinking in public	.43	Interpersonal
76.	Not getting credit for your achievements	.55	Paranoid
84.	Having thoughts about sex that bother you	.41	Psychoticism

Table 6. Varimax Item Loadings on Factor 3 of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Loading	Original Factor
Factor 3: Anxious Phobia			
2.	Nervousness or shakiness inside	.60	Anxiety
4.	Faintness or dizziness	.51	Somatization
13.	Feeling afraid in open spaces or on streets	.46	Phobic
17.	Trembling	.62	Anxiety
23.	Suddenly scared for no reason	.61	Anxiety
25.	Feeling afraid to go out of the house alone	.42	Phobic
33.	Feeling fearful	.52	Anxiety
39.	Heart pounding or racing	.63	Anxiety
40.	Nausea or upset stomach	.53	Somatization
48.	Trouble getting your breath	.45	Somatization
50.	Avoiding people, places, things for fear	.45	Phobic
57.	Feeling tense or keyed up	.50	Anxiety
70.	Feeling uneasy in crowds	.45	Phobic
72.	Spells of terror or panic	.73	Anxiety
73.	Feeling leery of eating or drinking in public	.43	Interpersonal
75.	Feeling nervous when left alone	.52	Phobic
82.	Feeling afraid you will faint in public	.52	Phobic

Table 7. Varimax Item Loadings on Factor 4 of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Loading	Original Factor
Factor 4: Somatization			
1.	Headaches	.47	Somatization
12.	Pains in heart or chest	.47	Somatization
17.	Trembling	.45	Anxiety
27.	Pains in lower back	.61	Somatization
40.	Nausea or upset stomach	.50	Somatization
42.	Soreness of your muscles	.64	Somatization
48.	Trouble getting your breath	.52	Somatization
49.	Hot or cold spells	.64	Somatization
52.	Numbness or tingling in parts of your body	.62	Somatization
56.	Feeling weak in parts of your body	.65	Somatization
58.	Heavy feelings in your arms or legs	.73	Somatization
87.	The idea that something is seriously wrong with your body	.43	Psychoticism

Table 8. Varimax Item Loadings on Factor 5 of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Loading	Original Factor
Factor 5: Hostility			
24.	Temper outbursts that you could not control	.67	Hostility
63.	Having urges to beat, injure, or harm someone	.56	Hostility
67.	Having urges to break or smash things	.76	Hostility
74.	Getting into frequent arguments	.51	Hostility
81.	Shouting or throwing things	.65	Hostility

Table 9. Varimax Item Loadings on Factor 6 of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Loading	Original Factor
Factor 6: Obsessive/Compulsive			
10.	Worried about sloppiness or carelessness	.48	Obsess/Comp
28.	Feeling blocked in getting things done	.40	Obsess/Comp
38.	Having to do things slow to insure correctness	.62	Obsess/Comp
45.	Having to check and re-check what you do	.57	Obsess/Comp
46.	Difficulty making decisions	.41	Obsess/Comp
51.	Your mind goes blank	.47	Obsess/Comp
55.	Trouble concentrating	.46	Obsess/Comp

Table 10. Items Loading Less than .40 in any of the Factors of the SCL-90-R as Obtained in the Current Study.

Item Number	Item Description	Original Factor
Items Loading Less than .40 in any of the Factors		
6.	Feeling critical of others	Interpersonal
7.	The idea that others control your thoughts	Psychoticism
8.	Blaming others for most of your troubles	Paranoid
9.	Trouble remembering things	Obsess/Comp
16.	Hearing voices that others don't hear	Psychoticism
22.	Feelings of being trapped or caught	Depression
53.	A lump in your throat	Somatization
78.	Feeling so restless that you can't sit still	Anxiety
85.	The idea that you should be punished for sins	Psychoticism
86.	Thoughts and images of a frightening nature	Anxiety
90.	The idea something is wrong with your mind	Psychoticism

DISCUSSION

The single most common finding in research on premature termination has been that those individuals who come from impoverished backgrounds tend to drop out of therapy prematurely. Among variables found to be significant predictors of early termination have been low socio-economic status, lower education, and minority racial status. It was hypothesized that this would also be in evidence in this study. Toward this end Race, Education Level, Income, and Occupation level were all examined with respect to point of termination. The only variable that showed a statistically significant relationship with point of termination was Education level. Those individuals who remained in therapy at least 8 sessions had a mean of approximately 15 years of education as compared to those who terminated after 1 to 3 sessions whose educational mean was 13.3 years. While it is in keeping with past research to find that education has a significant relationship with premature termination, it is somewhat surprising that none of the other variables were significant. The income level within this sample ranged from \$0 to \$50,000 with a comparable spread in occupational levels. These wide representations of income and occupation level provide enough power for hypothesis testing on this issue. Less surprising were the results testing the relationship between race and point of termination. Relatively few clients were seen during the duration of this study and so the power is likely to be insufficient to detect the true nature of this relationship.

It was further posited that the level of distress experienced by the client as well as certain types of pathologic symptomatology contributes to the manner in which clients

engage in therapy. The SCL-90-R was used to investigate the levels of distress and pathology observed within the sample population. For the majority of the analyses performed the factor structure, as originally provided by Derogatis, was used. It was hypothesized that the Interpersonal Sensitivity subscale, Anxiety subscale, and Depression subscale of the SCL-90-R would all be significant predictors of premature termination. This was not found to be the case. All of the subscales of the SCL-90-R were tested and none of them produced a significant relationship with the point at which clients terminated psychotherapy. Additionally, the global measure of distress provided by the SCL-90-R (GSI) was hypothesized to have a differential effect upon termination depending upon whether the client was predominantly dominant or submissive. Individuals rating themselves as predominantly dominant were posited to reveal lower distress levels for those who remain in therapy longer. Individuals rating themselves as predominantly submissive were posited to reveal higher distress levels for those remaining in therapy longer. This hypothesis was not supported by the data.

Past studies have called the factor structure of the SCL-90-R into question. Several of these studies have noted that the factor structure of the instrument changes depending upon the population being studied. To gain a better understanding of the population under study an exploratory factor analysis of the SCL-90-R was performed. Six Factors were obtained. These six Factors explained 50.96% of the total variance observed. Of this, 36.64% of the total variance was explained by the first two rotated factors, Depressed Interpersonal Sensitivity and Phobic Interpersonal Sensitivity. This suggests that interpersonal problems are the complaint most commonly experienced by individuals seeking therapy in this sample. Of interpersonal complaints reported, those of

a depressed nature explained the greatest portion of the variance, followed by those of a phobic nature. It was the general supposition of this thesis that one of the reasons clients terminate psychotherapy prematurely is that their preconceived understanding of the therapeutic relationship is incompatible with their style of interpersonal functioning.

The interpersonal factors hypothesized to have an impact upon the client's ability to form an alliance with a therapist were those factors associated with self-perceived level of dominance/submission. This impact was postulated to reveal itself in the number of sessions that the individual attended therapy. As discussed by Lorr (1991), clients begin the therapeutic process by projecting onto the therapist the role of an authoritarian figure. This representation should gradually be replaced by an egalitarian relationship as the therapeutic alliance strengthens. Sullivan has posited that individuals shape relationships in ways that reduce anxiety. The complementarity portion of Leary's Interpersonal Circumplex model posits that individuals who are submissive will experience anxiety reduction when relating to another who is dominant such as an authority figure. Dominant individuals will experience elevated levels of anxiety when relating to a dominant authority figure. Elevated levels of anxiety are aversive and should precipitate premature termination.

Neither a significant main effect nor a significant linear trend was obtained when this hypothesis was tested. However, a significant quadratic trend did lend partial support to this idea such that the Late Dropout Group displayed greater levels of dominance than did the Persisters. The curvilinear trend was revealed in the results of the Early Dropout Group whose level of dominance was almost as low as the Persisters.

Post Hoc analyses demonstrated that this relationship did not hold for the entire sample. A significant interaction between level of dominance and gender was discovered. Men showed a linear trend in support of the hypothesized relationship of level of dominance and point of termination. Early Dropouts revealed higher levels of dominance than did Late Dropouts and Persisters evidenced the lowest level of dominance. Women did not evidence this relationship. The women displayed a curvilinear pattern of termination in which women who were in the Early Dropout group were lower in dominance than those in the Late Dropout Group. Women Persisters were also lower in dominance than the Late Dropout Group. That the pattern held for men and not women would seem to indicate that dominance has a different meaning for the two groups. Men would seem to be more consistently effected by an assumed hierarchical relationship in a therapeutic situation than are women. While it does not seem to be the case that women are not effected by an assumed hierarchical relationship in therapy, it does seem as if women's reactions to this relationship are different.

A possible explanation of this difference might lie in the differential manner in which men and women have been socialized. Hankin and Abramson (2001) discuss socialization as a precursor for gender differences in the development of depression. Within their model, girls experience a greater number of interpersonal negative events such as peer rejection during adolescence (Davies & Windle, 1997), as well as having experienced higher levels of sexual abuse (Kaplan, Pelcovitz, & Labruna, 1999). "In addition to encountering more negative events, girls also encode these events in greater detail in large associative cognitive networks" (Hankin & Abramson, 2001, p. 785). These factors, in turn lead to a greater cognitive vulnerability for depression. This

cognitive vulnerability is discussed in terms of specific cognitive attributions made in specific situations. If one takes into account research on gender socialization that shows mothers to be more controlling with their daughters than with their sons (Pomerantz & Ruble, 1998), it would seem a reasonable step to infer that these cognitive attributions coupled with gender socialization trends may also effect how relationships in general are viewed.

Dominance and submission are inherently hierarchical concepts. If one assumes that men have been raised to see themselves as active participants within hierarchies then it would naturally follow that they would learn specific rules for participating within those hierarchies. The necessity for assessing the level and type of participation would be important to avoid conflict. Consistent with the notion of complementarity, people immersed in this understanding of hierarchy would be more prone to feeling anxious when associating with someone with whom they might have to compete for a position within the hierarchy. If one assumes that women are not socialized to participate within hierarchies but rather to cope with the ramifications of those hierarchies then it would seem evident that their understanding of the hierarchical structure itself would be much different. Submission can then be seen as a coping strategy that serves to avoid those dominant individuals who might harm them and please those who might help them. Dominance could likewise be viewed as a method of achieving independence from a hierarchical structure. If this is the case then it becomes apparent that submissive women who view the therapist as a dominating threat would be more likely to avoid that threat and terminate prematurely. Submissive women who view the therapist as a dominant person who can help them will court the therapist's favor and continue with treatment for

as long as the dominant therapist deems appropriate. Women who take a dominant stance under this supposition would seem more likely to take control of their own therapy and terminate at a point that they deem appropriate without relying solely upon the therapist's judgment. While this explanation mirrors the results found within this study, the conclusions that it offers are meant only as conjecture. More research is called for to examine this discrepancy between men and women.

An exploration of the different gradations of the Interpersonal Circumplex with respect to premature termination was also completed. It must be remembered that Leary proposed using a circumplex to examine interpersonal relationships because he felt that the divisions commonly made between personality structures did not capture the unified nature of an individual's interpersonal presentation. This being the case the Dominance measure of the Interpersonal Circumplex is derived from a geometric formula that includes all of the separate categories contained within the Circumplex. These separate categories of the Circumplex may be divided up into 8 independent constructs (octants) or 16 independent constructs (sixteenths). It was Leary's original intent to allow for each of these constructs to be studied on its own or in concert with the full circumplex. This leads one to question the optimal number of categorical divisions that provide the maximum amount of information. Toward this end, the individual octants and sixteenths from which the circumplex is derived were analyzed.

This more detailed examination of the Circumplex did not bring greater clarity to the question regarding the main effect of dominance on point of termination. The only octants and sixteenths that were found to be significantly related to point of termination were those that were aligned with the status poles of the circumplex. The two octants

that had significant curvilinear trends were the Autocratic/Managerial octant, which corresponds with the dominant quadrant of the circumplex, and the Self-Effacing/Masochistic octant, which corresponds with the submissive quadrant of the circumplex. Four of the sixteenths were found to have significant curvilinear trends. These were the two sixteenths that, when compiled together, form the Autocratic/Managerial octant as well as the two sixteenths that form the Self-Effacing/Masochistic octant. The pattern of scores for each of these octants and sixteenths followed the same pattern that the more global status measure of dominance had found. This pattern was such that Early Dropouts displayed lower levels of dominance (higher levels of submissiveness), Late Dropouts displayed higher levels of dominance (lower levels of submissiveness), and Persisters displayed lower levels of dominance (higher levels of submissiveness). While examination of the more global Status dimension did reveal a significant interaction with gender, the octants and sixteenths did not. It must be concluded that the octants and the sixteenths do not add additional information when assessing whether or not an individual is likely to terminate psychotherapy prematurely. The status dimension of the Interpersonal Circumplex is the most appropriate measure to use in this regard.

Further Research

This study explored just one of the dimensions within Leary's interpersonal Circumplex. His expanded diagnostic scheme includes not simply the individual's self-report ratings of interpersonal style (level of conscious communication) within one situation, in this case therapy. Also included are: 1) level of public communication in

which significant others provide ratings, 2) level of private perception in which the Minnesota Multiphasic Personality Inventory (MMPI) is utilized, 3) level of the unexpressed in which the Thematic Aptitude Test (TAT, Murray, 1943) is utilized with specific rules for scoring the instrument, and 4) level of values. These four levels, in concert with the level of conscious communications used within this study provide a full interpersonal diagnostic picture of a client. Future research on interpersonal factors involved in premature termination from therapy would benefit from making full use of the entire diagnostic system.

While a considerable body of research has been devoted to the etiological differences of gender, much less research has been devoted to understanding gender differences in the psychotherapeutic process. More work needs to be done with respect to the differential view that men and women have of the therapeutic situation at the outset of therapy as well as during the process. Issues that should be investigated include gender of the therapeutic dyad, interpersonal style of the therapist, as well as client education about the therapeutic process they are entering prior to therapy. This research will be important in establishing individualized therapeutic strategies that keep individuals in therapy long enough to derive therapeutic benefit.

While type of symptomatology was not found to be a significant predictor of premature termination, questions regarding the factor structure used to measure this variable have been raised. Further research investigating this factor discrepancy is needed. Additionally, this portion of the study should be replicated with an instrument that provides greater symptomalogic detail.

APPENDIX A
INSTRUMENTS

THE INTERPERSONAL CHECKLIST

Instructions: Below is a list of descriptive words and phrases which you will use to describe yourself. Read the items quickly and fill in the circles of each item you consider to be generally descriptive of yourself at the present time. Leave the circle blank when an item does not describe you. In the example below, the subject has indicated that Item A is true, and Item B is false as applied to him. That is, he says he is generally well-behaved but not suspicious.

Example:

A. well-behaved ●

B. suspicious ○

Your first impression is generally the best so work quickly and don't be concerned about duplications, contradictions, or being exact. If you feel much doubt whether an item applies, leave it blank.

ITEMS:

- | | |
|---------------------------------|---|
| 1. well thought of | ○ |
| 2. makes a good impression | ○ |
| 3. able to give orders | ○ |
| 4. forceful | ○ |
| 5. self-respecting | ○ |
| 6. independent | ○ |
| 7. able to take care of self | ○ |
| 8. can be indifferent to others | ○ |
| 9. can be strict if necessary | ○ |
| 10. firm but just | ○ |
| 11. can be frank | ○ |
| 12. critical of others | ○ |
| 13. can complain if necessary | ○ |

Respondent # _____

ICL Page 2 – if the item generally describes you
Fill in the circle. If the item does not generally
Describe you, leave the circle blank.

- | | |
|------------------------------------|-----------------------|
| 14. often gloomy | <input type="radio"/> |
| 15. able to doubt others | <input type="radio"/> |
| 16. frequently disappointed | <input type="radio"/> |
| 17. able to criticize self | <input type="radio"/> |
| 18. apologetic | <input type="radio"/> |
| 19. can be obedient | <input type="radio"/> |
| 20. usually gives in | <input type="radio"/> |
| 21. grateful | <input type="radio"/> |
| 22. admires and imitates others | <input type="radio"/> |
| 23. appreciative | <input type="radio"/> |
| 24. very anxious to be approved of | <input type="radio"/> |
| 25. cooperative | <input type="radio"/> |
| 26. eager to get along with others | <input type="radio"/> |
| 27. friendly | <input type="radio"/> |
| 28. affectionate and understanding | <input type="radio"/> |
| 29. considerate | <input type="radio"/> |
| 30. encourage others | <input type="radio"/> |
| 31. helpful | <input type="radio"/> |
| 32. big-hearted and unselfish | <input type="radio"/> |
| 33. often admired | <input type="radio"/> |
| 34. respected by others | <input type="radio"/> |

Respondent # _____

ICL Page 3 – if the item generally describes you
Fill in the circle. If the item does not generally
Describe you, leave the circle blank.

- | | |
|----------------------------------|-----------------------|
| 35. good leader | <input type="radio"/> |
| 36. likes responsibility | <input type="radio"/> |
| 37. self-confident | <input type="radio"/> |
| 38. self-reliance and assertive | <input type="radio"/> |
| 39. businesslike | <input type="radio"/> |
| 40. likes to compete with others | <input type="radio"/> |
| 41. hard-boiled when necessary | <input type="radio"/> |
| 42. stern but fair | <input type="radio"/> |
| 43. irritable | <input type="radio"/> |
| 44. straightforward and direct | <input type="radio"/> |
| 45. resents being bossed | <input type="radio"/> |
| 46. skeptical | <input type="radio"/> |
| 47. hard to impress | <input type="radio"/> |
| 48. touchy and easily hurt | <input type="radio"/> |
| 49. easily embarrassed | <input type="radio"/> |
| 50. lacks self-confidence | <input type="radio"/> |
| 51. easily led | <input type="radio"/> |
| 52. modest | <input type="radio"/> |
| 53. often helped by others | <input type="radio"/> |
| 54. very respectful of authority | <input type="radio"/> |
| 55. accepts advice readily | <input type="radio"/> |

Respondent # _____

ICL Page 4 – if the item generally describes you
Fill in the circle. If the item does not generally
Describe you, leave the circle blank.

- 56. trusting and eager to please ☐
- 57. always pleasant and agreeable ☐
- 58. wants everyone to like him/her ☐
- 59. sociable and neighborly ☐
- 60. warm ☐
- 61. kind and reassuring ☐
- 62. tender and soft-hearted ☐
- 63. enjoys taking care of others ☐
- 64. gives freely of self ☐
- 65. always giving advice ☐
- 66. acts important ☐
- 67. bossy ☐
- 68. dominating ☐
- 69. boastful ☐
- 70. proud and self-satisfied ☐
- 71. thinks only of him/herself ☐
- 72. shrewd and calculating ☐
- 73. impatient with others' mistakes ☐
- 74. self-seeking ☐
- 75. outspoken ☐
- 76. often unfriendly ☐

Respondent # _____

ICL Page 5 – if the item generally describes you
Fill in the circle. If the item does not generally
Describe you, leave the circle blank

- | | |
|-------------------------------------|-----------------------|
| 77. bitter | <input type="radio"/> |
| 78. complaining | <input type="radio"/> |
| 79. jealous | <input type="radio"/> |
| 80. slow to forgive a wrong | <input type="radio"/> |
| 81. self-punishing | <input type="radio"/> |
| 82. shy | <input type="radio"/> |
| 83. passive and unaggressive | <input type="radio"/> |
| 84. meek | <input type="radio"/> |
| 85. dependent | <input type="radio"/> |
| 86. wants to be led | <input type="radio"/> |
| 87. lets others make decisions | <input type="radio"/> |
| 88. easily fooled | <input type="radio"/> |
| 89. to easily influenced by friends | <input type="radio"/> |
| 90. will confide in anyone | <input type="radio"/> |
| 91. fond of everyone | <input type="radio"/> |
| 92. likes everybody | <input type="radio"/> |
| 93. forgives anything | <input type="radio"/> |
| 94. over-sympathetic | <input type="radio"/> |
| 95. generous to a fault | <input type="radio"/> |
| 96. overprotective of others | <input type="radio"/> |
| 97. tries to be too successful | <input type="radio"/> |

Respondent # _____

ICL Page 6 – if the item generally describes you
Fill in the circle. If the item does not generally
Describe you, leave the circle blank

- | | |
|---|-----------------------|
| 98. expects everyone to admire
him/her | <input type="radio"/> |
| 99. manages others | <input type="radio"/> |
| 100. dictatorial | <input type="radio"/> |
| 101. somewhat snobbish | <input type="radio"/> |
| 102. egotistical and conceited | <input type="radio"/> |
| 103. selfish | <input type="radio"/> |
| 104. cold and unfeeling | <input type="radio"/> |
| 105. sarcastic | <input type="radio"/> |
| 106. cruel and unkind | <input type="radio"/> |
| 107. frequently angry | <input type="radio"/> |
| 108. hard-hearted | <input type="radio"/> |
| 109. resentful | <input type="radio"/> |
| 110. rebels against everything | <input type="radio"/> |
| 111. stubborn | <input type="radio"/> |
| 112. distrusts everybody | <input type="radio"/> |
| 113. timid | <input type="radio"/> |
| 114. always ashamed of self | <input type="radio"/> |
| 115. obeys too willingly | <input type="radio"/> |
| 116. spineless | <input type="radio"/> |
| 117. hardly ever talks | <input type="radio"/> |

Respondent # _____

ICL Page 7 – if the item generally describes you
Fill in the circle. If the item does not generally
Describe you, leave the circle blank

- | | |
|------------------------------------|-----------------------|
| 118. clinging vine | <input type="radio"/> |
| 119. likes to be taken care of | <input type="radio"/> |
| 120. will believe anyone | <input type="radio"/> |
| 121. wants everyone's love | <input type="radio"/> |
| 122. agrees with everyone | <input type="radio"/> |
| 123. friendly all the time | <input type="radio"/> |
| 124. loves everyone | <input type="radio"/> |
| 125. too lenient with others | <input type="radio"/> |
| 126. tries to comfort everyone | <input type="radio"/> |
| 127. too willing to give to others | <input type="radio"/> |
| 128. spoils people with kindness | <input type="radio"/> |

SCL-90-R**Sex:** Male ☐ Female ☐

Instructions: Below is a list of problems people sometimes have. Please read each one carefully, and circle the number to the right that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem and do not skip any items. If you change your mind, erase your first mark carefully. If you have any questions please ask about them.

HOW MUCH WERE YOU DISTRESSED BY:

1. Headaches

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

2. Nervousness or shakiness inside

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

3. Repeated unpleasant thought that won't leave your mind

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

4. Faintness or dizziness

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

5. Loss of sexual interest

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

6. Feeling critical of others

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

7. The idea that someone else can control your thoughts

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

8. Feeling others are to blame for most of your troubles

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

SCL-90-R: Page 2**HOW MUCH WERE YOU DISTRESSED BY:**

9. Trouble remembering things
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
10. Worried about sloppiness or carelessness
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
11. Feeling easily annoyed or irritated
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
12. Pains in heart or chest
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
13. Feeling afraid in open spaces or on streets
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
14. Feeling low in energy or slowed down
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
15. Thoughts of ending your life
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
16. Hearing voices that other people do not hear
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
17. Trembling
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |
18. Feeling that most people cannot be trusted
- | | | | | |
|------------|--------------|------------|-------------|-----------|
| 0 | 1 | 2 | 3 | 4 |
| Not at all | A little bit | Moderately | Quite a bit | Extremely |

SCL-90-R: page 3**HOW MUCH WERE YOU DISTRESSED BY:**

19. Poor appetite

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

20. Crying easily

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

21. Feeling shy or uneasy with the opposite sex

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

22. Feelings of being trapped or caught

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

23. Suddenly scared for no reason

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

24. Temper outbursts that you could not control

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

25. Feeling afraid to go out of your house alone

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

26. Blaming yourself for things

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

27. Pains in lower back

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

28. Feeling blocked in getting things done

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

SCL-90-R: page 4**HOW MUCH WERE YOU DISTRESSED BY:**

29. Feeling lonely

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

30. Feeling blue

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

31. Worrying too much about things

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

32. Feeling no interest in things

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

33. Feeling fearful

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

34. Your feelings being easily hurt

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

35. Other people being aware of your private thoughts

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

36. Feeling that others do not understand you or are unsympathetic

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

37. Feeling that people are unfriendly or dislike you

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

38. Having to do things very slowly to insure correctness

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

SCL-90-R: page 5**HOW MUCH WERE YOU DISTRESSED BY:**

39. Heart pounding or racing

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

40. Nausea or upset stomach

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

41. Feeling inferior to others

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

42. Soreness of your muscles

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

43. Feeling that you are watched or talked about by others

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

44. Trouble falling asleep

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

45. Having to check and double-check what you do

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

46. Difficulty making decisions

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

47. Feeling afraid to travel on buses, subways, or trains

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

48. Trouble getting your breath

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

SCL-90-R: page 6**HOW MUCH WERE YOU DISTRESSED BY:**

49. Hot or cold spells

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

50. Having to avoid certain things, places, or activities because they frighten you

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

51. Your mind going blank

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

52. Numbness or tingling in parts of your body

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

53. A lump in your throat

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

54. Feeling hopeless about the future

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

55. Trouble concentrating

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

56. Feeling weak in parts of your body

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

57. Feeling tense or keyed up

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

58. Heavy feelings in your arms or legs

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

SCL-90-R: page 7**HOW MUCH WERE YOU DISTRESSED BY:**

59. Thoughts of death or dying

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

60. Overeating

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

61. Feeling uneasy when people are watching or talking about you

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

62. Having thoughts that are not your own

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

63. Having urges to beat, injure or harm someone

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

64. Awakening in the early morning

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

65. Having to repeat the same actions such as touching, counting, or washing

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

66. Sleep that is restless or disturbed

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

67. Having urges to break or smash things

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

68. Having ideas or beliefs that others do not share

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

SCL-90-R: page 8**HOW MUCH WERE YOU DISTRESSED BY:**

69. Feeling very self-conscious with others

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

70. Feeling uneasy in crowds, such as shopping or at a movie

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

71. Feeling everything is an effort

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

72. Spells of terror or panic

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

73. Feeling uncomfortable about eating or drinking in public

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

74. Getting into frequent arguments

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

75. Feeling nervous when you are left alone

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

76. Others not giving you proper credit for your achievements

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

77. Feeling lonely even when you are with people

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

78. Feeling so restless you couldn't sit still

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

SCL-90-R: page 9**HOW MUCH WERE YOU DISTRESSED BY:**

79. Feelings of worthlessness

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

80. The feeling that something bad is going to happen to you

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

81. Shouting or throwing things

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

82. Feeling afraid you will faint in public

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

83. Feeling that people will take advantage of you if you let them

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

84. Having thoughts about sex that bother you a lot

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

85. The idea that you should be punished for your sins

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

86. Thoughts and images if a frightening nature

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

87. The idea that something serious is wrong with your body

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

88. Never feeling close to another person

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

Respondent # _____

SCL-90-R: page 10

HOW MUCH WERE YOU DISTRESSED BY:

89. Feelings of guilty

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

90. The idea that something is wrong with your mind

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

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