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CONTINGENCY CONTRACTING: EFFECTS ON PSYCHOTHERAPY
ATTENDANCE AND TERMINATION AT TWO COMMUNITY
MENTAL HEALTH CENTERS

DISSERTATION

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Contingency management has been utilized to improve treatment compliance and attendance in a medical setting. A related question involves the effect of contingency management on attendance in outpatient psychotherapy. Sixty-nine individuals ranging in age from 8 to 50 years agreed to participate in such a study. Persons younger than 18 years were included in the study only if their families were involved in therapy. Individuals at the Lewisville Family Counseling Center and the Denton County Mental Health Unit were randomly assigned by blocks of three to a control condition, a motivation control condition, or a group which incorporated contingency management. These individuals agreed to sign a contract specifying consequence for failure to notify the centers 24 hours in advance of an impending absence. Each therapist at these centers had an equal number of clients in each condition. Data on attendance and notification of impending absences were collected weekly for five sessions. In addition, pretherapy expectations, symptoms, and demographic variables were assessed. After five sessions, dropouts and remainders were interviewed and the course of treatment was

discussed. For the purpose of this study, a "dropout" occurred whenever an individual terminated therapy by missing an appointment and not rescheduling, or whenever an individual missed three consecutive appointments. A one-way analysis of variance for each of the demographic variables--age, sex, income, and education--and the symptom checklist suggests the groups are similar in relation to these measures. Also, a one-way analysis of variance reveals session attendance in each of the three conditions is similar. Thus, contingency management as incorporated in this study did not improve attendance in outpatient psychotherapy. Persons who negotiated a contract tended to reschedule more and no-show less. Although these data are in the predicted direction, the probability of obtaining differences this large are quite high by chance. Statistically significant F 's are not obtained in a one-way analysis of variance on the data for rescheduling, no-shows, and cancellations. While the least amount of lost time occurs in the contingency management condition, the differences between groups are not statistically significant. A one-way analysis of variance on each of the four categories of pretherapy expectations--expected-confirmed, expected-disconfirmed, unexpected-confirmed, and unexpected-disconfirmed--suggests expectations are similar across conditions. In addition, disconfirmation of expectations is not related to treatment dropout under the conditions of this study. To summarize, one-way analyses of variance reveal

statistically significant differences do not occur across groups in relation to objective measures of attendance or subjective ratings of satisfaction and outcome. Other factors were involved in premature termination. Only 10 of the 41 individuals who terminated before the fifth session rated the experience as negative. Overall, 75% of 62 individuals voiced satisfaction. Additional reasons for termination--problem resolution, prohibitive fees, difficulty attending sessions during clinic hours, and sabotage by a significant other--are cited. Finally, hazards associated with contingency management--redundancy, the problem of reinforcer selection, and individuals who view environmental manipulation as unworthy--are discussed.

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF ILLUSTRATIONS	v
Dissertation	
Introduction	1
Method	23
Subjects	
Procedure	
Results	28
Discussion	35
Appendices	45
References	68

LIST OF TABLES

Table	Page
1. Analysis of Variance--Age	57
2. Analysis of Variance--Sex	57
3. Analysis of Variance--Income	58
4. Analysis of Variance--Education	58
5. Analysis of Variance--Symptom Checklist	59
6. Frequency and Amount of Consequation in Prepayment Groups	60
7. Analysis of Variance--Rescheduling Data	61
8. Analysis of Variance--No-Show Data	61
9. Analysis of Variance--Cancellation Data	62
10. Analysis of Variance--Ratings of Satisfaction	62
11. Reasons Given by Clients for Termination	63
12. Analysis of Covariance--Ratings of Satisfaction	64
13. Analysis of Variance--Expected/Confirmed	65
14. Analysis of Variance--Expected/Disconfirmed	65
15. Analysis of Variance--No Expected/Confirmed	66
16. Analysis of Variance--Not Expected/ Disconfirmed	66
17. Correlation Matrix of Demographic and Outcome Variables	67

LIST OF ILLUSTRATIONS

Figure	Page
1. The Percentage of Individuals in Each Group Who Attended Each Session	30
2. The Mean Number of Rescheduled Appointments By Groups	31
3. The Mean Number of No-Shows by Groups	31
4. The Total Number of Cancelled Appointments in Each Group	32
5. The Total Time Lost for Each Group	33

CONTINGENCY CONTRACTING: EFFECTS ON PSYCHOTHERAPY
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In recent years, an increase in the number of community mental health centers and a corresponding emphasis on brief, symptom-oriented therapies prompted research in the areas of client dropout and noncompliance. Mental health agencies were troubled by the loss of staff time and funding which resulted from treatment interruption. Also, it appeared the needs of many consumers were not met.

The dropout rate at community mental health centers was indicative of the scope of the problem. For example, 30% to 50% of the clients at three urban centers dropped out after the first or second session (Fiester, 1974). In a related study, Fiester, Mahrer, Giambra, and Ormiston (1974) identified two distinct groups of clients who appeared at mental health centers: (a) those who quickly dropped out within the first two sessions and were not likely to reapply for services at a later date, and (b) individuals who continued to avail themselves of a variety of mental health services. Contrary to clinical lore, clients who unilaterally terminated therapy rarely sought treatment elsewhere (Noonan, 1973; Reiss & Brandt, 1965).

The factors which cause a significant number of consumers to withdraw from the services offered by community mental health centers remain an enigma. Some persons who dropped out of therapy evaluated mental health services as highly as clients who remained in therapy (Littlepage, Kosloski, Schnelle, McNees, & Gendrich, 1976; Meyer, 1969). Even though their therapists did not agree, these individuals believed their goals had been attained. However, many clients unilaterally terminated therapy for other reasons, including consumer dissatisfaction.

Implicit in most studies which investigated the problem was the assumption that specific input variables were linked to dropping out of therapy. Investigators conceptualized individuals as exhibiting a characteristic "personality type" and employed univariate research designs in the attempt to identify these important variables. Two reviews (Brandt, 1965; Garfield, 1971) yielded a morass of contradictory information. The only consistent finding was that lower socioeconomic class patients contributed disproportionately to dropout rates.

Overall, several variables seemed to contribute to early termination. These included (a) demographic variables such as age, sex, socioeconomic status, race, and social isolation; (b) personality characteristics, including anger, anti-social behavior, passive-aggressive tendencies, motivation, psychiatric diagnosis and expectations; and (c) therapist behaviors

associated with interruption of therapy. These included ethnocentrism, lack of rapport, incongruence of patient and therapist goals, and negative expectations regarding outcome.

Some authors indicated age was an important factor in treatment interruption, especially when patients were younger than 30 years (Baekeland & Lundwall, 1975; Brown & Kosterlitz, 1964; Craig & Huffine, 1976; Gottschalk, Mayerson, & Gottlieb, 1967). Similarly, Kline and King (1973) and Maris, Connor, and Matthews (1974) found dropouts were younger than individuals who remained in therapy. In contrast, several studies did not find a relationship between age and continuation in treatment (Affleck & Garfield, 1961; Garfield & Affleck, 1959). Consequently, Garfield (1977) disagreed that age had predictive value for continuation in adult individual psychotherapy. Meltzoff and Kornreich (1970) pointed out that in many outcome studies the variable of age was confounded with prognosis and education and their correlates. At this time, the issue of age as a factor in the continuation of treatment is far from resolved.

Another demographic variable, the sex of patients, has been surveyed in relation to early termination. Female patients were found to be more likely to drop out in four studies (Brown & Kosterlitz, 1964; Cartwright, 1955; Rosenthal & Frank, 1958; Weiss & Schaie, 1958). However, Maris, Connor, and Matthews (1974) compared individuals who did and did not keep their appointments after crisis

consultation and found that the nonrespondent group contained a greater proportion of males. Craig and Huffine (1976) found no relation between sex and dropout rate. Similarly, Brandt (1965) found no consistent differences in his review of the dropout phenomenon. It seems these data are not as clear-cut as Baekeland and Lundwall (1975) indicated in their review of the literature on client dropout.

With regard to socioeconomic status, the data were more consistent. Baekeland and Lundwall (1975) found socioeconomic standing was related to dropout in 35 of the 57 (61%) studies which were surveyed. Individuals with lower incomes were more likely to terminate treatment prematurely. This relationship was even stronger in clinics which emphasized psychoanalytically oriented psychotherapy. Similarly, Maris, Connor, and Matthews (1974) reported blue-collar workers were more often in the nonrespondent group. Income may be more important in premature withdrawal from treatment than was previously realized. For example, Stern, Moore, and Gross (1975) hypothesized that personality traits assumed to be related to dropout had been confounded with the personality characteristics of clients who terminated most frequently, i.e., the lower class individual. These authors provided evidence in support of the hypothesis that social class differences underlie purported personality differences between individuals who remain in therapy and those who drop out. No personality differences were found within any one social

class when dropouts and remainers were examined. Garfield (1977) agreed that social class may be the most useful predictor of treatment dropout. However, the need for replication and specification of the study by Stern et al. (1975) was stressed.

The race of the client and therapist have been examined in an effort to identify the contribution of ethnicity in the interruption of treatment. Sue, McKinney, Allen, and Hall (1974) found race was a more important variable in treatment dropout than age, sex, education, and income. After eliminating the influence of other demographic variables, blacks were more likely than whites to discontinue after the initial session. Results indicated that 52% of the blacks dropped out after the first contact, as compared to 30% of the white clients. Likewise, Maris, Connor, and Matthews (1974) found that blacks constituted almost two-thirds of the nonresponders. Craig and Huffine (1976) suggested the race of clients and therapists did not seem to influence continuation in treatment, although such an influence may have been masked by differences in therapist experience. Finally, Vail (1978) found race did not contribute to premature termination.

Social stability also has been identified as an important demographic variable related to premature termination. Baekeland and Lundwall (1975) attested to the importance of social isolation and a lack of affiliation in the dropout

phenomenon. The socially isolated individual is hindered by difficulties in forming an alliance with the therapist.

Researchers also studied the personality traits of dropouts in an attempt to identify pertinent variables. For example, Brandt (1965) reviewed 25 studies concerned with withdrawal from therapy. "Personality characteristics" were the only criteria which consistently differentiated terminators from remainers. However, the specific personality characteristics and the methodology differed from one study to the next.

Kline and King (1973) performed a cluster analysis of demographic, social history, and mental status variables. Dropouts were characterized as more impaired psychologically, more angry, and had a greater tendency to act out. Male anger was associated with acting out against others. In contrast, female anger was associated with anxiety and other neurotic symptoms. Anger related to aggressive or passive-aggressive behavior also mitigated against remaining in treatment.

Out of 11 studies reviewed by Baekeland and Lundwall (1975), 9 indicated that highly aggressive or passive-aggressive individuals tended to drop out of treatment. Openly aggressive clients often antagonized the therapist. Also, covert resentment may have escalated until a person decided to leave treatment. Another personality variable which was related to difficulties in treatment was antisocial

behavior. Low levels of guilt or anxiety and different values were associated with difficulties in rapport. A majority of the research reviewed by Baekeland and Lundwall (1975) suggested that sociopathy was associated with premature dropout from treatment.

The relationship of psychological diagnoses to treatment dropout was investigated by Craig and Huffine (1976). Findings indicated that chronically ill patients, particularly those individuals with the diagnosis of psychoses or severe personality disorders, tended to maintain a longer relationship with a therapist. Likewise, Kline and King (1973) indicated dropouts were more impaired psychologically, showed more primary diagnoses, and had a poorer prognosis. Maris, Connor, and Matthews (1974) found dropouts were three times as likely to be alcoholic and twice as likely to be a drug abuser.

Another personality variable, motivation, has often been implicated in the process of remaining in or defecting from therapy. Although "motivation" lacks conceptual clarity and has been assessed in different ways, a literature survey (Baekland & Lundwall, 1975) suggested motivation was a factor in treatment dropout. It seems clear that a person's reasons for treatment, regardless of the source, influenced the decision to remain in therapy or drop out prematurely.

Disconfirmation of expectations was reported as a contributing factor in premature termination (Borghini, 1968;

Heine & Trossman, 1960; Hollingshead & Redlich, 1958; Otto & Moos, 1974; Overall & Aronson, 1963). Levitt (1966) suggested a linear relationship existed between the success of psychotherapy and the client's expectation-reality discrepancy. However, Begley and Liberman (1970) and Horenstein and Houston (1976) suggested a parabolic relationship existed between the two factors.

Another approach to the problem of withdrawal from therapy involves an examination of therapist input, rather than patient demographic or personality variables. Therapist characteristics were shown to be extremely important in 35 studies reviewed by Baekeland and Lundwall (1975). Several of the characteristics of a therapist who was prone to drive patients from treatment included (a) ethnocentrism, (b) a lack of concern for, dislike of, or boredom with the patient, and (c) negative feelings about the use of medication. The therapist was also more permissive, less active, introverted, and detached.

In a study of nonrespondents 1 year after their initial crisis consultation, Maris, Connor, and Matthews (1974) identified several important therapist variables. Symptoms were still present in the majority of nonresponders, but paradoxically, a large proportion denied that they needed psychiatric services. Compared to clients who completed therapy, the nonresponders were rated as less attractive, and difficulties in rapport were noted. Some of these negative attitudes

toward the eventual nonresponders may have been interpreted as rejection by the patients. Similarly, Strickland and Crowne (1963) found that therapists in individual therapy lost patients they did not like.

The attitudes and expectations of therapists towards their patients are known to affect therapeutic behavior (Goldstein, 1971). Several studies found that therapists' attitudes toward patients of lower socioeconomic status were negative (Baum, Felzer, D'Zmura, & Shumaker, 1966; Heine & Trossman, 1960). Siassi and Messer (1976) offered guidelines for the correction of inadvertant discrimination by therapists. For example, therapists were encouraged to explore and correct their racial stereotypes.

In addition, Sue, McKinney, Allen, and Hall (1974) found race to be a more important correlate to dropping out of treatment than background variables such as age, sex, education, and income. Although blacks were no more likely than whites to receive inferior forms of treatment, blacks saw paraprofessionals rather than professional staff members. Over 50% of the black individuals failed to return to the clinic after an initial contact. Therefore, clients and therapists differing in race, social class, and lifestyle may have difficulties in establishing trust and in maintaining a working relationship (Halpern, 1973; Vontress, 1971).

A few investigators examined the client-therapist interaction, in an attempt to increase the understanding of

premature termination. For example, Weiner (1974) attributed psychotherapeutic impasse and subsequent dropout to incongruence between the therapist's and patient's goals, a lack of rapport, and an antitherapeutic alliance. Similarly, Levinson, McMurray, Podell, and Weiner (1978) suggested four factors were involved in client dropout. The most important factor included barriers to treatment such as a fear of loss of defenses, a fear of dependence, a fear of aggression or sexuality, transference, and decompensation. Intrinsic factors--masochism or poor motivation--and therapist factors --iatrogenic effects and countertransference--were also implicated. Finally, reality factors, such as the sabotage of therapy by significant others or physical illness, were also important in premature termination.

Specific therapist behaviors which were associated with difficulties in the client-therapist interaction were examined. For example, Fiester (1977) identified therapy process variables which distinguished high attrition therapists from therapists with low attrition rates. A principal-components analysis indicated five factors characterized the therapeutic process associated with a high dropout rate. Therapy process variables were found to have greater importance in the therapy dropout phenomenon than client characteristics. These variables were (a) bipolar client involvement/client inhibition, (b) an anxious, aroused therapist, (c) a therapist-directed interview, (d) an ineffectual therapist with a

confronting client, and (e) cathartic relief with an anxious therapist.

Duehn and Proctor (1977) suggested continuance or defection from therapy was related to the level of satisfaction which accrued in the relationship between the therapist and the client. Two variables which resulted in satisfaction were identified, i.e., stimulus-response congruence and content relevance. A congruent exchange was defined as an interaction characterized by confirmation to the participant that his or her message was received. Likewise, continuance in therapy was more likely whenever a client's definition of the problem was similar to that of the clinician. Results indicated that clinicians were significantly more incongruent with defectors than with continuers in the initial interview. Further, a clinician's content was significantly more irrelevant to the content expectations of patients who discontinued treatment. These findings indicated patient continuance or defection should not be viewed as a "given," but as dependent upon specific behaviors of the clinician.

The failure of early investigators to employ multivariate designs precluded an examination of the multiple determinants of premature termination. Recently, Fiester and Rudestam (1975) employed a multivariate design to evaluate the interaction of patient input (demographic variables), and the patient's perceptions of therapy. Therapists

at one center were psychodynamically oriented, while therapists at the other center were more concerned with feelings, and emphasized the "here and now." Results suggested that the process of dropping out operated differently at the separate community mental health centers. Even though no overall differences in dropout rates were observed at the two centers, the existence of different significant therapist input, patient input, and therapy process variables supported a setting specificity in the dropout phenomenon. Also, there were no significant differences between the two patient samples with regard to age, sex, or socioeconomic status. In other words, the differences between the samples were the result of therapist behavior. Extrapolating from these results, Fiester and Rudestam suggested that higher dropout rates among lower class patients may occur only in settings which employed psychodynamic techniques. Baekeland and Lundwall (1975) reached a similar conclusion on setting specificity.

In summary, the research on premature termination is contradictory and relatively unclear. Part of the disagreement may result from a propensity to focus only on patient variables, while neglecting therapist and process factors. One practice which led to confusion was the definition of a "dropout." Investigators included patients who failed to return, refused to return, or made the initial appointment and failed to show. In addition, clients who had previously

dropped out of therapy were included in some studies. The temporal criteria were also dissimilar. For example, drop-out may be defined as immediate (one visit), rapid (by 1 month), or slow (between 1 and 6 months). Morrow, Del Gaudio, and Carpenter (1977) found that categorizations based on number of sessions were not comparable to those based on clinical data obtained from clients who terminated therapy.

Perhaps the most important factor which contributed to these diverse findings was discussed by Fiester and Rudestam (1975). Their data suggested the process of dropping out operated differently in separate settings. These findings of intersetting and intrasetting differences in the dropout process may have been overlooked by researchers, leading to confusion when separate studies were compared.

Finally, studies which focused on patient variables neglected an important part of the dropout process, i.e., the influence of the therapist. As Kiesler (1971) pointed out, the assumption that all therapists operate in an identical fashion is an unfounded uniformity myth.

An alternative research strategy to the retroactive study of psychotherapy termination involves the identification of variables which enable the clinician to predict which clients will drop out from psychotherapy. For example, Jachim (1974) constructed an instrument used in the identification of potential terminators. The items which differentiated between terminators and remainers were combined into a

subscale and norms were developed for the prediction of therapy dropout.

Iverson, Jurs, and Wenger (1976) attempted to identify potential dropouts utilizing the Personal Orientation Inventory. These researchers hypothesized that the higher the Personal Orientation Inventory score, the sooner the resident would drop out of the program. Results indicated the inventory was a weak, but significant, predictor of length of stay. Also, the inventory was a better predictor of length of stay than demographic variables.

Heilbrun (1978) developed the Counseling Readiness Scale by combining adjectives from the Adjective Checklist which distinguished terminators and remainers. High-readiness clients attended significantly more sessions than low-readiness clients. Results indicated the scale was a valid instrument for use in the prediction of continuation in therapy.

Smart and Gray (1978) performed a multivariate analysis of admission variables and treatment variables in an attempt to identify which factors influence a patient's decision to drop out from alcoholism treatment. Results suggested treatment variables were better predictors of remaining in therapy than admission variables. For example, only four admission variables were significant, i.e., motivation for treatment, problems due to drinking, life experiences with alcohol, and the length of time alcohol had been a problem.

Taken together, the treatment variables--type of treatment received, medication, treatment location, medical assessment, and therapist profession--had a significant bivariate relationship to dropout, and explained 30% of the variance in dropout rates. In summary, results indicated patients who remained in therapy were more likely to have had a variety of medical interventions than those who dropped out early.

Sue, McKinney, and Allen (1976) examined single and multiple correlates for premature termination in 13,450 clients seen in 17 community mental health facilities. Although the personality characteristics and attitudes of clients and therapists were found to be important in previous studies, these factors were not considered. The 12 predictor variables, which included client characteristics and type of services rendered, showed multiple correlations of .32 for premature termination and .20 for number of sessions. One factor, ethnicity, was very important in early termination. Three other factors--education, goals, and the type of personnel seen by the client--were each found to be related to dropping out.

In child settings, Bernal, North, and Kreutzer (1974) found that excuses given by mothers for not participating in a parent training project could be used to identify potential dropouts. An excuse was defined as a verbal effort to avoid agreement with a request from a mental health professional.

Bernal and Kreutzer (1976) also found this procedure useful in identifying dropouts in adult settings.

While the research on scales which may be useful in the identification of potential termination (Bernal & Kreutzer, 1976; Bernal, North, & Kreutzer, 1974; Heilbrun, 1978; Iverson, Jurs, & Wenger, 1976; Jachim, 1974; Smart & Gray, 1978; Sue, McKinney, & Allen, 1976) is interesting, care must be exercised in extrapolating the results. As Fiester and Rudestam (1975) suggested, the process of dropping out operates differently in separate settings. Therefore, cross-validation is necessary before these scales are applied on a wide basis.

A third approach to the problem of early termination involves the pretherapy training of clients. For example, Baum and Felzer (1964) advocated client "preparation" by openly discussing the client's expectations and the process of therapy. In an uncontrolled study, these authors found that flexible therapist activity during the initial interviews reduced premature termination. Another attempt at pretherapy training utilized a role-induction interview (Hoehn-Saric, Frank, Imber, Nash, Stone, & Battle, 1964) in order to study the relation between client expectations, the process, and outcome of psychotherapy. The interview stressed four components: (a) a general exposition of psychotherapy, (b) the expected behavior of patient and therapist, (c) preparation for certain phenomena in therapy, and (d) expectation

of improvement within 4 months. The experimental group was rated as significantly improved on 6 of the 16 criterion measures, including attendance, the patient's rating of improvement, the therapist's rating of difficulty in the maintenance of the therapeutic relationship, and a rating of social ineffectiveness.

Attempts at "vicarious therapy pretraining" were also reported by Truax and his co-workers (Truax & Carkhuff, 1967; Truax & Wargo, 1969). A 30-minute tape of excerpts of "good" therapy behavior was developed to allow prospective clients to "experience" group therapy prior to their own therapy. While this study did not address the problem of continuation in psychotherapy, pretraining had a moderately beneficial effect on outcome, as measured by a Q-sort procedure, an analysis of MMPI scales, and Barron's Ego Strength scale. However, no significant differences in premature termination occurred as a result of pretherapy training in two other studies (Sloane, Cristol, Pepernik, & Staples, 1970; Yalom, Houts, Newall, & Rand, 1968).

Recently, several investigators have reported specific attempts to prepare lower-class individuals for psychotherapy. Strupp and Bloxom (1973) utilized a role-induction film for lower-class clients and compared its effectiveness to a control procedure. Although clients who participated in the role-induction film and induction interview showed significant gains on attitudinal measures and indicated higher

ratings of improvement, no differences in attendance were found. Also, the therapist's ratings of outcome and a symptom checklist were essentially equal.

Still another attempt at pretherapy training with 35 low-prognosis clients was reported by Warren and Rice (1972). The two-part treatment approach involved four half-hour, outside of therapy sessions with another staff member. The first component of training, stabilizing, was designed to encourage clients to discuss difficulties that they were having with therapy or the therapist. The second component, structuring, was an attempt to train the client to participate in client-centered therapy. Ten persons received only the stabilizing component of training, while nine individuals received both the stabilizing and structuring components of training. With these two groups combined, the attrition rate was significantly lower than the attrition rate for a control group. In addition, therapist and client ratings of outcome were significantly higher for persons in the combined experimental group.

One study investigated the effects of pretherapy training on children (Holmes & Urie, 1975). One-half of a group of 88 children were given a therapy preparation interview. These children were "told what therapy was for, what the therapist would do, and what they should do" (p. 314). A significantly lower proportion of prepared children dropped out of therapy, 25% to 37.4% respectively. No significant

differences occurred in the therapist or parent ratings of improvement.

Overall, it is clear that no firm conclusions may be drawn from the research on the preparation of clients for psychotherapy. Three studies (Hoehn-Saric, Frank, Imber, Nash, Stone, & Battle, 1964; Sloane, Cristal, Pepernik, & Staples, 1970; Yalom, Houts, Newall, & Rand, 1968) did not control for socioeconomic status or prior psychotherapy experience. Pretherapy training significantly improved attendance in three studies (Hoehn-Saric, et al., 1964; Holmes & Urie, 1975; Warren & Rice, 1972) and had no significant affect in three others (Sloane, et al., 1970; Strupp & Bloxom, 1973; Yalom, et al., 1968).

An alternative strategy for dealing with the problem of premature termination was advanced by Turner and Vernon (1976). A telephone prompt was employed 1 to 3 days before scheduled intake appointments at a mental health center. The 6-month baseline indicated a no-show rate of about 31%. This rate was lowered to 15% during the 6-month period in which the prompt was used. With the prompt discontinued, the no-show rate rose to 18%. These data suggested the rate at which clients attended their intake appointments was increased by a telephone reminder. However, Kidd and Euphart (1971) found that contacting prospective clients by phone did not increase attendance. Of 97 individuals who were contacted, only three kept appointments.

Tracy (1978) examined the immediate attrition rate of clients who were evaluated by either of two intake procedures at a community mental health center. In a related study, the effects of a traditional psychiatric examination and a behavior analysis report were evaluated (Tracy & Sata, 1975). Significantly more people made contact after evaluation by the behavioral analysis report than after traditional evaluation. Three elements within the behavioral analysis report were hypothesized to promote treatment contact, i.e., stating problems in behavioral terms, stating the client's strengths and resources, and negotiation of explicit goals.

Another approach involved behavioral contracting with a heterogeneous population in the active attempt to influence behavior. Essentially, a behavioral contract specified certain behavior, the conditions under which the behavior was to occur, and the ensuing consequences if the conditions of the contract were not honored. In general, a contract acted to increase the likelihood that mutually beneficial performance occurred. Thus, contracting may be viewed as one way of directly rearranging the environment to increase compliance. For example, contingency contracting was employed in the inpatient and outpatient treatment of schizophrenia (Frederiksen & Williams, 1977) and anorexia nervosa (Hauserman & Lavin, 1977). Stern and Marks (1973) and Silverman (1977) successfully treated individuals with the diagnosis of obsessive-compulsive neuroses. These

methods were also applied in the treatment of depression (McLean, Oyston, & Grauer, 1973) and drug abuse (Hall & Burmaster, 1976; Polokow & Doctor, 1973). Addictive behavior such as smoking (Lando, 1977; Winett, 1973) and weight gain (Harris & Bruner, 1971; Mann, 1973) have been successfully controlled by contracting techniques. In addition, children with behavior problems at school (Cantrell, Cantrell, Huddleston, & Woolridge, 1969; Eyberg & Johnson, 1974), school-phobic children (Cretkos, 1977), and delinquents (Stuart, 1971) were treated with contingency management procedures. Finally, using the principles of reciprocity and social exchange, programs designed to reduce marital conflict were developed (Azrin, Master, & Jones, 1973; Jacobson, 1971; Jacobson & Martin, 1976; Rappaport & Harrell, 1972; Weiss, 1975; Weiss, Birchler, & Vincent, 1974). A recent review (Gurman & Kniskern, 1979) suggested both behavioral marriage therapy and nonbehavioral couples therapy were more effective in reducing marital conflict than control conditions.

A related study involved contingency contracting with noncompliant patients (Steckel & Swain, 1977). One group of hypertensive persons received routine clinic care, others received routine clinic care plus educational material, and a third group of individuals participated in contingency contracting. Results indicated a significant difference between the groups in terms of patients who dropped out of clinic care. No persons were lost from the contract group,

but three individuals were lost from the routine clinic care group and twelve patients were lost from the education group. In addition, only the persons who participated in contracting lost significant amounts of weight and significantly lowered their blood pressures. Thus, compliance with treatment procedures was prompted through the use of contingency management.

An important application of contingency management in a community mental health center is reported by Rinn, Vernon, and Wise (1975). Parents of behaviorally-disordered children were instructed in the principles of applied operant learning. One-third of the \$30 treatment fee was refunded contingent to attendance and the completion of homework. At the end of the fifth session, 92% of parents rated the problem behavior as "much-improved." Attendance and completion of homework assignments were significantly higher in the contracting individuals.

Overall, contingency management has been shown to be useful in a wide range of problems. Also, it is effective with many types of clients. A related question pertains to the effect of contingency management in outpatient psychotherapy. Specifically, will the no-show and dropout rate from outpatient psychotherapy be altered through the use of behavioral contracts?

The two mental health centers involved in this study have heavy client loads. Due to the therapist demand, the

centers also have waiting lists. However, some clients do not attend scheduled appointments or notify the center of impending absences. Whenever this happens, therapists essentially have "free time" which cannot be used to see other clients. Contingency management may provide an answer to this problem (Steckel & Swain, 1977). It is hypothesized that the negotiation of contracts will result in an increase in attendance, a decrease in early termination, and more efficient use of staff time. Any of the demographic variables or questionnaire responses which are significantly correlated with these outcome measures will be entered as covariates in the analysis. If no significant correlations are obtained, the outcome measures will be evaluated with a simple analysis of variance.

Method

Subjects

The individuals participating in the study ranged in age from 8 to 50 years. Persons younger than 18 years were included only if their families were also involved in therapy. Both individuals who were referred and persons who called the Denton County Mental Health Unit or the Lewisville Family Counseling Center were eligible. Persons who agreed to participate were randomly assigned to either a control group, a motivation-control group, or a group which included contingency management.

Procedure

Staff training was provided in order to familiarize the staff at the two community mental health centers with the study. One-hour training sessions were conducted by the experimenter for the secretarial personnel, intake workers, and therapists. Discussion included the nature of the investigation, questionnaires, and the differential treatment of persons in each group. Flow charts representing the differential treatment were provided to each staff member. Intake workers were instructed to begin group assignment at the completion of training. Data were collected over a 7-month period.

Individuals were assigned an appointment time and intake worker during the initial contact. Approximately 24 hours before a scheduled intake, the experimenter placed a phone call to all persons as a reminder of the appointment. If the individual wished to reschedule, another time was selected. Another reminder call was made approximately 24 hours before this session.

Before being interviewed, each individual completed two questionnaires--an expectation inventory (Appendix A) and a symptom checklist (Appendix B). During the intake, information regarding problems in living, symptom duration, and precipitating events were collected. Shortly before the session ended, the intake worker sought permission for inclusion in the study. Specifically, the intake worker asked,

"We are conducting a study concerning client participation in therapy. Would you be willing to allow us to use information relating to symptoms and psychotherapy attendance?" Whenever a person answered affirmatively, he or she was asked to sign a statement allowing inclusion in the study (Appendix C). If an individual refused, the intake worker reported the refusal, but did not deny treatment.

Persons were assigned to a group on a random basis. A table of random numbers was used to generate two lists--one for use with new clients and one for use with individuals who had prior agency contact. Random assignment occurred by blocks of three individuals.

Treatment procedures remained the same for individuals assigned to the control group. Persons assigned to the motivation-control group were asked if they would participate in a prepayment contingency, but were not required to do so if they agreed. Specifically, the intake worker asked, "Would you be willing to sign a contract requiring you to pay for a session in advance? Also you will be required to give a 24-hour notice of an impending absence, or the fee will be forfeited." Whenever an individual agreed, the intake worker "examined the service fee to determine if prepayment is necessary." The individual was then informed that "prepayment is not necessary with this fee for services."

Persons assigned to the contract group were asked to pay for each session in advance. If these persons missed a

scheduled appointment or failed to give a 24-hour notice of an impending absence, their service fee was forfeited. The next session was scheduled after an additional payment. These individuals were asked, "Would you be willing to sign a contract requiring you to pay for each session in advance? Also, you will be required to notify our agency at least 24 hours before an impending absence or the fee will be forfeited." If the person answered affirmatively, the contract (Appendix D) was negotiated. Refusals were reported to the experimenter.

Shortly before the close of the intake session, persons completed the postsession expectation questionnaire (Appendix E). Comparison of the two expectation questionnaires (Appendices A and E) yielded an expectation-reality index for future analysis. The responses were totaled for each of four categories: (a) expected-confirmed, (b) expected-disconfirmed, (c) not expected-confirmed, and (d) not expected-disconfirmed (Begley & Liberman, 1970; Overall & Aronson, 1963).

The final step in the intake procedure involved assignment of each case to a therapist. Research suggests the outcome of psychotherapy was influenced by the therapist's style (Baekeland & Lundwall, 1975; Goldstein, 1971; Halpern, 1973). Therefore, each therapist was assigned an equal number of clients in each group.

Data on attendance and premature termination of therapy were collected weekly. In other words, whether an individual

attended a scheduled session, information concerning notification of impending absences, and the time of day of missed appointments were collected. Finally, a posttherapy report (Appendix F) was completed by each contract member at the end of a session.

As Morrow, Del Gaudio, and Carpenter (1977) indicated, almost 70% of dropouts occur before the fifth session. Therefore, the data were collected over four treatment sessions. For the purpose of this study, a "drop out" occurred whenever an individual terminated therapy by missing an appointment and not rescheduling, or whenever a person missed three consecutive appointments. Persons could reschedule a session by calling the centers and arranging another time. A "no-show" occurred whenever a client did not keep an appointment. Finally, individuals cancelled an appointment by notifying the centers of an impending absence. After the fourth session, the experimenter interviewed each individual who remained in therapy (Appendix G). Persons who terminated therapy were contacted by phone 5 weeks after the intake and an interview (Appendix G) was scheduled. The experimenter identified himself as a graduate student at North Texas State University and an employee of the Denton County Mental Health Unit. The interview (Appendix G) was conducted "so that agency service may be improved." Individuals who had moved were contacted by mail.

Results

Eighty intakes were completed during the study. Sixty-nine persons agreed to the experimental procedures and 11 declined participation (Appendix II).

Originally, each condition contained 23 individuals. Due to client attrition, the control group consisted of 20 members, while both the motivation-control condition and the contract condition contained 21 members. One person in the contract group was hospitalized. In each of the conditions, one member moved and could not be contacted at followup. Finally, two control persons and one member of the motivation control group would not allow the experimenter to conduct the followup interview at their home.

The readability (Grunder, 1978) of the self-report questionnaires is seventh- to eighth-grade level. All of the individuals who completed forms had an eighth-grade or above education.

Analyses of variance for each of the demographic variables--age, sex, income, and education--and for the symptom checklist are contained in Tables 1-5, Appendix I. Overall, no statistically significant differences in demographics or the number of symptoms are indicated.

Inspection of a graphic representation of session attendance (Figure 1) reveals the dropout rate in each condition is similar. In terms of numbers, 17 members of the contract group, 15 members of the motivation-control group, and 14

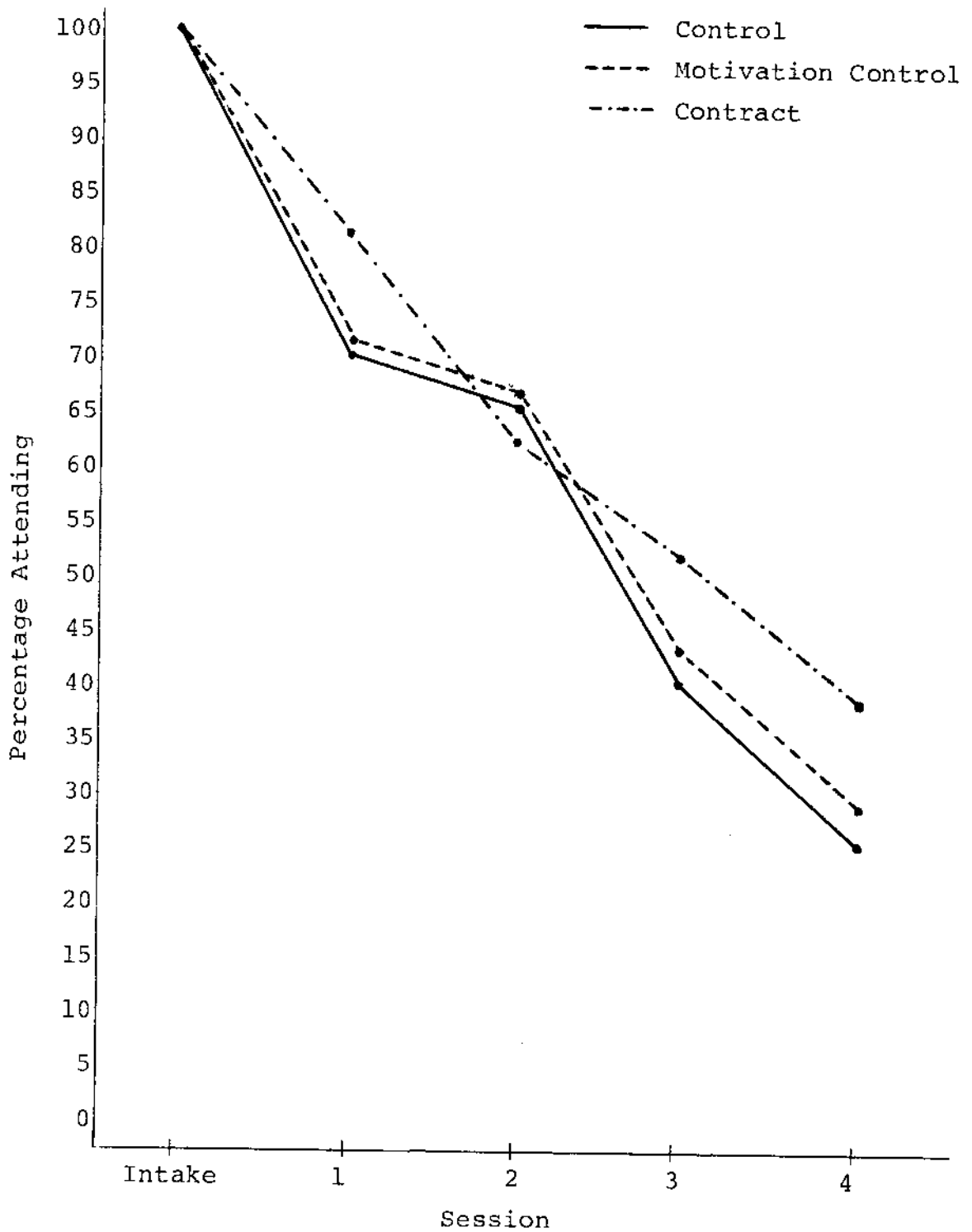


Figure 1. The percentage of individuals in each group who attended each session.

members of the control group attended the first therapy session. By the fourth session, eight persons in the contract condition, six individuals in the motivation-control condition, and five members of the control condition were still attending.

Thus, the dropout rate is 62% in the contract individuals, 71% in the motivation-control persons, and 76% in the control condition. For those individuals who refused to participate in the study, the dropout rate is 73%. These figures are similar to the reported dropout rates of 30% to 50% by the first or second session (Fiester, 1974) and 70% by the fifth session (Morrow, Del Gaudio, & Carpenter, 1977).

Eight individuals who participated in contingency management were consequented for nonattendance. In addition, three persons failed to give 24-hour notice of impending absence. The total amount forfeited is \$146 (see Table 6, Appendix J). Only one individual lost more than a single fee as a result of noncompliance.

Graphic representations of the mean frequency of rescheduled appointments, by groups, is presented in Figure 2. Inspection of the graphic trends reveals the frequency of rescheduled appointments is similar across control, motivation control, and contract groups.

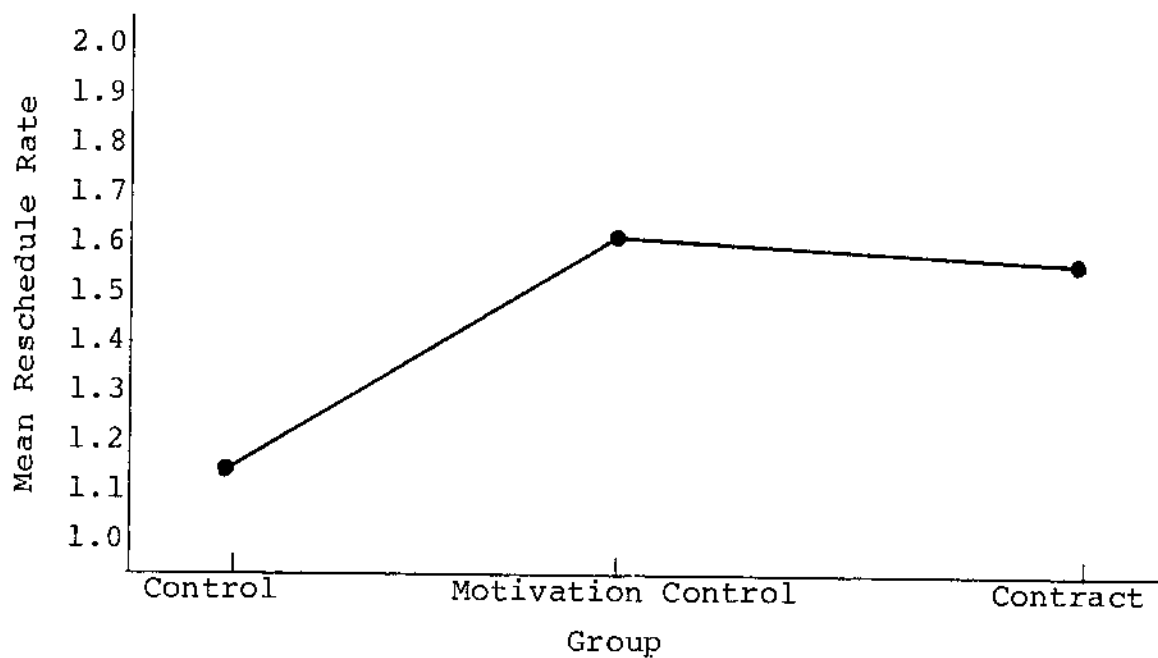


Figure 2. The mean number of rescheduled appointments by groups.

Figure 3 graphically illustrates the mean number of no-shows for each group.

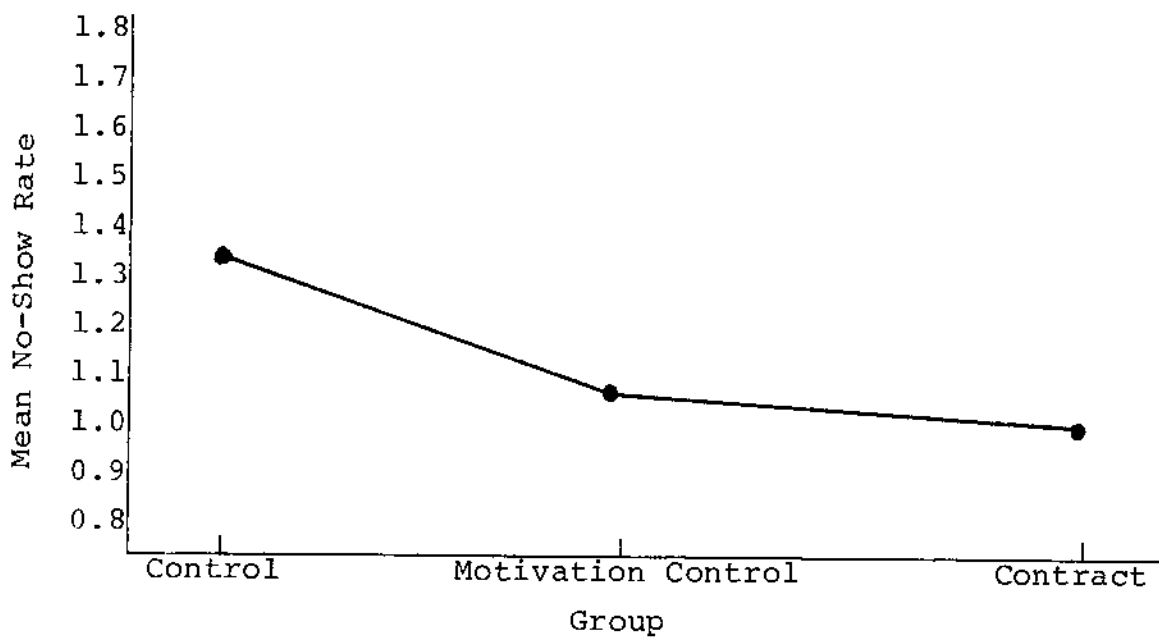


Figure 3. The mean number of no-shows by groups.

The mean frequency of cancellations is graphically presented in Table 4.

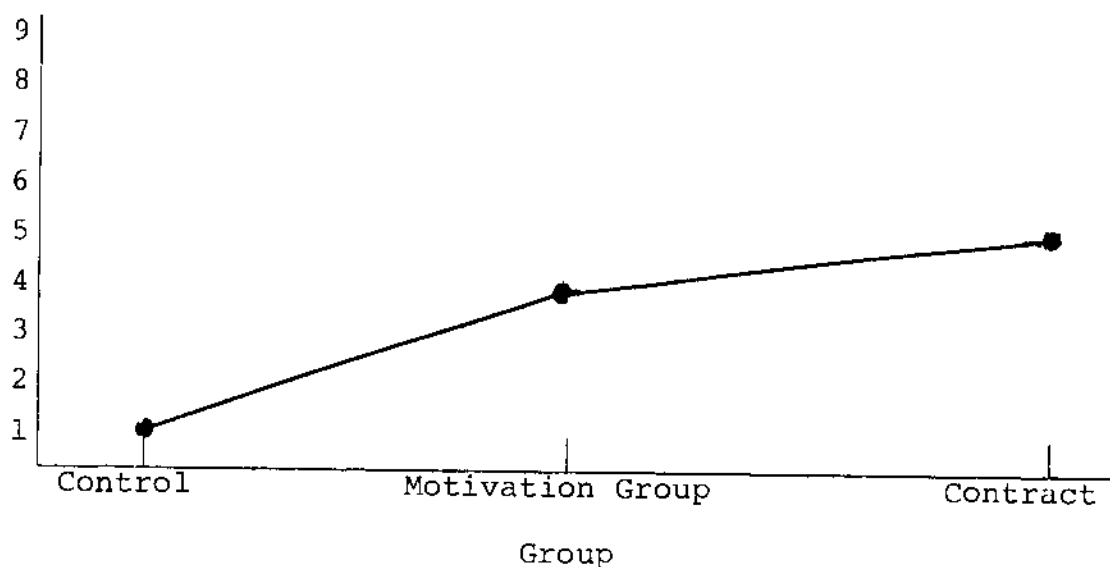


Figure 4. The total number of cancelled appointments in each group.

Although the results are in the direction predicted, the probability of obtaining differences this large are quite high by chance. Statistically significant F 's are not obtained in a one-way analysis of variance of data for rescheduling, no-shows, and cancellations (Tables 7, 8, 9, Appendix K).

For example, the average frequency of rescheduling across groups is not statistically significant ($F = 0.777$, $p > .05$). The total number of rescheduled appointments does not represent an extreme number for any individual. Of the persons who rescheduled appointments, the total number is nine in the control condition, eight in the motivation-control group, and 14 in the contract condition.

In addition, the average no-show rate in each group is comparable ($F = 1.336$, $p > .05$). These figures do not represent an extreme number for any individual. Of the persons who no-showed, the total is 12 for control members, 15 for motivation-control members, and eight for contract persons. The average frequency of cancellation is not significant ($F = 1.548$, $p > .05$).

In order to determine the amount of lost staff time, the number of no-shows was added to the number of appointments which were rescheduled with less than 24-hours notice (Figure 5). The least amount of time lost, 11 hours, is associated with contingency management. A 16-hour loss occurs with control members. Individuals in the motivation-control condition are responsible for an 18-hour loss.

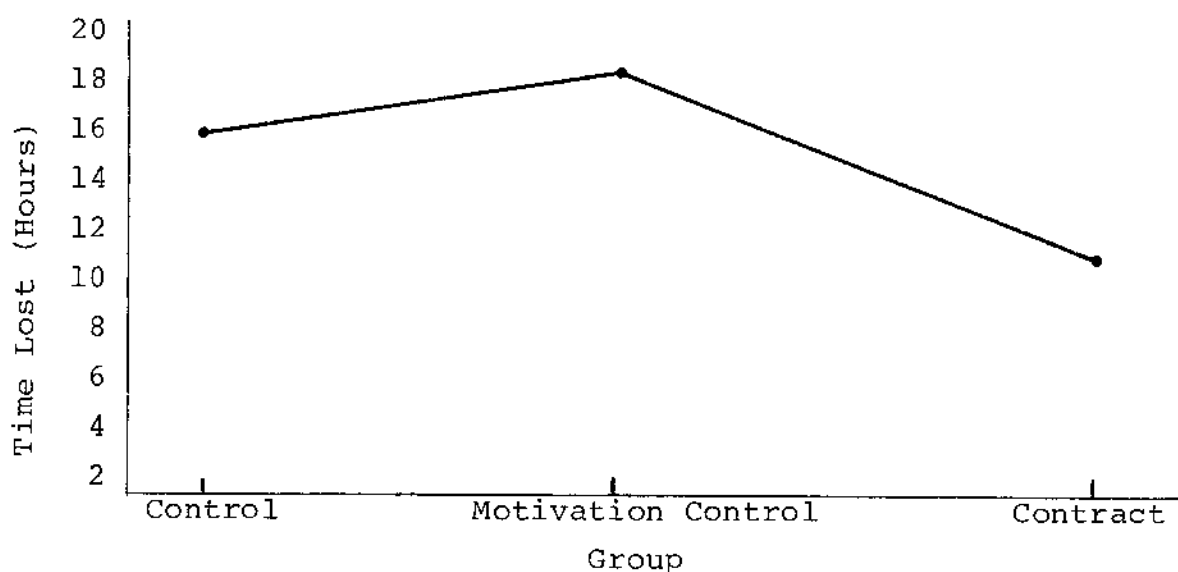


Figure 5. The total time lost for each group. (The number of no-shows combined with the number of rescheduling failures equals the amount of time loss.)

Items 3 through 6 of Appendix G were scored such that a response to "a" equals 1 point, "b" equals 2 points, "c" equals 3 points, "d" equals 4 points, and "e" equals 5 points. Thus, the score for each individual can vary from 4 to 20. With regard to subjective measures, a one-way analysis of variance indicates no significant differences ($F = 0.766$, $p > .05$) in satisfaction as measured by the self-report questionnaire (see Table 10, Appendix L). Of the 41 individuals who prematurely terminated therapy, 10 rated the experience as negative. Six of these 10 individuals are in the motivation-control group, three are in the contract group, and one is in the control group. Problem resolution is reported by five control members, one motivation-control person, and three contract members. Additional reasons for termination--being unable to leave work to attend sessions, an inability to pay, and problem resolution--were cited by the individuals who rated therapy positively. Of these, nine are motivation-control members, 10 are contract members, and 12 are control members.

Correlational analysis indicates a statistically significant relationship between education and several outcome measures. Therefore education was employed as a covariate in an analysis of covariance on these outcome measures (Table 12, Appendix M). One statistically significant difference is indicated between dropouts and remainers. Individuals who

terminate therapy before the fifth session view therapy as a less positive experience ($\underline{F} = 10.471$, $\underline{p} < .01$).

Results of an unweighted means analysis of variance indicate that confirmation or disconfirmation of treatment expectations has no effect on continuation of therapy through five sessions. These data are contained in Tables 13, 14, 15, and 16, Appendix N. Persons who remain in therapy and those who drop out have similar numbers of expectations confirmed, including expectations that a behavior would ($\underline{F} = 0.897$, $\underline{p} > .05$) or would not happen ($\underline{F} = 1.188$, $p > .05$). Remainders and dropouts also have a similar frequency of disconfirmation, including the occurrence of unanticipated behavior ($F = 2.041$, $\underline{p} > .05$) and the absence of unanticipated behavior ($\underline{F} = 3.131$, $p > .05$).

In order to determine the relationship between the demographic variables and the attendance data, simple correlations were computed (Table 17, Appendix O). An inverse relationship is indicated between rescheduling and both income and education. Persons with higher income tended to no-show more frequently. Finally, a positive relationship exists between satisfaction and both rescheduling and the no-show rate.

Discussion

While the data are in the predicted direction statistically significant differences in outcome measures are not indicated. Under the conditions of the present study, the effect of contingency management on attendance measures

is not statistically significant. With regard to subjective measures, client ratings of outcome and satisfaction are similar across conditions. A majority of clients who dropped out before the fifth session expressed satisfaction with the procedure. However, these individuals rated the outcome as less positive. Finally, client expectations and disconfirmations do not appear to contribute to client drop out under the conditions of the study.

Thus, the data from this study do not support the findings of Steckel and Swain (1977), who reported compliance with treatment procedures and attendance were improved by implementing contingency contracts. In addition, contracting did not increase attendance and the completion of homework assignments as reported by Rinn, Vernon, and Wise (1975). Methodological differences may be responsible for the failure of the present investigation to support these earlier results. The experiments are different along several dimensions, i.e., the target behaviors, the contingencies which were involved, and the potential for feedback on symptom change. The discrepant findings do not appear to be associated with motivational variables. Statistically significant differences are not indicated between the motivation-control group and the contract group.

In the present study, individuals agreed to attend all scheduled appointments and to notify the center of impending absences. This contingency was in effect throughout treatment.

In contrast, Steckel and Swain (1977) utilized compliance with treatment procedures--maintaining a diet, exercising, or keeping an appointment--as the target behaviors. The contract was renegotiated and individuals picked new behavioral goals during each appointment. Even though attendance was not consequted in every contract, contingency management was associated with treatment compliance and a reduction in withdrawal from treatment.

Different contingencies are employed in these two studies. For example, Steckel and Swain (1977) provided tangible objects or other reinforcers, e.g., staff assistance with insurance forms, for use with the contracts. In this study, persons avoided the loss of prepaid treatment fee by fulfilling the terms of the contract. In other words, Steckel and Swain reinforced patients for meeting their goals, while clients in this study avoided a monetary loss through compliance with goals they did not select. These two contingencies may have dissimilar effects on behavior.

Another possible explanation for the variance between these investigations concerns reinforcer effectiveness. Patients in the medical setting received feedback on progress whenever weight, blood pressure, or medication was monitored. When these measures improved, patients viewed treatments as "successful." Attributions of success may be associated with regular and long-term attendance. A comparable measure of symptom severity is seldom present in outpatient

psychotherapy. Perhaps attendance in this setting could be maintained if presenting problems are defined operationally, monitored weekly, and individuals are informed of progress.

Still another potential explanation is suggested by an examination of early termination. Of the persons who terminated therapy, 10 of 41 rated the experience as negative. Many factors are involved in client attrition (Table 3). If contingency management interacts with each factor, significant differences between groups of individuals may be difficult to obtain. Alternatively, contingency management may not override the multiple variables which affect the dropout rate.

Finally, a failure to gain control of specific reinforcers may have contributed to the ineffectiveness of contingency management. While it is easy for individuals to identify stimuli as pleasant or unpleasant, whether or not these stimuli are reinforcing is another matter. Individuals rarely emit behavior as the result of a discrete pleasant stimulus. Instead, the cumulative total of pleasant stimuli, the ratio of these stimuli to aversive stimuli, the situational context, or an individual's attribution of change may be more important in determining the probability of a certain behavior.

Perhaps the avoidance of a monetary loss may be thought of as a cue instead of a reinforcer. In essence, a cue functions as a discriminative stimulus which signals the

likelihood of additional reinforcement. For example, the contract signals the possibility of additional reinforcement --symptom resolution, problem solving, and so on--if individuals attend regularly. When additional reinforcement is no longer available, the cue loses effectiveness. At this point, clients become "discouraged" and withdraw from treatment.

An analysis of treatment expectations also fails to support previous research. Contrary to prediction, confirmation or disconfirmation of client expectations has no significant effect on continuation of therapy through five sessions. These findings are at variance with results of several previous studies (Begley & Liberman, 1970; Borghi, 1968; Heine & Trossman, 1960; Horenstein & Houston, 1976; Otto & Moos, 1974; Overall & Aronson, 1963). The expectation questionnaires utilized in this study (Appendix A, Appendix E) are a shortened version of those employed by Overall and Aronson (1963). Perhaps this contributed to the failure to obtain significant differences. Alternatively, it seems that many of the clients involved in the present investigation have relatively high incomes. Therefore, they may be more "sophisticated" about the therapy process than the lower-class clients involved in the previous studies.

The question remains as to whether contingency management under the conditions of the present investigation is viable. In an effort to increase the power of a contract,

several important dimensions may be varied. For example, the probability of high frequency negative behavior may be altered through the reinforcement of an incompatible behavior. This strategy requires a change of the target behaviors selected for consequence in the present study. Concurrently, treatment fees could be structured to allow the return of money for positive behavior. The negotiated agreement will specify that money would be deposited into a fund whenever individuals give 24-hours notice of their plans. In addition, another deposit to the fund would be contingent to attendance. Rinn, Vernon, and Wise (1975) indicate attendance is improved by a positive reinforcement contingency. The power of this agreement might increase if the contract requires the fund be used for a specific, client-related purpose, i.e., to travel, to buy new clothes, or to have an expensive meal.

Another possible alteration requires a more substantial deposit from each client. Although the aversiveness of this procedure requires monitoring, it could increase compliance. On the other hand, clients may find the deposit too stringent and refuse to participate in therapy.

In one sense, the negotiation and signing of an agreement can be considered as stimulus control. These procedures change the context of the behavior. Other methods of stimulus control may be specified in the contract. Clients could be asked to keep an appointment card next to their telephone as a reminder of their agreement to notify the center of impending absences.

A prompting procedure (Turner & Vernon, 1976) could also be included in the contract. One day before an appointment, the centers will remind a client to call later in the day to report his plans. This prompt could be gradually faded as clients begin to call on a more regular basis.

Although no significant F 's are indicated in the present study, the utility of contingency management is suggested by an examination of earlier investigations. In the future, research must address several issues. Further investigation is necessary to account for individual differences in response to treatment. Perhaps these differences are associated with previous experience, i.e., discrimination learning, history of reinforcement, individual attributions of change, or the context of a behavior. In addition, future programs should incorporate significant others into contractual agreements. This would provide greater control of reinforcement as well as including an important part of the environment into the treatment plan.

Future investigations must place a greater emphasis on the negotiation process. For example, allowing individuals to pick behavioral goals and reinforcers may increase the utility of contingency management (Steckel & Swain, 1977). The importance of this process should be investigated in a wide range of settings.

Historically, the oldest form of contingency contracting is the "quid pro quo" agreement (Weiss, Birchler, & Vincent,

1974) which involves the simultaneous exchange of behavior. In another type of contract, the "good faith" agreement, behavior changes are not made contingent upon one another. Under certain circumstances, one type of contract may be more effective. In the future, the efficacy of both types of contracts should be assessed in specific medical and behavioral problems. Future research should attempt to systematically partial out the effective components of broad spectrum interventions. The relative power of a single versus simultaneous multiple-contract behavioral exchange should also be assessed. Then, components of the program which do not contribute to the overall effectiveness could be eliminated.

In closing, it is important to consider the drawbacks involved in contingency management. Although some data indicate this approach is useful, widespread applications have not been conclusively demonstrated. In deciding whether contingency management is clinically indicated, two questions must be considered. First, does contracting add to the therapeutic regimen; second, are there clinical hazards associated with contracting which contraindicate its use?

In some instances, contingency management is redundant. Communication between involved parties, negotiation, and therapist input are necessary before a contract is instigated. The clinical procedures which precede contracting may result in changes in the target behavior.

When a therapist negotiates a "reward" for behavioral change, is the probability of compliance automatically increased? In some cases, the probability of a behavior remains at the baseline level. Contract negotiation is an important antecedent of compliance. If negotiations are difficult or heated, an individual may be less likely to comply with the agreement, even though reinforcement is provided.

Another hazard associated with contingency management is the problem of reinforcer selection. Basically, three general classes of reinforcers are available: (a) pleasant stimuli provided by a significant person, (b) reinforcers provided by sources other than a significant person, and (c) high-frequency behaviors (Premack, 1965). In selecting reinforcers, it may be difficult to obtain the cooperation of significant others or acquaintances. In addition, it is tempting to designate high-probability behavior as reinforcing on an a priori basis. Caution must be exercised to avoid the inherent attribution of reinforcing properties to stimuli. For example, money was selected as a reinforcer in the present study under the assumption that monetary loss would constitute a loss of reinforcement. However, assessment of reinforcer effectiveness would have been necessary to verify this assumption.

Even when it is possible to identify effective reinforcers, their specification may eliminate an ability to influence behavior. Extrapolating from prior studies,

reinforcers may be effective only when accompanied by certain attributions (Levine & Fasnacht, 1974; Notz, 1975). For example, marital partners may attribute changes in behavior to extrinsic factors, i.e., a contingency contract, and therefore value the changes less than these same changes without specified consequences. In other words, changes in spouse behavior might be attributed to being "forced" to improve, rather than a desire to improve the marital relationship. It seems that some individuals view environmental explanations of behavior as less worthy (Skinner, 1971). Contingency management should be instigated only after careful consideration of an individual's attributions.

In summary, results indicate contingency management as incorporated in this study does not significantly effect either objective measures of attendance or subjective measures of client satisfaction and outcome. Change agreements, as the result of a complex problem-solving process, are a vital component of any therapeutic orientation. Whether or not the specification of contingencies in a "quid pro quo" contract increases the efficacy of this process remains an empirical issue. However, the present data suggest attendance is not significantly increased by contingency management.

Appendix A
Expectation Inventory

Please circle yes or no after each question:

Do you think the counselor will:

- | | | |
|---|-----|----|
| 1. give you medication? | yes | no |
| 2. try to cheer you up? | yes | no |
| 3. not want your opinions? | yes | no |
| 4. listen more than he/she talks? | yes | no |
| 5. avoid subjects which might upset you? | yes | no |
| 6. ask what medicines you've been taking? | yes | no |
| 7. want to know what your childhood was like? | yes | no |
| 8. want to know what makes you unhappy? | yes | no |
| 9. ask what physical illnesses have been in
your family? | yes | no |
| 10. want to know about your thoughts and
feelings | yes | no |
| 11. want to know what doctors you've seen
lately? | yes | no |
| 12. ask you a lot of questions? | yes | no |
| 13. want to know how you get along with people? | yes | no |
| 14. tell you ways to solve your problems? | yes | no |
| 15. expect you to do most of the talking? | yes | no |
| 16. be particularly interested in your aches
and pains? | yes | no |
| 17. tell you what is wrong with what you do? | yes | no |

- | | | |
|--|-----|----|
| 18. take your pulse and blood pressure? | yes | no |
| 19. listen to your troubles? | yes | no |
| 20. be interested in knowing if some things
make you afraid or nervous? | yes | no |

Appendix B
Symptom Checklist

Please check the symptoms or problems with which you are currently having difficulty:

- 1. Headaches
- 2. Nervousness or shakiness inside
- 3. Being unable to get rid of bad thoughts or ideas
- 4. Loss of sexual interest or pleasure
- 5. Feeling critical of others
- 6. Trouble remembering things
- 7. Feeling easily annoyed or irritated
- 8. Pains in the heart or chest
- 9. Thoughts of ending your life
- 10. Feeling confused
- 11. Feeling shy or uneasy with other persons
- 12. Suddenly scared for no reason
- 13. Temper outbursts you could not control
- 14. Blaming yourself for things
- 15. Feeling lonely
- 16. Feeling no interest in things
- 17. Feeling fearful
- 18. Feeling others do not understand you
- 19. Feeling that other people are unfriendly or do not like you
- 20. Upset stomach

- [] 21. Feeling inferior to others
- [] 22. Difficulty in falling asleep or staying asleep
- [] 23. Having to check and double check what you do
- [] 24. Having to stay away from certain things, places, or activities because they frighten you
- [] 25. Your mind goes blank
- [] 26. Numbness or tingling in parts of your body
- [] 27. Feeling hopeless about the future
- [] 28. Trouble concentrating
- [] 29. Feeling tense or keyed up
- 30. Do you think you will be willing to attend 4 sessions or more if the counselor thinks it is necessary?
Yes _____ No _____

Appendix C

Research Participation Consent

I have received an explanation of the study which is being conducted to improve client services at the Denton County Mental Health Unit or the Lewisville Family Counseling Center. I also understand that my name will not be used in connection with the study. All information will be used on an anonymous basis. I give my permission for information relating to symptoms, psychotherapy attendance, and psychotherapy dropout to be used in the study.

Signed: _____

Date: _____

Appendix D
Behavioral Contract

I, _____, have received an explanation of the prepayment plan at Denton County Mental Health Unit. I agree to pay for my sessions one week in advance. I also understand that the fee will be forfeited unless I give at least 24 hours (one day) notice of an impending absence to the secretary at the Denton County Mental Health Unit.

Therapist _____ Signed _____
Date _____

Appendix E

Post-Intake Session Expectation Questionnaire

Please circle yes or no

Did the counselor:

- | | | |
|---|-----|----|
| 1. give you medicine? | yes | no |
| 2. try to cheer you up? | yes | no |
| 3. not want your opinions? | yes | no |
| 4. listen more than he/she talked? | yes | no |
| 5. avoid subjects which might upset you? | yes | no |
| 6. ask what medicines you've been taking? | yes | no |
| 7. want to know what your childhood was like? | yes | no |
| 8. want to know what makes you unhappy? | yes | no |
| 9. ask what physical illnesses have been in
your family? | yes | no |
| 10. want to know about your thoughts and
feelings? | yes | no |
| 11. want to know what doctors you've seen
lately? | yes | no |
| 12. ask you a lot of questions? | yes | no |
| 13. want to know how you get along with people? | yes | no |
| 14. tell you ways to solve your problems? | yes | no |
| 15. expect you to do most of the talking? | yes | no |
| 16. be particularly interested in your aches
and pains? | yes | no |
| 17. tell you what is wrong with what you do? | yes | no |

- | | | | |
|-----|--|-----|----|
| 18. | take your pulse and blood pressure? | yes | no |
| 19. | listen to your troubles? | yes | no |
| 20. | seem interested in knowing if some things
make you afraid or nervous? | yes | no |
| 21. | Did you like the counselor? | yes | no |
| 22. | Do you think the counselor seemed to
understand you? | yes | no |
| 23. | Do you feel the counselor can help you? | yes | no |

Appendix F

Weekly Therapy Progress

1. How well does your therapist understand the problem?
 - a. Understands exactly how I think and feel
 - b. Understands very well how I think and feel
 - c. Understands pretty well, but there are some things he or she does not understand
 - d. Didn't understand how I think and feel
 - e. Misunderstands how I think and feel

2. How much help are you receiving from therapy?
 - a. A great deal of help
 - b. Considerable help
 - c. Some help
 - d. Not any help
 - e. In some ways, the problems are worse

Appendix G

Therapy Progress Report

1. Were you satisfied with the services offered by Denton County Mental Health Unit?
Yes _____ No _____
2. If not, how could services be improved?
3. How much progress do you feel you made in dealing with your problems?
 - a. A great deal of progress
 - b. Considerable progress
 - c. Moderate progress
 - d. Didn't make any progress
 - e. In some ways the problems are worse
4. How well do you feel that you are getting along emotionally and psychologically at this time?
 - a. Very well; much the way I would like to
 - b. Quite well; no important complaints
 - c. Fairly well; have my ups and downs
 - d. Fairly well; life gets pretty tough at times
 - e. Quite poorly; can barely manage to deal with things
5. How well did your therapist seem to understand what you were feeling and thinking this session?
 - a. Understood exactly how I thought and felt
 - b. Understood very well how I thought and felt

- c. Understood pretty well, but there were some things he/she did not understand
 - d. Didn't understand too well how I thought and felt
 - e. Misunderstood how I thought and felt
6. How helpful was your therapist?
- a. Completely helpful
 - b. Very helpful
 - c. Pretty helpful
 - d. Somewhat helpful
 - e. Slightly helpful
 - f. Not at all helpful
7. If you are no longer in therapy, what reasons caused you to terminate your sessions?
- a. The problem was solved
 - b. The treatment didn't seem to be helpful
 - c. The sessions cost too much
 - d. I had difficulty attending the sessions on a weekly basis
 - e. I decided to go to another mental health professional
 - f. I decided I could help myself
 - g. I decided to talk things over with a friend
 - h. It seems that nobody could help me
 - i. Other: _____
-

Appendix H

Frequency of Reasons for Nonparticipation

Reason	Frequency
Unable to complete forms	3
Refused to participate	5
Refused to prepay	3

Appendix I
Analyses of Variance for Demographic Variables

Table 1
Analysis of Variance--Age

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	115.620	0.881 ^a
Within Groups	64	113.203	
Total	66		

^a $\underline{p} > .05$

Table 2
Analysis of Variance--Sex

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	0.093	0.461 ^a
Within Groups	64	0.203	
Total	66		

^a $\underline{p} > .05$

Table 3
Analysis of Variance--Income

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	342181.062	0.772 ^a
Within Groups	59	443352.063	
Total	61		

^ap > .05

Table 4
Analysis of Variance--Education

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	.072	0.087 ^a
Within Groups	64	8.090	
Total	66		

^ap > .05

Table 5
Analysis of Variance--Symptom Checklist

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	53.441	0.926 ^a
Within Groups	64	57.718	
Total	66		

^ap > .05

Appendix J

Table 6

Frequency and Amount of Consequation
in Prepayment Groups

Subject	Amount	Reason for Loss	
		NS ^a	RS ^b
1	\$14.00	1	0
2	2.00	1	0
3	28.00	1	0
4	2.00	1	0
5	16.00	1	0
6	8.00	1	1
7	22.00	1	0
8	32.00	1	0
9	6.00	0	1
10	8.00	0	1
Total	146.00		

^aNS = No-Show

^bRS = Reschedule less than 24-hours before appointment

Appendix K

Analyses of Variance for Participation Variables

Table 7

Analysis of Variance--Rescheduling Data

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	0.532	0.777 ^a
Within Groups	59	0.685	
Total	61		

^ap > .05

Table 8

Analysis of Variance--
No-Show Data

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	0.587	1.336 ^a
Within Groups	60	0.439	
Total	62		

^ap > .05

Table 9
Analysis of Variance--Cancellation Data

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	0.206	1.548 ^a
Within Groups	60	0.133	
Total	62		

^ap > .05

Table 10
Analysis of Variance--Ratings of Satisfaction

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	2	8.672	0.776 ^a
Within Groups	64	11.320	
Total	66		

^ap > .05

Appendix L

Table 11
Reasons Given by Clients for Termination

Reason	Frequency by Group ^a			Total
	Control	Motivation Control	Contract	
1. Problem resolution	5	1	3	9
2. Treatment was not helpful	5	3	2	10
3. Prohibitive cost	2	2	3	7
4. Difficulty attending	3	4	2	9
5. Went to another therapist	0	0	1	1
6. I can help myself	3	4	2	9
7. Talk things over with a friend	0	2	0	2
8. No one can help	0	1	0	1
9. Other--				
a. work prohibits attendance	4	3	3	10
b. refusal of significant others to attend	2	3	2	7
c. illness	0	1	0	1

^aMore than one reason may be checked.

Appendix M

Table 12
 Analysis of Covariance^a--Ratings of Satisfaction

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Covariates	1	1.344	0.135
Main Effects	1	104.111	10.471 ^b
Explained	2	52.728	5.303 ^b
Residual	64	9.943	
Total	66	11.239	

^aEducation as covariate.

^bp < .05

Appendix N
Analyses of Variance for Expectation Variables

Table 13
Analysis of Variance--Expected/Confirmed

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	1	95.5702	0.897 ^a
Within Groups	65	106.5253	
Total	66		

^ap > .05

Table 14
Analysis of Variance--Expected/Disconfirmed

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	1	27.6505	1.188 ^a
Within Groups	65	23.2733	
Total	66		

^ap > .05

Table 15
Analysis of Variance--Not Expected/Confirmed

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	1	135.4614	2.041 ^a
Within Groups	65	66.3752	
Total	66		

^ap > .05

Table 16
Analysis of Variance--Not Expected/Disconfirmed

Source	<u>df</u>	<u>MS</u>	<u>F</u>
Between Groups	1	4.4125	3.131 ^a
Within Groups	65	1.4905	
Total	66		

^ap > .05

Table 17

Correlation Matrix of Demographic and Outcome Variables

	Age	Sex	Race	Income	Educ.	RS	NS	CA	Satis.
Age	1.0000	0.1035	-0.0557	-0.1429	0.1848	-0.1932	-0.0034	0.1951	0.0356
Sex		1.0000	0.0086	0.0539	0.1311	0.1090	0.0981	-0.0622	-0.0143
Race			1.0000	-0.0474	0.0535	0.1602	0.2219	0.1683	0.0541
Income				1.0000	0.0717	-0.2464	-0.0506	-0.0386	-0.0573
Education					1.0000	-0.3046	0.2921	-0.0993	0.0426
Rescheduled						1.0000	-0.0666	-0.1668	0.2520
No-Show							1.0000	-0.0810	0.2093
Cancellation								1.0000	-0.0151
Satisfaction									1.0000

Note: RS = Rescheduled, NS = No-Show, CA = Cancellation.

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