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RELATION OF SELF-EFFICACY AND OUTCOME
EXPECTATIONS TO CLIENT ENGAGEMENT IN
A UNIVERSITY COUNSELING CENTER

By

Daniele Alexander Longo

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ABSTRACT

RELATION OF SELF-EFFICACY AND OUTCOME EXPECTATIONS TO CLIENT ENGAGEMENT IN A UNIVERSITY COUNSELING CENTER

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Daniele Alexander Longo
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The phenomenon of premature termination has received wide attention in the empirical literature over the past twenty years. Findings regarding clients who fail to engage in the counseling process, however, have been largely inconclusive and often contradictory. For example, studies which have focused on client and counselor background variables including age, gender, race, and counselor experience level have largely found no differences between clients who continue in therapy versus those that dropout of treatment (Rodolfa, Rapaport, & Lee, 1979).

Attrition research has generally not been guided by theoretical considerations aimed at prediction of client behavior (cf. Mennicke, Lent, & Burgoyne, 1988). In an effort to explore the problem of client engagement in treatment, an exploratory study was conducted to investigate the relationship between self-efficacy theory and attrition. The application of theory to the study of attrition was a novel step in furthering our knowledge about the factors which may facilitate clients' engagement in counseling.

Subjects were 139 graduate and undergraduate students who had requested counseling at Michigan State University's

Counseling Center. A package of questionnaires including measures of self-efficacy for client behaviors, counseling motivation, and outcome expectations were administered to subjects immediately following the intake session. Self-efficacy was measured by a task-specific, twenty-item measure, the Self-efficacy for Client Behaviors questionnaire (SECB) which was specifically developed for this study. Results indicated that the novel measure (SECB) developed to assess client's beliefs about their ability to engage in counseling was a highly reliable measure. Significant differences were found between continuers and early premature terminators in their level of motivation for counseling and self-efficacy beliefs. Terminators were characterized by inefficacious beliefs about their ability to engage in counseling and low levels of motivation to resolve the difficulties that brought them to counseling. Additionally, no differences were found among continuers and dropouts in terms of their counseling outcome expectations; in general both groups expected a positive outcome. Self-efficacy was also found to significantly predict subjects' level of motivation about counseling, with highly efficacious subjects displaying high levels of motivation. Contrary to expectations, neither self-efficacy or outcome expectations were related to subjects' state anxiety at time of intake. Results were discussed with regard to implications for further research and practice.

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In the intricate labyrinth of dissertation-making it is easy to get lost along the way. Often, it was difficult to sustain the effort and giving up appeared inviting and thrilling at times. Yet I have come to appreciate that it may be impossible to make a dissertation meaningful without having successfully overcome the various obstacles that are met along the way.

Although the "dissertation journey" may not be as dramatic or adventuresome as Ulysses' ten year return voyage to Ithaca, it did present many moments of joy as well as periods of confusion and lost navigation. But I too have had companions. Dr. Bob Lent, my chairperson, provided invaluable support and technical know-how. In particular, I would like to thank Bob for sharing the secrets of successful navigation, and for steering the research through the rough waters; his guidance in "getting it done" was truly appreciated. I would also like to thank Dr. John Powell for his unexhaustable humanness and kindness. Dr. Lee June also provided support and encouragement. Dr. John Scheineder provided invaluable insight as well as emotional and spiritual support.

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D. A. L.

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TABLE OF CONTENTS

LIST OF TABLES	1x
Chapter	
I. INTRODUCTION	1
Statement of the Problem	1
Purpose of Study	7
Research Questions	9
II. REVIEW OF LITERATURE	11
Self-Efficacy Theory.....	12
Research on Client Attrition	26
III. METHODOLOGY	46
Instruments	46
Procedures	54
Design	56
Data Analysis	57
VI. RESULTS	60
Description of the Sample	60
Reliability Analysis	64
Interrelationships among the Scales	71
Prediction of Motivation, Anxiety and Premature Termination	75
V. DISCUSSION	89

Chapter V (Continued)

Summary	89
Discussion of Results	90
Limitations, Implications, and Directions for Future Research	97
REFERENCES	103
APPENDICES	125
A. Demographic Data/Return Status Sheet	126
B. Motivation Subscale	127
C. Self-efficacy for Client Behaviors	129
D. Outcome Expectancy Subscale	131
E. The Rosenberg Self-Esteem Scale	133
F. Client Problem Identification Questionnaire	134
G. Instructions	135
H. Consent Form	136

LIST OF TABLES

Table 4.1	Demographic Information on Total Sample	62
Table 4.2	Descriptive Information on Clinical Staff ..	63
Table 4.3	Descriptive Information on the SECB scale ..	65
Table 4.4	Internal Consistency of Scales	68
Table 4.5	Scale Summary Statistics	69
Table 4.6	Scale Item Statistics	70
Table 4.7	Two Weeks Test-retest Correlations	70
Table 4.8	CPIQ, STAI and RSES scale summary statistics	72
Table 4.9	Intercorrelations among Variables	73
Table 4.10	Correlation between Self-Efficacy and Self-Esteem	74
Table 4.11	Regression on Motivation	78
Table 4.12	Regression on State Anxiety	79
Table 4.13	Return Status	81
Table 4.14	Means and Standard Deviations of EPT's and Continuers	82
Table 4.15	Standardized Canonical Discriminant Function Coefficients	84
Table 4.16	Pooled Within Group Correlations between Predictors and Discriminant Function	85

Table 4.17	Overall Discrimination of	
	Criterion Groups	86
Table 4.18	Classification Results	88

CHAPTER I

Introduction

Statement of the Problem

Client attrition from college counseling centers is an issue of concern to counselors and researchers alike. Betz and Shullman (1979) have suggested that early premature termination constitutes "a major barrier in effective delivery of counseling services" (p. 542). In fact, it has been estimated that between 19% and 25% of counseling center clients drop out of treatment following an initial intake interview (Betz & Shullman, 1979; Epperson, 1981). In other mental health settings, it has been reported that between 20% and 60% of psychotherapy clients terminate treatment prematurely (Baekland & Lundwall, 1975; Pekarik, 1983a). Private practitioners do not seem to fare any better. In a recent study, Persons, Burns, and Perloff (1988) reported a 50% dropout rate with depressive patients at a private practice.

Much of the concern in the literature about premature termination stems from the beliefs that it may (a) signify treatment failure, (b) reflect client dissatisfaction with services, and (c) create

administrative burdens for a counseling center. Regarding the first issue, research has suggested that premature termination does sometimes represent treatment failure (Pekarik, 1983b). For example, it has been reported that treatment outcome was rated as poor for clients who terminated after one or two sessions, as compared to those who continued in therapy (Gottschalk, Mayerson, & Gottlieb, 1967; Pekarik, 1983b). In another study which examined depressed patients reactions to cognitive therapy, dropouts had poorer outcome as compared to continuers (Persons, Burns, & Perloff, 1988). Christensen, Birk, and Sedlacek (1977) found that up to 60% of their sample of dropouts at a counseling center continued to experience the difficulty reported at intake, and 50% had applied for services elsewhere. It has also been reported that clients who dropped out of treatment were rated by their counselors as less improved than continuers (Gunzburger, Henggler, & Watson, 1985). Luborsky et al. (1980) also reported that length of treatment, as indicated by the number of sessions attended, was associated with improvement. In a review of studies across a thirty-year span, it was found that 85% of clients showed improvement by the end of one year of treatment; 75% improved by the twenty-sixth session, and only 50% improved (as evidenced by subjective

report by clients or clinicians) by the eighth session (Howard, Kopta, Krause, & Orlinsky, 1986).

Premature termination may also reflect client dissatisfaction with the particular services received. Shueman, Gelso, Mindus, Hunt, and Stevenson (1980) interviewed counseling center clients following their intake interview. It was found that 50% of their sample were dissatisfied with length of session, waiting periods for intake, referrals, and counselor assignment. A shortcoming in this study was that authors did not differentiate between those clients who returned after intake and those who did not. It was therefore unclear how return rate related to client satisfaction. Recently, Cochran and Stamler (1989) surveyed clients at a university counseling center who had terminated in agreement with their therapist versus clients who dropped out following one counseling session. Results indicated that dropouts viewed the counseling experience less positively, and were less satisfied, than continuers.

In addition to reflecting possible treatment failures and client dissatisfaction, "no shows" may create administrative burdens, for example, clerical and staff time may be wasted, and there may be financial costs to centers (Pekarik, 1985a). Pekarik suggested that counselors may feel less efficacious and

less satisfied with their job as a result of premature terminations. Duehn and Proctor (1977) suggested that premature terminations represent a threat to staff morale. In effect, it may be said that no shows affect the service delivery system as a whole. Phillips (1987) suggested that the drop out phenomenon can be illustrated by a decay curve which is evidenced within all delivery systems from counseling to general hospitals. This decay curve has yet to be changed successfully in any setting, but remains an important issue to be resolved. The first issue to be resolved, however, is that of definition of terms.

Definitions of attrition have included the following: (a) any kind of termination without a therapist's approval (McNeill, Lee, & May, 1987); (b) "no show" following initial intake session and counselor assignment (Betz & Shullman, 1979; Christensen, Birk, & Sedlacek, 1977; Schiller, 1976); (c) failure to show for two consecutive appointments (Kolb, Beutler, Davis, Crago, & Shanfield, 1985); (d) counselor narrative of the nature of termination (Greenspan & Mann Kulish, 1985); and (e) failure to continue counseling beyond the ninth session (Saltzman, Luetgert, Roth, Creaser, & Howard, 1976). This multitude of attrition definitions, along with a variety of methodological problems (e.g., lack of

replication studies, small subject pools), make it difficult to draw valid conclusions about the prediction and control of this phenomenon. Pekarik (1985b) in particular was critical of duration-based classification of premature termination. He argued that duration itself may not necessarily be related to dropping out of treatment since many clients may improve and then choose to drop out of treatment. Pekarik (1985b) suggested a classification criteria based on therapists' judgment of premature termination. Such classification, however, would seem to introduce counselor bias, and may not address what a true premature termination is. For example, typically most counselors indicate that more sessions are needed whereas clients typically report satisfaction after a few sessions (cf. Larsen et al., 1979).

One conceptual framework which may provide a basis for understanding client premature termination is self-efficacy theory (Bandura, 1977, 1986). Self-efficacy is a social cognitive theory that explains human operations as the result of the interaction among cognition, behavior, and environmental factors. Central to the theory is the notion that cognition affects behavior. One type of thought, self-efficacy percepts (beliefs regarding one's performance capabilities), affect peoples' choice of behavior as

well as their level of motivation and persistence of effort when faced with obstacles.

According to this theory, it might be expected that clients' level of self-efficacy (i.e., judgments about personal capabilities) would influence their engagement in counseling and their persistence despite obstacles. Self-efficacy would also be expected to influence clients' motivation level. For example, some clients may doubt their ability to cope with a stressful situation and tend to avoid a situation perceived as threatening. It would also be expected that clients with low self-efficacy perceptions about their ability to engage in counseling may experience a high level of distress, i.e., anxiety.

For the purpose of this study, self-efficacy will be defined as the subjects' self-reported judgments about their ability to negotiate various aspects of the counseling process. It is crucial to distinguish self-efficacy from global personality traits such as self-esteem. Self-esteem is a broad, global trait indicating an evaluation of self-worth, i.e., an individual may have generally high or low self-esteem. Self-efficacy, instead, is a task-specific state, indicating one's judgment about personal abilities (Bandura, 1986). For example, self-efficacy to control eating habits was found to be only weakly associated

with self-efficacy to control smoking behaviors (DiClemente, 1986). An individual, then, may have high or low self-efficacy in relation to one or several specific tasks. Thus, a client seeking counseling services might have a relatively low level of self-esteem yet may hold strong beliefs about his or her ability to succeed in counseling.

Additionally, self-esteem is typically regarded as being stable over time and across situations, whereas self-efficacy may not necessarily be generalizable across situations. For example, an individual may feel low self-efficacy in regard to their ability to engage in the therapeutic relationship, yet feel highly efficacious in other areas of functioning, such as academic-related tasks or athletic performance.

Since self-efficacy is measured in relation to a specific domain of behavior, this investigation involved developing a measure of client self-efficacy regarding ability to engage in the therapeutic process.

Purpose of the Proposed Study

Despite the prevalence of client attrition in college counseling centers, the vast majority of the literature on attrition has focused primarily on outpatient psychotherapy clientele. In an extensive review of the psychotherapeutic literature, Baekland and Lundwall (1975), identified fifteen factors

associated with premature termination. Clients at high risk of dropping out of treatment included females, individuals of lower socioeconomic status, clients presenting with low motivation to change, and those evidencing substance abuse difficulties, low levels of anxiety, or antisocial behaviors. It may be argued, however, that these findings may not generalize to the college setting; students tend to be at higher levels of psychological functioning, education, and socioeconomic status as compared to clients at mental health agencies and hospitals (Mennicke, Lent, & Burgoyne, 1988).

In an effort to address these issues, this study was aimed at exploring the problem of client attrition within a university counseling center setting. Generally, most studies on attrition in similar settings have examined broad demographic factors, such as gender and race; however, such predictors have not proven to be very useful. It has been suggested that extending theoretical models to include more useful predictors in the study of attrition may prove valuable at this juncture (cf. Mennicke et al., 1988).

The primary purpose of this investigation was to examine premature termination from the perspective of social cognitive theory (Bandura, 1986). Specifically, this study examined the utility of two social cognitive

variables -- self-efficacy and outcome expectations-- in predicting clients' motivation to continue counseling and their actual return rate beyond the intake interview.

It is hoped that the conceptualization of attrition from a theoretical point of view will enhance our understanding and knowledge of this problem, improving upon the explanatory and predictive power of non-theory based studies.

Research Questions

Overall, four main research questions will be addressed by this study:

1. What are the internal consistency and 2 week test-retest reliabilities of the measure developed to assess self-efficacy? What are the local reliabilities of the subscales used to measure motivation to stay in counseling and counseling outcome expectations? Are these reliabilities sufficient to warrant their further use for research purposes?
2. To what extent are self-efficacy, outcome expectancies, and perceived motivation interrelated? How do they relate to subject demographics, problem type, distress level, and self-esteem?
3. To what extent do self-efficacy and outcome expectations, separately and jointly, predict the following criterion variables: (a) perceived motivation

to continue counseling, and (b) state anxiety at time of intake -- above and beyond client demographics, perceived distress level, and intaker experience level?

4. To what extent do self-efficacy and outcome expectations predict actual return rate following intake, above and beyond client demographics, perceived distress level, and intaker experience level?

CHAPTER II

REVIEW OF LITERATURE

This chapter will examine and discuss the client attrition literature with a particular emphasis on studies employing college student populations. Bandura's (1977, 1986) self-efficacy theory, which underpins the proposed study, will be outlined as well. Specifically, this chapter will cover five general topical areas: (a) overview of self-efficacy theory; (b) research on setting and administrative factors related to premature termination; (c) research on client variables related to premature termination; (d) research on counselor characteristics related to premature termination; and (e) research on the counselor-client interaction in relation to premature termination.

A manual literature search of Psychological Abstracts was performed. Studies published from 1960 through 1990 employing counseling center samples were included in this review. (Prior to 1960, the attrition literature seemed mostly focused on community mental health populations.) Additionally, studies which dealt with outpatient mental health populations during the

same time period were reviewed and findings are reported as they relate to the major focus of this study.

Self-Efficacy Theory

Cognitive theories have advanced the hypothesis that cognition is instrumental in the acquisition and preservation of new behaviors. Bandura (1977) proposed that all behavior and behavioral changes are mediated through cognition. Self-efficacy cognitions, which occupy a central mediating role in Bandura's (1986) theory, are defined as "people's beliefs in their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391).

Perceived self-efficacy reflects the judgments people make about their ability to perform necessary skills. These judgments affect cognition, emotional arousal, and behavior (Bandura, 1982). They also serve as motivators and determine how much effort one may be willing to put forth to achieve a desired result. Bandura (1986) has postulated that efficacy judgments differ in level, strength, and generality. The level dimension refers to the level of task difficulty one feels capable of accomplishing. For example, some people feel efficacious in very arduous tasks, whereas others only in simple ones. Self-efficacy judgments

can also vary by strength: strong beliefs will result in continued effort even in highly stressful situations, whereas weak beliefs may not sustain prolonged effort especially in the face of mounting pressure or failure. The last dimension of efficacy judgments, generality, refers to the range of behaviors at which one feels efficacious. For example, some individuals may feel inefficacious about math competency tasks, but feel highly efficacious in many other areas of functioning. There is some evidence that once established, self-efficacy may generalize to other activities (Bandura, Adams, & Beyer, 1977).

A major distinction is made between outcome expectations and self-efficacy expectations. An outcome expectation is an individual's anticipation that a specific behavior will lead to a specific outcome. In contrast, self-efficacy expectation refers to the individual's belief that he or she can successfully carry out a required behavior (Bandura, 1977). Therefore, an individual may hold a belief that a specific outcome can be achieved through specific behavior, yet not believe in his or her ability to implement that behavior. Although skills are an important ingredient for task accomplishment, they are not sufficient. An individual who may know how to carry out a task but still not attempt it (or be

successful at it) if he or she possesses low self-efficacy or outcome expectations (Bandura, 1986).

Persistence of effort is a major component of efficacy since most people rarely achieve a desired result on their first try. A high level of self-efficacy reflects an individual's strong belief in his or her ability to handle task demands and events, whereas low self-efficacy involves weak beliefs about one's ability to succeed. According to the theory (Bandura, 1986), individuals with a high level of self-efficacy will tend to approach challenging tasks with less anxiety than individuals with a low level of self-efficacy. Highly efficacious people also have an expectation that they can draw from their personal resources (e.g., cognition, skills, and behaviors) in order to meet situational demands. Weinberg, Gould & Jackson (1979) for example, found that highly efficacious individuals, after losing in a leg-endurance competition, actually improved their performance on a second trial. Less efficacious subjects, however, showed a decline in effort from their previous performance. Self-efficacy percepts thereby aid the development of necessary skills by promoting task participation; inefficacy percepts slow down growth, limiting participation in task accomplishment. Theoretically, then, a person with

necessary skills and low efficacy beliefs will have difficulty persisting and achieving positive results with a task, especially in the face of anxiety-provoking stimuli.

Sources of Information

According to Bandura and Adams (1977) personal efficacy information is provided by four main sources:

1. Performance experiences. People can derive efficacy information directly from task mastery. This type of information has enduring effects since personal performance accomplishments convey especially compelling evidence regarding one's capabilities. In general, successes raise perceived efficacy, whereas failures lower it. Once strong self-efficacy is established, periodic failures may not diminish endurance (Bandura, 1986). Additionally, established self-efficacy has been reported to generalize to other tasks (Bandura, Adams, & Beyer, 1977).

2. Vicarious experiences. Self-efficacy can also be created by direct exposure to other individuals completing a task. Individuals observing successful models may then be motivated to engage in a behavior and/or persist at efforts which they have judged themselves capable of performing. In contrast, a modeling situation may have a negative effect on self-efficacy when the individual being observed fails at

the task. An individual may avoid engaging in a task to the extent that he or she identifies with the model. Generally, vicarious experiences may have a weaker influence on self-efficacy than direct performance.

3. Verbal persuasion. Verbal persuasion refers to convincing someone that he or she has the ability to cope and achieve a certain goal. Verbal persuasion may work best as a motivator for the individual to continue their achievement efforts, thus, enhancing the development of personal efficacy (Bandura, 1986).

4. Arousal states. Anxiety or fear provides physiological information that is used by individuals to judge their ability to cope with stressful events. The impact of physiological arousal on behavior depends on how the person cognitively appraises that information. Too high a state of negative arousal, for example, will hinder performance by creating doubt regarding one's abilities. Behavioral performance may be enhanced by decreasing negative arousal, thereby enhancing an individual's efficacy percepts (Bandura & Adams, 1977).

These sources of efficacy information are multidimensional and multidetermined. Individuals are faced with the task of organizing and integrating these sources of information. The cognitive appraisal of this information, rather than the information per se,

is crucial in judging one's efficacy (Bandura, 1982). According to the theory, the first two information sources (i.e., performance and vicarious experiences) tend to exert the strongest impact on self-efficacy perceptions.

Causal Analysis

According to Bandura (1977), behavioral change is mediated through changes in self-efficacy. Self-efficacy operates as a causal factor such that increases in self-efficacy result in increased persistence and success with a particular task. Overall, research has shown a high degree of correspondence between performance and self-efficacy (cf. Telch, Bandura, Vinciguerra, Agras & Stout, 1982). Other authors (Eysenck, 1978; Wolpe 1978), however, have argued that self-efficacy is merely a correlate of performance rather than a causal factor of behavioral change. These authors have suggested that anxiety is the causal factor in both performance and self-efficacy.

Typically, the causal role of self-efficacy has been investigated by correlating changes in self-efficacy with changes in performance. If the level of performance cannot be predicted by changes in self-efficacy, then efficacy may not play a causal role. For example, Barrios (1983) investigated self-efficacy

ratings prior to and following interventions aimed at increasing assertiveness. He found that self-efficacy did increase as a result of the intervention, however, it was not associated with changes in performance. Feltz (1982) compared the causal role of self-efficacy against anxiety in swimmers performing diving routines. Results indicated that anxiety, as measured by heart rate and the State-Trait Anxiety Inventory (Spielberger, Gorsh, & Lushene, 1970), had a nonsignificant role in performance, nor did it account for subjects' reported self-efficacy. Self-efficacy was the best predictor of first-trial task performance; however, as participants increased their mastery over the task, self-efficacy's causal role declined over subsequent trials.

Much of the evidence to date has demonstrated the causal role of the construct. Litt (1988) recently investigated whether self-efficacy expectations are indeed causal determinants of behavior. Litt exposed undergraduate females to the cold-pressor task whereby subjects were required to immerse their non-dominant hand in icy water in order to measure tolerance to pain. Self-efficacy scores were generally predictive of performance (.41 to .80) and of changes in tolerance to the cold-pressor task. Additionally, the prediction of performance by self-efficacy was greater than that

by past performance on a baseline trial. Bandura, Reese, and Adams (1982) were also able to increase the efficacy percepts of snake phobics through the provision of enactive mastery experiences. Collins (1982) investigated children with comparable mathematics ability and found that children who perceived themselves as efficacious in mathematics performed better in resolving mathematical tasks than children with a low sense of efficacy. Locke, Frederick, Bobko, and Lee (1984) reported that self-efficacy directly and indirectly affected performance as well as goal commitment. The results of these studies point to the role of self-efficacy as a causal agent of behavior rather than a mere correlate.

Empirical Support

In the last ten years, self-efficacy has become one of the most frequently studied constructs in the literatures of counseling, clinical, and social psychology (Maddux & Stanley, 1986). The theory has been applied to a wide variety of psychological areas, including career development (Lent & Hackett, 1987), anxiety disorders (Bandura et al., 1982), health psychology (O'Leary, 1985), performance motivation (Bandura & Cervone, 1983), depression (Kanfer & Zeiss, 1983), achievement behavior (Bandura & Schunk, 1981; Collins, 1982), and phobias (Bandura & Adams, 1977).

According to O'Leary (1985), the findings of this research support the theory's tenet that people's functioning and level of motivation is affected by self-efficacy percepts. Bandura (1980) stated that in order to test the theory, one needs to examine the degree of congruence between subjects' self-efficacy judgments and performance on a specific task.

In an empirical test of the theory, Bandura, Adams, and Beyer (1977) found that different treatment modalities affected self-efficacy expectations. As predicted by the theory, treatments based on mastery accomplishments were found to have the strongest effect on increasing self-efficacy expectations. In a similar study, Bandura (1977) exposed phobics to either a modeling treatment, mastery experiences, or a control condition. It was found that performance experiences produced higher levels of efficacy expectations than did vicarious modeling. In accordance with theory, high congruence between efficacy judgments and performance accomplishment were found (89% for performance experiences; 86% for vicarious modeling). In two studies conducted with snake phobics, self-efficacy was shown to be related to actual performance, as well as being highly predictive of behavioral change (Bandura & Adams, 1977). Bandura, Reese, and Adams (1980) enhanced the self-efficacy of phobics by

increasing their mastery over threatening tasks. Results supported the theory in that increasing levels of self-efficacy resulted in better performance. Finally, Bandura, Adams, Hardy, and Howells (1980) conducted two studies to test the predictive and explanatory value of self-efficacy theory. In the first study they exposed phobics to a cognitive modeling treatment in the form of imagery. Modeling alone was found to enhance subjects' self-efficacy towards similar and dissimilar threats, and efficacy predicted individual performance. In the second study, agoraphobic individuals were exposed to enactive mastery treatment. Results suggested that enactive mastery increased level and strength of self-efficacy, and task performance was accurately predicted from efficacy judgments.

Other authors (Brown, & Inouye, 1978; Schunk, 1979) also provided support for the theory's tenet that individuals increase their efforts when self-efficacy percepts were optimal. Brown and Inouye (1978) exposed male subjects to a model who failed at solving anagrams. Subjects who judged themselves similar competency-wise to the model demonstrated a decreased persistence in performing the task, whereas subjects who judged themselves as more competent than the

observed model displayed increased motivation and no evidence of decreased persistence.

Bernier and Avarð (1986) stated that people's reported self-efficacy is highly correlated with performance. This may not be all that surprising. For instance, the mere act of reporting one's expectations about a specific task should easily raise social pressure for performance. Bernier and Avarð (1986) suggested, however, that a more accurate test of the theory would involve predicting a subject's performance at a later point in time than when self-efficacy percepts were first reported. These authors tested this hypothesis with 62 females who agreed to take part in a weight-reduction program. All subjects were exposed to cognitive self-control techniques including identifying thoughts associated with eating and setting goals. Results showed that an individual's self-efficacy level was predictive of weight loss during the program and at the six-week follow-up period. Self-efficacy was also reported to be predictive of smoking abstinence, and of relapse at a 3 month follow-up (Condiotte & Lichtenstein, 1981). Similarly, DiClemente (1981) found efficacy expectations predictive of smoking behavior at 5 months post-treatment. McIntyre, Lichtenstein, and Mermelstein (1983) also reported that self-efficacy following

treatment was predictive of smoking status at a 3 month and 6 month follow-up.

Other authors have paid attention to whether public reporting of one's self-efficacy percepts can affect subsequent performance on a specific task. Two studies (Weinberg, Gould, & Jackson, 1979; Weinberg, Yukelson, & Jackson, 1980) examined whether stating public versus private self-efficacy expectations may increase social pressure to perform as predicted on a leg-endurance task. The leg-endurance task consisted of having subjects extend their leg and hold for as long as possible. In accordance with the theory, changes in expectations were related to changes in performance, with highly efficacious subjects performing better than less efficacious subjects. It was found that there were no significant differences in performance between subjects who made public statements of their self-efficacy expectations and those who had written down their expectations privately. These conclusions were supported by a study done by Gauthier and Ladoucer (1981) who found that snake phobics performed equally well in either group.

Telch et al. (1982) also examined whether self-rating of self-efficacy affect performance due to increased social pressure for consistency between what one states and actually does on a task. In this study,

snake phobics were asked to rate their level of self-efficacy in a pre- and post-treatment under two experimental conditions of high and low social demand. In the pre-treatment condition, the degree of consistency between reported self-efficacy and performance was higher under low social demand (79%) as compared to high demand condition (50%). During the post-treatment, high congruence between self-efficacy and performance was evinced in both the low (98%) and high (97%) social demand conditions. Social demand, therefore, does not seem to increase the degree of congruency between self-efficacy and behavioral performance.

Eastman and Marzillier (1984), in a review of the theory, criticized the construct of self-efficacy expectations, suggesting that it is not particularly different or independent from outcome expectations. The relationship between these two constructs, however, has not been extensively investigated. Davis and Yates (1982) manipulated undergraduates' self-efficacy and outcome expectations by having them solve easy and difficult anagrams. As predicted by the theory, self-efficacy expectations were more highly related to performance than were outcome expectations, and lowering outcome expectations did not affect performance. Manning and Wright (1983) also tested the

predictive power of self-efficacy expectations versus outcome expectancies with women giving drug-free childbirth. It was found that self-efficacy was a better predictor of pain management and degree of persistence with this task. Devins and Edwards (1988) examined the role of self-efficacy and outcome expectations among individuals with pulmonary disease. Subjects were assessed on their motivation, expectations, and self-efficacy in regard to smoking cessation, and were reassessed at one and three months intervals. Self-efficacy was found to be the most potent predictor of decreased smoking, and highly efficacious individuals experienced greater smoking reduction as compared to less efficacious subjects.

Measurement of Efficacy Percepts

Bandura (1986) proposed a microanalytic approach to the measurement of efficacy percepts. This approach calls for the specific measurement of self-efficacy in relation to the domain under investigation, rather than a global assessment of general efficacy beliefs. A major advantage to this research strategy is that it allows for measurement of the degree of congruence between reported levels of self-efficacy and actual behavior. The degree of congruence between self-efficacy and performance allows for better predictions of behavior.

Adherence to Medical/Health Regimens

Although self-efficacy theory has not been previously applied to the investigation of premature termination, its role has been investigated in people's compliance to medical treatment. According to O'Leary (1985), self-efficacy beliefs affect one's ability to cope and recover from illness. Self-efficacy was found to be predictive of compliance with a medical regimen designed to fight periodontal disease (Beck & Lund, 1981). Elsewhere, Kaplan, Atkins, and Reinsch (1984) found that among patients with chronic obstructive pulmonary disease, self-efficacy was predictive of behavioral change.

In summary, these results support Bandura's (1977; 1986) theory and attest to the utility of self-efficacy as a predictor of behavioral change.

Research on Client Attrition

Environmental Variables

Environmental or setting factors which may be related to client attrition include waiting list periods, precounseling orientation sessions, and various environmental constraints (e.g., fees, waiting periods). In one study, Pekarik (1983a) found that 35% of early premature terminators (EPT's) from a community mental health center indicated several environmental

constraints including schedule conflicts, transportation, and financial problems as their reason for discontinuing services. Pekarik's definition of EPT in this study was "any client in need of further help" who dropped out. This ambiguous and broad definition may mask important individual differences.

Waiting List. It has been suggested that waiting lists negatively impact clients' attitudes towards counseling (Schiller, 1976). Shueman et al. (1980) reported that 50% of their sample was dissatisfied with the waiting time for intake and counselor assignment. In a study which examined return rate following intake, it was found that both the length of the intake and wait between intake and counselor assignment was longer for clients who did not return for services (Rodolfa, Rapaport, & Lee, 1983). In a series of studies with mental health outpatient clinics (Larsen, Nguyen, Green, & Attkisson, 1983), it was found that the longer the wait between intake and scheduled first session, the higher the no-show rate. Other findings, however, have indicated no differences between continuers and dropouts in length of wait from initial interview to first scheduled appointment (Anderson, Hogg, and Magoon, 1987; Rodolfa et al., 1983). In addition, Jenkins, Fuqua, and Bloom (1986) reported that such setting variables as fees and type of

referral were not highly predictive of client attrition.

Pre-counseling orientations. In some studies, efforts were made to orient the individual to counseling. Pre-counseling orientations were typically aimed at preparing the client for the counseling process through workshops, interviews, and phone contacts.

Lawe, Horne, and Taylor (1983) found pre-counseling orientation to lower first session attrition rates at a university counseling center. With "low counseling ready" clients as defined by the Counseling Readiness Scale (Heilbrun & Sullivan, 1962), precounseling training was found to decrease attrition following intake (Cartwright, Lloyd & Wicklund, 1980; Heilbrun, 1972).

Larsen et al. (1983) found that mental health clinic clients exposed to a fifteen minute orientation session had lower attrition rates than non-oriented clients, suggesting that pretherapy workshops may enhance client expectations. Turner and Vernon (1976) were also able to significantly reduce "no shows" by contacting clients by phone prior to their first scheduled appointment. Overall, it is unclear whether such treatment results are due to the effects of the

orientation per se or to the exposure to the treatment setting (Mennicke et al., 1988).

Client Variables

Gender. The literature presents mixed findings regarding the relationship between gender and premature termination (Epperson; 1981, Krauskopf et al., 1981). For example, Rodolfa et al. (1983) and Betz and Shullman (1979) found non-significant differences in the return rate for males and females. On the other hand, Christensen, Birk, and Sedlacek (1977) found that male dropouts were more active in resolving their difficulties than were females. In this study, none of the female students who had dropped out following the intake reported resolving their difficulties alone, whereas 50% of the male subjects reported problem resolution based on their own efforts. In another study, Noonan (1973) examined no shows for initial appointment in a clinic serving primarily college students. It was reported that demographic characteristics such as gender and age did not distinguish between clients who showed for intake assessment and pretherapy dropouts. Overall, findings regarding the role of gender in premature termination are mixed and inconclusive, suggesting that gender per se is not a significant variable in the prediction of premature termination.

Socio-economic Status and Ethnicity. In a rather comprehensive review of the literature Baekland and Lundwall (1975) suggested that socio-economic status (SES) may be one of the variables related to mental health centers' attrition rates given that counselors' expectations vary from those of their lower SES clients. Pekarik (1985b), however, found income not to be related to dropout rate when termination was defined by number of sessions completed. However, when therapists judged when a premature termination had occurred, it was found that lower income was associated with dropouts as compared to continuers. In contrast, Fiester, Mahrer, Giambra, and Ormiston (1974) found that SES did not distinguish between adult/child dropouts and continuers at a mental health clinic.

In general, SES has been indicated as one of the biggest contributors to drop-out rates within the mental health center setting (Fiester & Rudestam, 1975). This variable, however, has rarely been measured or included in counseling center attrition studies.

Studies examining the relationship between ethnicity and treatment dropout rate have generally presented inconclusive or mixed results, although there is some evidence that counselors seem to engage in fewer sessions with ethnic minorities as compared to

majority clients (Niemeyer & Gonzales, 1983). In a study which surveyed 17 community mental health clinics, Sue, McKinney, Allen, and Hall (1974) found that following the initial session, black clients had significantly higher rates of premature termination than did white clients. In a similar study, Sue, McKinney, and Allen (1976) reported that ethnic minority clients with lower educational background tended to dropout out of treatment following the initial intake.

Within-group gender differences have also been investigated. Krebs (1971) found that black psychiatric outpatient females experienced a higher rate of missed appointments than did black males, white males, and white females. Craig and Huffine (1976), however, found no gender differences among a primarily inner city black population attending outpatient psychiatric services.

It has been reported that over 50% of minorities do not continue treatment and that the attrition rate for Chicanos, Blacks, and Native Americans was significantly higher than for White clients in a community mental health center (Sue, 1977).

Acosta (1980) contacted and interviewed 74 Mexican, Black, and Anglo-American psychiatric outpatients clients who had terminated prematurely. No

differences were found among the three groups in terms of their reasons for not continuing in treatment. Cross-culturally different counselor-client dyads were found not to affect duration of treatment when compared to same-race dyads (Duckro, & George, 1979; Proctor, & Rosen, 1981). Craig and Huffine (1976) reported that racially mixed counselor-client dyads showed better continuation rates than homogeneous ones. In a study which looked at international and American students, it was found that the counselor's race had no relationship to "no show" rates, and cultural differences were not related to length of treatment (Anderson & Myer, 1985). Interestingly, it was found that 33% of international students did not show for their second appointment, in contrast with a 12% rate for their American counterparts. Foulks, Persons, and Merkel (1986) found that race alone did not account for attrition rates among a psychiatric outpatient population. However, when clients' beliefs about the etiology of their problems (e.g., mystical or religious beliefs) were different from that of their counselors, greater attrition was evidenced.

Personality Variables. In one of the earliest investigations of personality and premature termination, three groups of dropouts were studied: those students who did not show for the intake, those

who dropped out following the intake, and those who dropped out after the sixth session (Heilbrun, 1961). It was reported that female dropouts displayed lower achievement needs and more dependency behaviors than females who stayed in counseling. A reverse trend was found for males who terminated prematurely. These male subjects were found to display high independence and high achievement needs.

Saltzman, Luetgert, Roth, Creaser, and Howard (1976) investigated personality dimensions including openness, uniqueness, and affect. These authors found that dropouts experienced lower anxiety levels than did continuers. Similar results were also reported by Jenkins et. al. (1986). Kirk and Frank (1976) compared students who stayed in treatment for an unspecified time period to those who had initiated contact but had not shown for an initial intake. Results suggested that "no shows" were characterized by greater impulsivity than continuers; no other significant personality differences were found.

It has also been suggested that premature terminators of group therapy experience difficulties with self-disclosure, closeness, and are poorly motivated (Roback, & Smith, 1978). Kolb et al. (1985) assessed the relationship of psychiatric outpatients' coping skills and extroversion to dropping out of

treatment defined as "two consecutive no shows." Coping and degree of extroversion did not differentiate continuers from dropouts. Community mental health clients at risk for not continuing therapy were also rated by therapists at the initial intake as more immature, less intelligent, and pressured to seek treatment by sources other than themselves (Heisler, Beck, Fraps, & McReynolds, 1982). Persons et al. (1988) found that among a group of individuals in treatment for depression, individuals with a personality disorder were more likely to dropout of treatment. Craig and Huffine (1976) found, however, that individuals classified as personality disorders or psychotic tended to stay in treatment longer than clients with more transient problems. Foulks et al. (1986) found no relationship between a psychotic diagnosis and premature termination.

Expectations. Client expectations about the therapeutic process have been extensively researched. It has been suggested that therapists and clients come to counseling with different expectations about the process (cf. Gulas, 1974). In fact, clients may discontinue treatment when their expectations are not realized in therapy (Heine & Trosman, 1960). Conflicts may also arise in the therapeutic relationship when counselor-client expectations differ significantly

(Sandler, 1975). A client's expectations about the counselor's behavior during the initial interview may affect his or her decision to stay in treatment (Heilbrun, 1972). Attempts to improve outcome by modifying expectancies, however, have not yielded consistent results (Duckro, Beal, & George, 1979). For example, modifying clients' expectations through verbal and information-giving interventions have not been particularly successful at improving counseling outcome (Tinsley, Bowman, & Ray, 1988).

Tinsley, Workman, and Kass (1980) have noted that expectation studies often present inconsistent findings, and include too few dimensions of clients' expectancies. For instance, Ziemelis (1974) found that most subjects displayed an increased preference for counselors seen in their initial intake regardless of whether their pre-therapy expectations were met in the initial session. The wide array of definition and measurement variations from study to study further complicates efforts to understand the relationship between expectations and counseling outcome (Hardin & Subich, 1985).

This section will review studies which have examined the relationship between clients' expectations and premature termination.

There is some evidence that the initial interview may affect outcome. Bottari and Rappaport (1983) found that clients who viewed the intake worker's communication style as positive tended to stay longer in treatment than those who did not. Contrary evidence was presented by Schiller (1976), who compared the attitudes and perceptions about counseling among dropouts and continuers. Continuers displayed more positive attitudes toward counseling, however, no differences between the two groups were noted on their perception of the intake session. Nash and Garske (1988) examined university counseling center clients' perceptions of the intake interview in terms of its value and easiness. It was found that premature terminators perceived the intake as smoother and easier than continuers. These results suggest that premature termination may not be affected by the initial intake per se but rather by the individual's beliefs and perceptions of the counseling process.

Other studies have examined the impact of the first scheduled session on premature termination. Gunzburger et. al. (1985) found that individuals were less prone to return for counseling when their expectations were not met in the first session. Hardin, Subich, and Holvey (1988) compared the counseling expectations of college students who

terminated in agreement with their counselors with the expectations of clients who dropped out following an initial session. No significant differences were found among the two groups; most subjects held fairly high expectations about counseling after their first meeting. Heesacker, Heppner, and Shaw (1988) administered a subset of the Expectations about Counseling scale (EAC; Tinsley et al., 1980). Subscales measuring motivation, openness, and acceptance were given to a group of university counseling center clients. It was found that lower expectations of counselor expertise and trustworthiness were significantly related to terminating against the counselor's advice in short-term therapy. In long-term therapy, higher expectations were associated with premature termination. These results suggest a nonlinear relationship between expectations and premature termination.

It has also been reported that treatment expectations often differentiate among continuers and dropouts in mental health outpatient settings (Feister, 1977). Premature terminators in an outpatient psychiatric clinic reported viewing their counselors as less facilitative of the therapeutic process than continuers (Kolb et al., 1985). Otto and Moos (1974), however, found that clients with

unrealistic expectations, especially about staff support, tended to dropout, whereas continuers appeared to have more realistic expectations from the start. Borghi (1968) reported similar results; continuers had expectations congruent with therapists as compared to dropouts. In sum, these studies indicate that expectations seem to be an important variable in terms of understanding client retention rates.

Satisfaction. Despite the fact that clients' level of satisfaction with services is a logical predictor of EPT, it has rarely been included in attrition studies. As Larsen, Attkinsson, Hargreaves, and Nguyen (1979) pointed out, assessing clients' satisfaction is an important element of gaining a more accurate evaluation of services provided.

McNeill, Lee, and May (1987) found a significant relationship between client satisfaction and duration of treatment, suggesting that dropouts were less satisfied with counseling. In another study, clients' level of satisfaction was confirmed to be a good predictor of dropping out (Kokotovic & Tracey, 1987). Cochran and Stamler (1989) explored levels of satisfaction with university counseling center clients who terminated in agreement with their counselor versus those who dropped out after at least one session. Significant differences on level of

satisfaction were found, with dropouts indicating dissatisfaction with their counselor's skills. Premature terminators also viewed their counseling experience less positively.

Last, Thase, Hersen, Bellack, and Himmelhoch (1985) found that dropouts among female depressive clients exposed to psychosocial treatment were largely dissatisfied with services received.

Silverman and Beech (1979) surveyed by phone 47 premature terminators at a community mental health clinic. It was reported that 70% of their subjects were satisfied with services received, and 40% indicated having resolved their problems after the initial session.

It should be noted that the evaluation of client satisfaction has been complicated by the fact that most individuals report a high level of satisfaction with services received.

Therapist Variables

Compared with the volume of research on client factors, studies examining counselor factors in premature termination are quite scant. Variables studied have included counselors' gender, experience level, and source characteristics, such as attractiveness, trustworthiness, and expertness (Strong, 1968).

Gender. Findings regarding the relationship between counselor gender and attrition have been inconclusive. Two studies (Epperson, 1981; Epperson et al., 1983) found male counselors to have a lower attrition rate than their female counterparts. Betz and Shullman (1979), however, found a higher attrition rate when the intake or assigned counselor was male. Krauskopf et al. (1981) replicated Betz and Shullman's study with a larger sample and did not find counselor gender to be related to client dropout rates. Similar results have also been reported by Rodolfa et al. (1983). In sum, counselor gender does not seem to be a viable factor with respect to client dropout behavior.

Experience Level. Although, intuitively, it would make sense to assume that experience level is related to attrition rate, this has not been confirmed by the literature (Betz & Shullman, 1979; Jenkins et al., 1986; Krauskopf et al., 1981). Rodolfa et al. (1983) reported that intake worker experience level was not related to attrition. The level of experience of the assigned counselor, however, did make a difference, with clients assigned to practicum students showing a higher rate of no-shows than clients assigned to staff and/or interns.

In a mental health setting, Tyson and Reder

(1979), found a higher dropout rate for inexperienced trainees (61%) as compared to experienced therapists (26%).

Source Characteristics. Strong's (1968) social influence theory conceptualized counseling as an interpersonal influence process. Three main variables, attractiveness, trustworthiness, and expertness, commonly referred to as "counselor source characteristics," were described as factors contributing to the process and outcome of counseling. It has been shown that clients' perception of these counselor characteristics can considerably enhance behavioral and attitudinal changes in the client (see Heppner & Claiborn, 1989, for a full review). Heppner and Heesacker (1983) found a relationship between client satisfaction and perceived source characteristics. McNeill et al. (1987) extended Heppner and Heesacker's study to examine dropouts and continuers perceptions of counselors' characteristics. Results suggested that when compared to continuers, dropouts reported lower ratings of counselor attractiveness, expertness, and trustworthiness. Their definition of a premature terminator was anyone who terminated on their own at any point during counseling.

In another study, clients' perceptions of counselor source characteristics were found to be

predictive of counseling satisfaction but not of attrition (Zamostny, Corrigan, & Eggert, 1981). Similarly, Kokotovic and Tracey (1897) found no significant differences among continuers and dropouts following the initial interview in their perception of intake counselor as expert, trustworthy, and attractive.

In sum, results from studies of counselor variables have not been any more conclusive than studies of client factors. The social influence perspective, however, seems to be the only cogent effort made to apply a coherent theoretical model to understanding the problem of client attrition.

Interaction Variables

Variables related to the nature of the client-counselor interaction have not been extensively researched. As Mennicke et al. (1988) have noted, the methodological and financial burden of matching counselor and clients may often be difficult to overcome. Additionally, it has been suggested that client-counselor characteristics may only be slightly related to early premature termination (Hardin, Subich, & Holvey, 1988).

Expectations. It is commonly assumed that clients and counselors often differ in terms of their expectations about the process, duration, and outcome

of counseling. For example, clients, as compared to counselors, reported expectancies for shorter treatment duration (June & Smith, 1983). Examination of client-counselor expectancies with regard to termination, however, has rarely been investigated. In one of the few studies to date, Horenstein and Houston (1976) examined the relationship between client-counselor expectancies about therapy and premature termination among college students and community residents. Results indicated that individuals who dropped out after the initial intake interview had the largest difference in expectations from their therapist, whereas clients who dropped out after the second session had the least amount of discrepancy. Interestingly, continuers fell in a medium range of discrepancy. These authors concluded that a curvilinear relationship exists between clients' expectations and attrition. Borghi (1968) also assessed client-therapist expectations about therapy in a mental health center. Results suggested that dropouts' expectations about the therapeutic process were incongruent with those of their counselors, whereas continuers' expectations matched those of the therapists.

Client-Counselor Agreement on Presenting Problem.

A common conceptualization between therapist and client

on the nature of the presenting difficulty and subsequent agreement on how to resolve the problem would seem a prerequisite for successful therapy. However, counselor-client agreement has not been fully studied.

There is some evidence that clients may drop out when the presenting difficulty is not acknowledged accurately by the therapist. Epperson et al. (1983) found a 55% attrition rate when the clients' difficulty was not recognized by the intake counselor. Similarly, Krauskopf et al. (1981) reported that clients were more likely to stay in treatment when reciprocal agreement on the presenting problem was present.

Contrary to these findings, it was found that counselor-client agreement on the presenting problem was not related to drop out following intake (Kokotovic & Tracey, 1987). Tracey (1986) investigated client-counselor communicational agreement (defined as the extent to which topic of discussion began by either the client or counselor was discussed or interrupted by the other) and found that premature termination was related to lower levels of communicational agreement.

Carr (1970) suggested that successful outcome may be related to client-counselor cognitive similarity, which serves as a basis for successful communication.

Hunt, Carr, Dagadakis, and Walker (1985) examined the effects of counselor-client cognitive match on premature termination at a university psychiatric clinic. Among continuers there were no differences between matched and non-matched dyads in terms of outcome, i.e., both showed improvement. However, differences in premature termination rates were found, with the matched dyads displaying a 24% dropout rate versus 60% in the cognitively-dissimilar group.

At this time it is difficult to draw valid conclusions from these studies because of their scarcity. It is notable that client-counselor factors such as expectancies, mutual satisfaction, and cognitive style congruence have not been extensively examined to date.

CHAPTER III

METHODOLOGY

Sample

Participants in this study were undergraduate and graduate level students who scheduled an intake session at any of the three branches of Michigan State University's Counseling Center. The Counseling Center provides free counseling services to enrolled undergraduate and graduate students. Subjects consisted only of clients who had actually come into the Counseling Center for an intake assessment. A final sample of 139 students, representing approximately 10% of all intakes, participated in the study over a 10 month period. The sample is described in Chapter IV.

Instruments

The data sources for this study included a demographic/return status data sheet and measures of perceived motivation to continue counseling, self-efficacy beliefs, outcome expectancy beliefs, client problem identification, self-esteem, and state-trait anxiety.

Demographic Data/Return Status Sheet

The Demographic Data/Return Status Sheet was used to record demographic information for each participant as well as their return status (i.e., "showed" versus "no showed") for their first scheduled session beyond intake. Information collected included sex, age, race, and class year. Problem type (defined as vocational, academic, or personal) and previous use of counseling center services was also assessed. Additionally, the intake counselor's experience level (staff vs. intern) was noted, along with their theoretical orientation and degree level (Ph.D. vs. Masters). In general, as previously noted in the literature review, global counselor characteristics have not been demonstrated to be significantly related to premature termination, hence these variables were primarily used to describe the treatment setting within which the study was conducted.

Items were completed by examination of intake forms available at the Counseling Center; the author recorded this information on the data sheet following the intake interview (see Appendix A).

Motivation Subscale

For the purposes of this study, the Motivation subscale from the Expectations about Counseling questionnaire (M-EAC) (Tinsley et al., 1980) was used

in order to measure client perceived level of motivation to engage and persist in treatment. The EAC consists of 135 items which comprise 17 scales assessing expectancies about counseling outcome, client attitudes and behaviors, the counselor, and counseling process characteristics. Internal consistency reliability of the scales has been reported to range from .71 to .89. The EAC has been used to examine client expectations of counselor expertness, trustworthiness and attractiveness (Heppner & Heesacker, 1983). This measure has also been used to compare treatment expectations of clients and nonclients (Hardin & Subich, 1985); and American students and international students (Yuen & Tinsley, 1981). Hardin et al. (1988) used the EAC to explore the relationship between counseling expectations and premature termination. Dorn (1989) employed the EAC to examine the relationship between motivation and career certainty among college students.

The Motivation subscale consists of 8 items, and its internal consistency has been reported as .82. Subjects are asked to indicate their level of agreement with each statement (e.g., I expect to see the counselor for more than three interviews) on a 1 to 7 scale. Higher scores reflect stronger motivation (see Appendix B).

Self-Efficacy for Client Behaviors

The Self-efficacy for Client Behaviors measure (SECB) attempts to tap clients' beliefs about their ability to perform various behaviors required in counseling. Items, which were culled from various sources (Paulhus, & Christie, 1981; Tinsley et al., 1980), represent three types of client capabilities believed necessary for successful counseling, including abilities to: (a) solve one's presenting problems, (b) perform difficult in-session behaviors, and (c) manage obstacles to therapy attendance. Five items (#'s 1,5,9,13, 17) comprise the first dimension. Sample items include: "Solve the problems that brought you to the counseling center", and "Find ways to work out difficult everyday problems." The second dimension consists of items 2, 4, 6, 8, 10, 12, 14, 16, 18, and 20. Sample items include: "Tell your counselor when you no longer need counseling", and "Tell your counselor when you don't understand something he or she said." The third dimension consists of items 3, 7, 11, 15, and 19. Sample items include: "Remove any obstacles (like schedule conflicts) to attending future counseling sessions", and "Adjust your schedule in order to attend future counseling sessions."

Subjects respond by indicating their confidence in

their ability to perform each behavior on a 0 to 9 rating scale (see Appendix C).

Outcome Expectancy Subscale

The outcome expectancy subscale (O-EAC) elicits clients' expectations about counseling outcome (Tinsley et al., 1980). This subscale consists of 11 items, and its internal consistency has been reported to be .89. Subjects are asked to indicate their level of agreement or disagreement with several items arranged on a 1 to 7 rating scale. Sample items include: "I expect that counseling will help me to get a better understanding of myself and others", and "I expect that counseling will help me to become better able to help myself in the future" (see Appendix D).

The Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a ten item scale which assesses individuals' global levels of self-esteem. Subjects are asked to respond to a four point Likert-type scale (1= strongly disagree to 4= strongly agree).

Mallinckrod and Fretz (1988) reported internal consistency (coefficient alpha) of .81, and 2-week test-retest reliability of .85 has also been reported (Silber & Tippet, 1965). Silber and Tippet also found that the measure correlated well with other self-esteem scales (correlations ranging from .56 to .83).

The scale has been utilized in the assessment of the impact of job loss with older workers (Mallinckroft & Fretz, 1988), in identifying sources of support associated with self-esteem in group therapy participants (Mallinckrodt, 1989), and in discriminating self-esteem between employed and unemployed workers (Perfetti & Bingham, 1983). See Appendix E.

Client Problem Identification Questionnaire

The Client Problem Identification Questionnaire (CPIQ) is a four item measure developed by Kokotovic and Tracey (1987). The CPIQ assesses client perceptions of problem severity across four problem dimensions: educational, vocational, personal, and interpersonal. Subjects are instructed to rate each area on a 5-point Likert type scale ranging from (1) no significant problem to (5) very severe problem (see Appendix F).

State-Trait Anxiety Inventory

The State-Trait Anxiety Inventory (STAI, form X-1) is a twenty item scale developed by Spielberger et al., (1970). These authors have recommended the use of the X-1 form in measuring state anxiety when defined as situational feelings of tension. Individuals who score high on this scale may be experiencing a great deal of interpersonal anxiety. This measure is self-

administered and typically requires about ten minutes to complete. Subjects are directed to answer twenty items based on how they feel at that very moment. Items are scored on a 1 to 4 scale in such a way that a rating of 4 is indicative of anxiety with 1 indicting low anxiety. (Ten items are reverse-scored.) The STAI is scored by simply calculating the total sum score, taking into account the reversed items.

Norms are available for various populations including college students, high school students, and medical and psychiatric patients. For male undergraduates the mean score was 39.39, with a standard deviation of 8.62. Females' mean score is 35.12, SD = 9.25. Test-retest reliability at 1 hour, 20 day, and 104 days for male undergraduate students is .33, .54, and .33, respectively. For females, corresponding values are .16, .27, and .31 (Spielberger, 1983). According to the manual such low correlations are to be expected due to the situational nature of anxiety. Cronbach's alpha reliability is reported as ranging from .83 to .92, and for college student populations is .91 for males and .93 for females.

Construct validity was demonstrated by administering the STAI to military trainees and to age-similar college and high school students in

nonstressful situations. The military trainees level of anxiety was significantly higher than the students (cf. Spielberger, 1983). Additional evidence is provided by two other studies. Spielberger et al. (1970) administered the STAI X-1 to college students under normal conditions. Next they retested these subjects under an exam condition, and found that state anxiety was significantly higher under the latter condition. Lazarus and Opton (1966) reported similar results with state anxiety being significantly higher under stressful condition than when subjects were asked to relax. Convergent validity of the STAI has been established by correlating the measure with other personality inventories. The STAI was found to be significantly correlated with the Minnesota Multiphasic Personality Inventory (MMPI) scales (.20 to .79), with the Cornell Medical Index (.70), and .61 with the Personality Research Form (Jackson, 1967).

Over the last twenty years, the STAI has been extensively used in research and clinical applications. Research applications have included studies of the role of anxiety in depression (Gotlib, & Robinson, 1982), academic achievement (Plake, Smith, & Dumsteegt, 1981), stress (Miller, 1979), speech anxiety (Lent, Russell, & Zamostny, 1981), and test anxiety (Smith, Snyder, & Handelsman, 1982). (The STAI is not here reproduced due to copyright law).

Procedures

This study was conducted in two phases. At phase I, a pilot study was conducted at one of the branches of the Michigan State University Counseling Center. The purpose of this pilot phase was to test the wording, internal consistency, and two-week test-retest reliability of the novel self-efficacy measure, along with tapping the local reliability of the Motivation and Outcome Expectancy subscales. Additionally, the relationship between self-esteem and self-efficacy was explored during this phase.

During phase II, data was collected at the three branches of Michigan State University's Counseling Center over the period of three quarters. Additionally another measure was added to the study, the State-Trait Anxiety Inventory (Spielberger et al., 1979). However, due to the low level of subject participation, and difficulties encountered in terms of following up subjects for retest data, it became necessary to combine these two phases into one study.

Subjects were drawn from the pool of student-clients attending fall, winter, and spring sessions at Michigan State University who had requested a counseling appointment. Subjects were asked to participate in the study at the time of their scheduled

intake by the front-desk support staff. These staff members introduced and explained the nature of the pilot study to clients. They also informed potential subjects that in two weeks time they would be asked to fill out four more questionnaires requiring approximately 10 minutes of their time. If clients agreed to participate they were instructed to fill out all measures immediately following the intake and then again in two weeks. Clients' counselors were not directly involved in data collection, however, staff often encouraged potential subjects to participate in the study. All intakes were done by regular Counseling Center staff members and by psychology interns.

Typically, students checked in with one of the secretaries upon arrival at the Counseling Center; at that time a cover letter explaining the nature and purpose of the study as a "general inquiry on the utilization of counseling services by students" was handed out by one of the secretaries. Clients were informed that participation was voluntary and that neither their cooperation nor refusal would affect their eligibility for counseling services in any way. They were also assured that neither their intake counselor or the assigned counselor would have access to their questionnaire responses. If students agreed to participate, an informed consent was obtained (see

complete all questionnaires in the waiting room immediately following their intake interview.

In order to protect confidentiality, identification numbers were assigned to each questionnaire package, and subjects were asked not to record their names on the instruments. Participants were also encouraged to contact the principal investigator in case they had questions or complaints about the research study. Typically, most subjects completed the instruments within fifteen minutes. Once questionnaires were completed, participants returned the completed package in a drop off box located by the receptionist area. Following the intake interview, the investigator completed the Demographic Data/Return Status Sheet for each participant from examination of their records.

Design

The design for the proposed study is a correlational one-group study, testing the predictive power of two social cognitive variables, i.e., self-efficacy and outcome expectations, along with other global client, counselor, and setting characteristics in predicting motivation to continue counseling, actual return rate following intake, and state-trait anxiety at time of intake. Specifically, the predictor variables are client demographics (age, sex, and race),

problem type, perceived distress level, intake counselor experience level, length of wait between intake and first session, self-efficacy beliefs, and counseling outcome expectations.

Data Analysis

Coefficient alpha was calculated in order to assess the internal consistency of the self-report measures (M-EAC, SECB, and O-EAC). According to Nunnally (1978), all newly developed measures should be assessed for their internal consistency before other forms of reliability are assessed. A high alpha coefficient indicates that items are homogeneous, suggesting internal consistency. A low alpha indicates that items are either heterogeneous or that the questionnaire is too brief (Nunnally, 1978). In order to estimate the degree of score fluctuations or stability of the measures, test-retest reliability was also calculated. Subjects scores on these measure at time of intake were correlated with scores obtained two weeks later on the same measures. The correlation between these two scores provided an index of temporal reliability (Helmstadter, 1964). Additionally the association between the Self-Efficacy for Client Behaviors questionnaire and the Rosenberg Self-Esteem measure was investigated. This last procedure was

useful in validating self-efficacy as a separate, situation-specific construct from global self-esteem.

Correlations to assess simple relations among the predictor and criterion variables were calculated. Hierarchical multiple regression analyses were then computed in order to examine the relationship between the independent variables and two criterion variables of interest: motivation to stay in counseling and state-anxiety at time of intake. The independent variables included in the regression equation were gender, age, race, perceived distress level, intake counselors' experience level, self-efficacy beliefs, and outcome expectancy beliefs.

Multiple regression is useful in establishing whether two or more variables are related, in theory testing, and in providing some initial support for causal models (Spector, 1981). It is a highly effective statistical procedure for predicting status on a dependent variable from two or more optimally combined predictor variables. F tests were applied to the multiple regression coefficients (beta weights) in order to determine the relative contribution of each cognitive predictor (self-efficacy and outcome expectancies) to the estimation of the criterion variables, above and beyond the other client, counselor, and administrative variables. The results

of this analysis indicate the relative importance of each factor to the prediction of motivation to stay in counseling, and state-anxiety at time of intake.

In order to assess the relative importance of the predictor variables to the prediction of return status a discriminant analysis was performed. Discriminant analysis is a useful procedure when trying to predict a dichotomous status or group membership based on certain scores or characteristics. Discriminant analysis creates classification functions based on means and group variance-covariance matrix (Tabachnick, & Fidell, 1983). Prediction of group membership, then, entails the classification of each subject's score into the best fitting group.

The Statistical Package for the Social Sciences (SPSS-X User's Guide, 1988) was used for all data analyses. The $p < .05$ level of significance was used in all analyses.

CHAPTER IV

RESULTS

This chapter presents the results of the data analyses conducted to explore the research questions posed for this study. Results are presented in four main sections: (a) descriptive information about the sample and the intake workers; (b) reliability data on the self-efficacy, outcome expectations, and motivations scale; (c) intercorrelations among the various scales; and (d) regression and discriminant analyses predicting motivation to continue counseling, state-anxiety, and actual return status following the intake.

Description of the Sample

Demographic characteristics of the subject sample and data available on the population (from the counseling center records) are summarized in Table 4.1. The total sample consisted of 139 subjects, 41 males and 98 females representing approximately 8% of all intakes done through the school year. The majority of participants were of Caucasian ethnic origin (82%); other ethnic groups accounted for only 18% of the sample. The age range was from 17 to 52 with a mean

age of 21.7 (SD = 5.1). Subjects were primarily undergraduate students (n = 120) who, for the most part, presented with personal problems (n = 124). Career problems (n = 15) were presented by a small percentage of the sample. The vast majority of the subjects (89%) had no previous contact with the counseling center. As it can be seen from Table 4.1, the demographic characteristics of the sample seem comparable to the characteristics of the population, i.e., intakes completed during the school year. It should be noted, however, that the population data set contains missing information.

Descriptive information regarding the composition of the intake staff is presented in Table 4.2. The intake staff was composed of 21 staff members and 5 psychology interns. In general this was a highly experienced professional group with an average of 14 years of experience; interns had an average of 6 years of experience. Professional staff performed 58% of all intakes and interns did 42%. As shown in Table 4.2, the psychodynamic approach was the theoretical orientation of choice for most intake staff.

Table 4.1.

--Demographic Information on Total Sample--

Variable	<u>n</u>	<u>%</u>	<u>N</u>	<u>%</u>
	<u>Sample</u>		<u>Population</u>	
<u>Gender</u>				
Male	41	29.5	519	31.1
Female	98	70.5	1148	68.9
<u>Race</u>				
Caucasian	114	82.0	1273	78.3
Black	8	5.8	109	6.7
Hispanic	4	2.9	34	2.1
Native Am.	3	2.2	37	2.3
Other	9	6.5	173	10.6
<u>Year in School</u>				
Freshmen	25	18.0	278	17.2
Sophomore	34	24.5	428	26.4
Junior	30	21.6	349	21.6
Senior	31	22.3	345	21.3
Graduate	19	13.7	218	13.5
<u>Problem Type</u>				
Academic/Career	15	10.8	478	26.7
Personal	124	89.2	1314	73.3
<u>Previous Use of Services</u>				
Yes	15	10.8	165	9.1
No	124	89.2	1651	90.9
	Mean	Range	SD	
<u>Age</u>				
Sample	21.7	17-52	5.1	
Population	22.0	12-52	4.0	

Table 4.2

--Descriptive information on clinical staff--

Variable	N	%
<u>Degree</u>		
Ph.D	12	46.2
MSW	3	11.5
M.A.	11	42.3
<u>Theoretical Orientation</u>		
Psychodynamic	13	50.0
Eclectic	5	19.2
Developmental	4	15.4
Cognitive	3	11.5
Behavioral	1	3.9
<u>Status</u>		
Staff	22	80.8
Intern	5	19.2
<u>Years of Experience</u>		
	Mean	
Staff	14	
Intern	6	

Reliability Analysis

Research Question 1: What are the internal consistency and 2 week test-retest reliabilities of the measure developed to assess self-efficacy? What are the local reliabilities of the subscales used to measure motivation to stay in counseling, and counseling outcome expectations? Are these reliabilities sufficient to warrant their further use for research purposes?

The Self-efficacy for Client Behavior (SECB) scale consists of 20 items. The SECB is scored on a 0-9 scale, with 0 = not at all confident and 9 = very confident. The vast majority of the sample responded to all items. A small sample of subjects did not complete all items, however, no subjects were excluded from the final analyses ($N = 139$). A mean substitution solution was used for missing data. Descriptive statistics for the twenty items of the SECB are summarized in Table 4.3. The Motivation subscale (MEAC) from the Expectation about Counseling questionnaire consists of 8 items measuring subjects' level of motivation about counseling. Tinsley et al. (1980) reported an internal consistency of .82 for the MEAC. The Outcome Expectancy scale (OEAC) consists of 11 items measuring subjects' expectations about counseling outcome. The OEAC internal consistency was previously reported as .89 (Tinsley et al., 1980).

In order to assess the degree of reliability of the SECB, MEAC, and OEAC scales, the scales'

Table 4.3

--Descriptive information on the SECB Scale--

Item	Mean	<u>SD</u>	Range
1. Solve the problems that brought you to the counseling center	5.8	2.3	0-9
2. Discuss your innermost feelings with a counselor	5.9	2.4	0-9
3. Remove any obstacles (like schedule conflicts) to attending future counseling sessions	5.3	2.5	0-9
4. Cope with unpleasant feelings (like fear or sadness) that might arise during counseling	6.5	2.2	0-9
5. Try out difficult new behaviors between counseling sessions that your counselor may recommend	6.2	2.2	0-9
6. Tell your counselor when you feel you no longer need counseling	7.1	1.9	1-9
7. Adjust your schedule in order to attend future counseling sessions	5.9	2.5	0-9
8. Discuss things with your counselor that might be embarrassing or painful	6.2	2.4	0-9
9. Find ways to work out difficult "everyday problems"	7.0	1.8	0-9
10. Tell your counselor when you don't understand something he or she said	7.8	1.6	0-9

--Table 4.3 (Cont'd)--

Item	Mean	<u>SD</u>	Range
11. Attend all scheduled counseling sessions	7.5	2.0	0-9
12. Describe your problems clearly to your counselor, even when you're upset	6.7	2.2	0-9
13. Change current behaviors that are troubling you	6.6	1.9	0-9
14. Talk about yourself during the counseling session	7.3	2.1	0-9
15. Get to the Counseling Center on time for your scheduled sessions	7.9	1.6	0-9
16. Tell your counselor when you are upset or uncomfortable with him or her	6.1	2.3	0-9
17. Persist with efforts to resolve your problems despite set-backs	6.8	1.9	0-9
18. Discuss thoughts that are bothering you with your counselor	7.3	1.8	0-9
19. Keep all your appointments with your counselor	7.9	1.5	0-9
20. Discuss with your counselor when you are feeling discouraged about solving your problems	7.3	1.9	0-9

Note. N = 139. The SECB is scored on a 0-9 scale with
 0 = Not at All Confident and 9 = Very Confident

coefficient alphas were calculated ($N = 139$). The coefficient alpha yields a measure of internal consistency based on the number of items and their average correlation (Nunnally, 1978). In general, a high coefficient alpha indicates that a scale has a good degree of homogeneity, therefore items are measuring the same construct. The results of the reliability analysis on the SECB, MEAC, and OEAC scales are reported in Table 4.4. The obtained coefficient alphas for the SECB (.94), MEAC (.93), and OEAC (.95) indicated a high degree of internal consistency. According to Nunnally (1978) an internal consistency of .80 indicates adequate reliability and warrants the use of the measure for research purposes. Nunnally, however, proposes a minimum coefficient alpha of .90 for use of any measure in an applied setting. All the measures met this criterion.

Descriptive information for all three measures are presented in Table 4.5. The mean score for the SECB was 135 with a range of 25 to 180; mean score for the MEAC was 41 with a range of 8 to 56; mean score for the OEAC was 55 with a range of 11 to 77. Item mean variance and inter-item correlations are shown in Table 4.6. Item mean variance for the SECB was 6.9 with a range of 5.09 to 6.90.

Table 4.4

--Internal Consistency of Scales.--

Scale	Alpha
<hr/>	
SECB	.94
MEAC	.93
OEAC	.95

Note. N = 139

SECB = Self-Efficacy for Client Behaviors

MEAC = Motivation about Counseling

OEAC = Outcome Expectancy about Counseling

Additional reliability information for all three scales was provided by obtaining a two week test-retest measurement on a subsample (N = 16) of the general client group. Test-retest correlations are presented in Table 4.7. All three scales obtained good test-retest reliability, suggesting that they are substantially stable over a 2-week interval.

Results indicated that the novel measure (SECB), developed to assess self-efficacy for client behavior in counseling, had both a high degree of internal consistency and test-retest reliability. These data thus lend support to SECB's use for research purposes. The reliability analyses also supported the adequacy of the MEAC and OEAC measures.

Table 4.5

--Scale summary statistics (N=139)--

	Mean	Median	Mode	Range	<u>SD</u>
SECB (20 items)	135.4	140.5	145	25-180	28.3
MEAC (8 items)	41.3	43	56	8-56	12.6
OEAC (11 items)	55.2	58	77	11-77	15.7

Note. SECB = Self-Efficacy for Client Behavior
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling

Table 4.6

-- SECB, MEAC, & OEAC scale item statistics--

	Item Mean (Variance)	Item Mean Range	Inter-Item Correlation Mean (Variance)	Inter-Item Correlation Range
<u>Scale</u>				
SECB	6.9	5.68-6.90	.552	.046-.869
MEAC	5.6	5.06-5.06	.595	.398-.846
OEAC	5.2	4.61-5.78	.633	.400-.815

Note. SECB = Self-Efficacy for Client Behavior
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling

Table 4.7

-- Two weeks test-retest correlations --

	SECB	MEAC	OEAC
SECB	(.94) <u>N=16</u>		
MEAC		(.89) <u>N=16</u>	
OEAC			(.88) <u>N=16</u>

Note. SECB = Self-efficacy for Client Behaviors
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling.

Interrelationships among the Scales

Research Question 2: To what extent are self-efficacy, outcome expectations, and perceived motivation interrelated? How do they relate to subject demographics, problem type, and distress level?

In order to investigate the nature of the relationships between self-efficacy, expectations about counseling outcome, and motivation to stay in counseling, the total scores for SECB, MEAC, and OEAC were correlated. Descriptive statistics for perceived distress, counselor experience, problem type, self-esteem, and state anxiety are presented on Table 4.8 (Means, standard deviations, and range of scores for the SECB, MEAC, and OEAC were presented in Table 4.5.) Zero-order Pearson intercorrelations are presented in Table 4.9.

Results showed a strong positive association between self-efficacy and motivation ($r = .60$); self-efficacy and outcome expectations ($r = .64$); and motivation and outcome expectations ($r = .67$). These results are in accordance with self-efficacy theory which posits that an individual's degree of self-efficacy should relate positively to task motivation and outcome expectations. These findings also offer some preliminary support for the validity of the three measures in that they intercorrelate in expected ways.

Table 4.8

--CPIQ, STAI and RSES scale summary statistics--

	<u>n</u>	Mean	Median	Mode	Range	<u>SD</u>
CPIQ (4 items)	139	11.3	11	11	3-19	3.5
STAI (20 items)	70	50	51	51	23-78	12
RSES (10 items)	58	27.6	27	23	13-40	6.5

Note. CPIQ = Client Problem Identification Questionnaire
 (Perceived Distress Level)
 STAI = State Anxiety
 RSES = Rosenberg Self-esteem scale.

Results of the intercorrelations between self-efficacy, motivation, expectations about counseling outcome, and client demographics, problem type, and distress level are also summarized in Table 4.9.

As expected, demographic characteristics and problem type were only weakly related to self-efficacy and expectations about counseling. Sex, however, was significantly associated with motivation about counseling ($r = .24$), with females reporting higher levels of counseling motivation. Perceived distress level was also significantly associated with motivation ($r = .26$) and outcome expectancy ($r = .31$), with more distressed subjects reporting higher motivation and outcome beliefs. None of the measures correlated significantly with

more experienced counselors to be associated with stronger outcome expectations.

Table 4.9

-- Intercorrelations among variables. --

	Variable								
	1	2	3	4	5	6	7	8	9
1. Age		-.13	.08	-.18*	.04	.05	.15	.18	.08
2. Sex				-.06	.09	-.21*	.00	.24*	.13
3. Race				-.12	-.01	-.04	-.11	-.03	-.15
4. CPIQ					.17	.00	-.04	.26*	.31**
5. Counselor Experience						.00	.04	.05	.19
6. Problem Type							-.01	-.02	.02
7. SECB								.60***	.64***
8. MEAC									.67***
9. OEAC									

Note. N = 139.

RSES = Rosenberg Self-esteem scale
 SECB = Self-efficacy for Client Behavior
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling
 CPIQ = Client Problem Identification Questionnaire
 * = $p < .05$
 ** = $p < .01$
 *** = $p < .001$

The SECB scale was also correlated with Rosenberg Self-Esteem scale (RSES) to examine the relation of self-efficacy to global self-esteem. Results, presented in Table 4.10, indicated that the SECB was only weakly (and non-significantly) correlated with the RSES ($r = .16$), suggesting that self-efficacy is a task specific construct distinct from the more global construct of self-esteem.

Table 4.10

--Correlation between Self-efficacy and Self-esteem--

	SECB
RSES	.16

Note. $N = 58$

RSES = Rosenberg Self-esteem scale

SECB = Self-efficacy for Client Behavior

Prediction of Motivation, Anxiety, and
Early Premature Termination

Research Question 3: To what extent do self-efficacy and outcome expectations, separately and jointly, predict the following criterion variables: (a) motivation to continue counseling and (b) state anxiety at time of intake?

Hierarchical regression analyses were performed in order to establish the utility of self-efficacy and outcome expectations in predicting motivation and state anxiety. The same entry order strategy was employed in both equations. Scores were standardized in order to reduce multicollinearity between simple and interaction effects (see Dunlap & Kemery, 1987). Client demographics, distress level, and counselor variables were entered first into the regression equation. Next, the theoretically derived variables (SECB, OEAC) were entered to examine their unique contribution to the prediction of motivation to continue counseling. In order to examine interaction effects, an interaction term was created by the cross-product of self-efficacy and outcome expectations, and entered into the regression equation at the last step. This order was chosen to facilitate interpretation of the contribution of outcome expectations and self-efficacy to regression equations beyond the effects of background client and counselor variables. The results of the regression analyses are presented in Table 4.10 and 4.11. The variables are listed in the order in which they were entered. The R change

values indicate the unique contribution of each variable to the prediction model, controlling for the variables entered at previous steps.

In the equation predicting counseling motivation, both self-efficacy (R^2 Change = .34) and outcome expectations (R^2 change = .03) accounted for significant and substantial proportions of the variance beyond that accounted for by the client and counselor variables. Client sex (R^2 Change = .08) was the only background variable to contribute significantly to the equation. The interaction term between self-efficacy and outcome expectancy (R^2 = .00) did not add unique variance beyond the component simple effects terms. Overall, expectations regarding the utility of self-efficacy and outcome expectations in predicting motivation to continue counseling were confirmed, and the full equation accounted for 58% of the variance in motivation.

In the regression equation predicting state-anxiety (N = 71, Table 4.11), results indicated that only age (R^2 change = .08) and perceived distress level (CPIQ; R^2 Change = .11) offered significant unique variance to the equation. Gender approached statistical significance and accounted for .05 of the variance. Contrary to expectations, neither self-efficacy, outcome expectations, or their interaction contributed unique significant variance to the prediction of state anxiety at time of intake. The full equation accounted for 29% of the variation in state anxiety.

A note of caution about these findings: due to the small sample used for this analysis ($n = 71$) in relation to the number of predictor variables (8), the results may not be stable and/or valid. Wampold and Freund (1987), for example, recommended that 107 subjects for six predictor variables are required to achieve a .70 power level.

Table 4.11

--Regression on Motivation--

Variables	<u>R</u>	<u>R</u> ²	<u>R</u> ² Change	<u>r</u>	<u>B</u>	<u>F</u> Change
Age	.18	.03	.03	.18	.18	2.25
Sex	.33	.11	.08	.24	.28	5.67*
Race	.33	.11	.00	-.03	-.05	.20
CPIQ	.40	.16	.05	.26	.23	3.77
Counselor Experience	.40	.16	.00	.05	-.03	.06
SECB	.71	.50	.34	.60	.60	42.94***
OEAC	.76	.58	.08	.67	.40	10.90**
SECB x OEAC	.76	.58	.00	.69	.18	.14

Note. N = 139.

* = significant at $p < .05$
 ** = significant at $p < .01$
 *** = significant at $p < .001$

CPIQ = Perceived Distress
 OEAC = Outcome Expectation about Counseling
 SECB = Self-efficacy for Client Behavior
 SECB x OEAC = Cross-product of Self-efficacy for Client Behavior and Outcome Expectation about Counseling

Table 4.12

--Regression on state-anxiety at time of intake.--

Variable	<u>R</u>	<u>R</u> ²	<u>R</u> ² Change	<u>r</u>	<u>B</u>	<u>F</u> Change
Age	.29	.84	.08	-.29	-.29	6.18*
Gender	.37	.14	.05	.28	.24	4.15
Race	.37	.14	.00	-.02	.03	.05
CPIQ	.50	.25	.11	.41	.35	9.37**
Counselor Experience	.53	.28	.03	.22	.17	2.33
SECB	.53	.28	.00	-.06	-.01	.01
OEAC	.53	.28	.00	.09	-.06	.14
SECB x OEAC	.54	.29	.02	.04	.67	1.25

Note. N = 71.* = significant at $p < .05$ ** = significant at $p < .01$ *** = significant at $p < .001$

CPIQ = Perceived Distress Level

SECB = Self-efficacy for Client Behavior

OEAC = Outcome Expectancy about Counseling

SECB x

OEAC = Cross-product of Self-efficacy for Client Behavior and Outcome Expectation about Counseling

Research Question 4: To what extent do self-efficacy, outcome expectations, and motivation to continue counseling predict actual return rate following intake (above and beyond client demographics, perceived distress level, and intake worker experience level)?

Discriminant analysis was performed to examine the relationship between the predictor variables and the actual return status of subjects. Additionally, the overall ability of the predictors to correctly identify and classify early premature terminators (EPT's) and continuers was examined.

The majority of subjects contracted to continue counseling services following their initial intake ($N = 104$). Other subjects ($N = 35$), however, were seen one time only -- due to their refusal of services or referral to other agencies in the community. The return status composition of subjects is summarized in Table 4.13. Approximately 16% of subjects were EPT's, i.e., they failed to show for their initial counseling session after intake. Subjects who either refused services or were seen one time only were excluded from further analyses.

Means and standard deviations for EPT's and continuers on distress level, MEAC, OEAC, and SECB are reported in Table 4.14. Early premature terminators reported significantly lower levels of self-efficacy and motivation for counseling compared to continuers. Contrary to expectations, however, there was no significant difference among EPT's and continuers on the outcome expectations or

Table 4.13

-- Return Status --

	<u>N</u>	<u>%</u>
EPT's	16	16
Continuers	88	88

Note. EPT's = Early Premature Terminators

perceived distress level variables.

In order to determine which variables contributed most to the prediction of group membership, standardized canonical discriminant function coefficients were calculated. A discriminant function is an equation which classifies each case according to the group that it resembles most. Results are presented in Table 4.15. Self-efficacy (.95) was the single variable that most significantly contributed to the discriminant function. Outcome expectancy (-.38) shows a small negative contribution to the discriminant function. It should be noted, however, that standardized coefficients are limited in their interpretation since they take into account the common variance among all variables entered in the equation (Klecka, 1980).

The pooled within-groups correlations between the predictors and the discriminating function are shown in

Table 4.14

--Means and Standard Deviations of EPTs and Continuers--

Variables	Mean	SD	Pooled Variance Estimate <u>t</u>	<u>df</u>
<u>Distress Level</u>				
EPT's	11.3	2.99		
Continuers	11.6	3.60	-.31	100
<u>MEAC</u>				
EPT's	35.2	12.8		
Continuers	44.4	11.4	-2.91**	102
<u>OEAC</u>				
EPT's	51.1	15.6		
Continuers	58.1	14.5	-1.71	101
<u>SECB</u>				
EPT's	112.6	24.0		
Continuers	142.7	22.5	-4.87***	101

Note. N =104

EPT's = Early Premature Terminators
 SECB = Self-efficacy for Client Behavior
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling

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

Table 4.16. These correlations indicate the degree of association between each predictor and the discriminating negatively associated with the discriminant equation (coded as a dummy variable with caucasian = 1 and non-caucasian = 0). Although not statistically significant, this result suggests that noncaucasians may tend to be associated with dropping out. All other predictors evidenced weak associations.

Wilks' lambda was calculated in order to determine the overall group differences based on the given set of predictors. Lambda values indicated the overall effectiveness of the predictors in discriminating early premature terminators from continuers. Lambda is an inverse measure of association coefficient -- values closer to zero indicate a stronger association, and values closer to one indicate a weaker relationship. Self-efficacy (Lambda=.83) effectively discriminated EPT's from individuals who continued therapy.

In order to test for the significance of the derived associations, lambda values were converted into F values. Results (see Table 4.17) indicated that two of the theoretically derived variables, self-efficacy and motivation to continue counseling, made significant contributions to the prediction of EPT's and continuers. The contribution of expectations about outcome to return

Table 4.15

-- Standardized canonical discriminant function
coefficients--

Predictors	Canonical Discriminant Function Coefficients
Age	.19
Sex	.04
Race	-.34
Cexper	.04
CPIQ	.24
SECB	.95
MEAC	.28
OEAC	-.38

Note. Cexper = Counselor Experience Level
 CPIQ = Perceived Distress
 SECB = Self-efficacy for Client Behavior
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling

Table 4.16

--Pooled within group correlations between predictors and discriminant function--

Variable	Discriminant Function
SECB	.86
MEAC	.61
OEAC	.37
Race	-.33
Counselor Experience	-.22
Age	.15
Sex	.09
CPIQ	.05
Sex	.01

Note. SECB = Self-efficacy for Client Behavior
 MEAC = Motivation about Counseling
 OEAC = Outcome Expectancy about Counseling
 CPIQ = Perceived Distress Level

Table 4.17

-- Overall discrimination of criterion groups--

Variable	Wilks' Lambda	F
Age	.99	.64
Gender	1.00	.22
Race	.97	2.9
Cexper	.99	1.22
CPIQ	1.00	.61
SECB	.83	20.31***
OEAC	.96	3.70
MEAC	.91	10.09***

Note. Cexper = Counselor experience
 CPIQ = Perceived Distress Level
 SECB = Sel-efficacy for Client Behavior
 OEAC = Outcome Expectancy about Counseling
 MEAC = Motivation about Counseling

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

status was just short of conventional significance ($p < .06$).

In addition to the predictive power of each variable, discriminant analysis yielded the predicted group membership for each subject. The classification results are summarized on Table 4.18. Overall, the accuracy of cases correctly classified was 80%, indicating that based on their overall scores, four out of every five subjects were correctly identified as part of their respective actual group, i.e., EPT's or continuers. Five EPT's (31%) were misclassified as continuers, whereas eleven (69%) were correctly predicted as EPT's based on their overall scores. By contrast, 82% of continuers were correctly classified; only 18% were misclassified as EPT's.

Table 4.18

-- Classification Results --

<u>Actual Group</u>	<u>Predicted Group Membership</u>	
	<u>Continuers</u>	<u>EPT's</u>
Continuers	81.8% (<u>N</u> =72)	18.2% (<u>N</u> =16)
EPT's	31.3% (<u>N</u> =5)	68.8% (<u>N</u> =11)
Overall percent of cases correctly classified: 80%		

Note -- EPT's = Early Premature Terminators

CHAPTER V

DISCUSSION

Chapter V provides a brief summary of the study, a discussion of results, and implications of findings.

Summary

This exploratory study investigated the complex interrelationships among cognitive variables and level of engagement in therapy. Clients' level of engagement in therapy was defined as the extent to which subjects (a) were motivated to continue counseling and (b) actually remained in treatment after the initial intake. This study contributes to current research about factors that may lead to early premature termination. Premature termination is a complex process that has received continued attention in the literature, though rarely have theoretical frameworks been applied to this problem. Given that the existing literature has reported mixed results in predicting or explaining premature termination, the application of a theoretical model was seen as a positive step in expanding our knowledge about the dropout phenomenon. Testing the utility of self-efficacy theory relative to early premature termination (EPT) involved developing the Self-efficacy for Client Behavior (SECB) scale, a twenty-item measure developed on the basis of the theoretical and empirical literature on

self-efficacy theory (Bandura, 1977; 1986). This scale was constructed in order to examine subjects' perceptions of their ability to negotiate counseling tasks.

A sample of 139 subjects completed the SECB immediately following their initial intake interview. Results of the reliability analyses of the SECB indicated that it was a highly reliable measure. The following sections will discuss descriptive data on the subjects; the psychometric properties of the SECB and other cognitive scales; the interrelationships among the predictor variables; the prediction of motivation to continue counseling, state-anxiety, and early premature termination following the intake session; and implications and limitations of the findings.

Discussion of Results

Characteristics of the Sample

This study's descriptive data (subjects' characteristics) were generally consistent with those reported in other studies of college students (e.g., Epperson et al., 1983; Gunzburger et al., 1985). The sample consisted primarily of white female students who presented, for the first time, with personal problems at a University Counseling Center. Additionally, the Counseling Center's records of all intakes done allowed for comparison between the sample and the population of all intakes. Overall, the sample was fairly representative of the population in terms

of demographic characteristics such as age, gender, and race.

Reliability of the SECB, MEAC, and OEAC Scales

_____ In research question one, internal consistency and test-retest reliability were investigated for the SECB, MEAC, and OEAC scales.

Research Question 1:

What are the internal consistency and 2 week test-retest reliabilities of the measure developed to assess self-efficacy? What are the local reliabilities of the subscales used to measure motivation to stay in counseling, and counseling outcome expectations? Are these reliabilities sufficient to warrant their further use for research purposes?

The obtained alpha coefficients for the SECB, MEAC, and OEAC indicated that the scales were highly homogeneous. Although the SECB consisted of only 20 items, the high alpha obtained suggested that the scale would not be appreciably strengthened by additional items. The high alpha levels suggested that measurement error due to item sampling did not affect the scales (Nunnally, 1978).

Test-retest correlation for the SECB, MEAC, and OEAC further lent evidence to their reliability, suggesting that these measures were stable, e.g., did not fluctuate over a two week period. According to Guilford (1954) high reliability indicates that a measure is dependable, and that subjects remained uniform with respect to the variables they were measured on. Additionally, it can be inferred that the measures were not affected by extraneous factors.

The weak, nonsignificant correlation between self-efficacy and the more global construct of self-esteem ($r = .16$) supports the discriminant validity of the self-efficacy measure and is consistent with the findings of Lent, Brown, and Larkin (1986) who reported a nonsignificant association between self-efficacy and general self-esteem. The finding that the average scores on the SECB were moderately high suggests that, overall, subjects were confident about their ability to engage in counseling. The local reliabilities for the OEAC (.95) and MEAC (.93) appear comparable, although higher, than what was reported by Tinsley et al. (1980; for OEAC, $\alpha = .89$; for MEAC, $\alpha = .82$).

The reliability information presented herein suggested that the SECB, OEAC, and MEAC scales are reliable instruments. The SECB is a novel measure developed to assess client's level of self-efficacy regarding counseling-related tasks. Overall, the preliminary findings about the SECB warrant its use for research purposes.

Interrelationships Among the Predictor Variables

Research Question 2:

To what extent are self-efficacy, outcome expectancies, and perceived motivation interrelated? How do they relate to subject demographics, problem type, and distress level?

Several significant interrelationships among the variables were demonstrated in the correlation analyses. Self-efficacy theory posits that an individual's self-

efficacy is positively and significantly related to task motivation and outcome expectations. As expected, self-efficacy, motivation to continue counseling, and outcome expectancy were significantly interrelated. According to Bandura (1977; 1986), past performance experiences provide the most powerful determinant of self-efficacy percepts. For example, previous failure in counseling would lower one's expectations, whereas past counseling accomplishments would enhance self-efficacy. Since the majority of subjects (89%) reported no previous counseling experiences, their efficacy appraisals were likely based on perceptions of personal problem solving ability and prior help-seeking experiences involving members of their natural support system (e.g., parents, peers).

Perceived distress level was significantly and positively associated with both outcome expectancy and motivation. Thus, subjects were highly motivated and expected a more positive outcome when the perceived distress level was high. Prior research also suggests that client distress tends to be associated with increased motivation (Garfield, 1986).

Surprisingly, gender was significantly associated with motivation, indicating that females were more motivated than males. In general more females than males accessed services for counseling in this sample (71%), a finding that it is

not surprising given socialization in regard to help-seeking behavior.

As expected, neither race, age, or problem type was significantly associated with self-efficacy beliefs and outcome expectations.

Prediction of Client Engagement and State-Anxiety.

Research Question 3:

To what extent do self-efficacy and outcome expectations, separately and jointly, predict the following criterion variables: (a) motivation to continue counseling, and (b) state-anxiety at time of intake above and beyond client demographics, perceived distress level, and intaker experience level?

The utility of the theoretical variables (self-efficacy, motivation, and outcome expectancy) along with other client and therapist variables were examined in regression analyses. Regression results indicated that self-efficacy and outcome expectancy accounted for significant unique variance in the prediction of motivation to continue counseling. It follows that individuals who have positive outcome expectations and strong beliefs about their ability to engage in the counseling process may be more highly motivated to stay in counseling, at least in the beginning phase of therapy. This finding is consistent with Bandura's (1977; 1986) hypotheses and prior research on Psychiatric patients indicating that self-efficacy and outcome beliefs are highly predictive of perceived

motivation (Lent, Lopez, Mikolaitis, Jones, & Bieschke, 1990).

The results of the regression analysis on anxiety at time of intake suggested that an individual's perceived distress level added significant unique variance to the prediction of anxiety. Self-efficacy and outcome expectancy alone were relatively unimportant in accounting for variance in the anxiety measure. This finding is difficult to explain since according to self-efficacy theory, individuals with high levels of self-efficacy tend to approach performance tasks with less anxiety than individuals with low efficacy beliefs. Barrios (1983), for example, found a significant association between self-efficacy and self-ratings of anxiety in response to stressful situations among a substance abuse in-patient sample. Feltz (1982), however, found no support for the hypothesis that low efficacy is associated with high performance anxiety in a diving task. The present findings suggest the need for further study of the efficacy-anxiety relationship in the counseling context. It may be that clients' state anxiety in this context is more a reflection of the distress they feel in relation to their presenting problem than it is a result of their self-efficacy regarding the counseling process.

Research Question 4: To what extent do self-efficacy, outcome expectations, and motivation to continue counseling predict actual return rate following intake (above and beyond client demographics, perceived distress level, and intake worker experience level?)

Client, counselor, and theoretical predictor variables were included in a discriminant analysis of actual return status following the intake. Overall, the early premature termination rate of 16% was comparable to rates which have been previously reported in the literature (e.g., Betz & Shullman, 1979; Epperson, 1981).

As expected, EPT's mean scores were significantly lower than continuers on self-efficacy and motivation. This finding suggested that there were meaningful individual differences in clients' motivation levels and beliefs about their ability to negotiate counseling. As previously suggested, one's level of motivation may be dependent on one's level of self-efficacy. In contrast, Heppner and Heesacker (1983) found no differences in motivation among dropouts and those who continued treatment. Heesacker, Heppner, and Shaw (1988) also reported that motivation was not a significant predictor of premature termination.

In accordance with previous findings (Hardin, Subich, & Holvey, 1988), there were no significant difference in outcome expectancy among EPT's and continuers. Gunzburger et al. (1985), however, found significant differences in expectations between past findings support the notion that client and counselor global background variables are not

very useful predictors of EPT's. The set of self-efficacy theory-based variables employed in this study seem to offer a promising alternative.

Limitations, Implications, and Directions
for Future Research

There are several limitations of this study that make efforts to apply or generalize the findings tenuous. First, since subjects were not randomly selected, it is possible that this sample may have had certain characteristics that biased their responses to the measures. Second, given the correlational nature of the design, it is not possible to infer causality from the obtained findings. For example, it is not clear whether self-efficacy is an antecedent or consequence of motivation to continue counseling. Third, the very small number of minority clients in the present sample suggests that generalization of these findings to particular racial/ethnic groups would be premature. Any effort to generalize these findings should consider the characteristics of the present sample, e.g., mostly caucasian female students at a large midwestern university. Fourth, the extent to which these findings may be specific to the therapists or setting employed herein is not clear. Additionally, the impact of the measures on clients should be considered. For example, response bias may have been evidenced on the MEAC in that some subjects may have been eager to please their intake counselors. Certainly,

replication and extension of these findings would enhance confidence in their reliability and generalizability.

The present findings suggest that beliefs about one's ability to engage in psychological therapy may have a meaningful impact on level of motivation and efforts to persist in the counseling task. EPT's were characterized by inefficacious beliefs about their ability to engage in counseling and low levels of motivation to persist in their efforts. It remains unclear as to what influences one's beliefs since most subjects had no previous counseling experience. Bernier and Avard (1986) have suggested that there may be a difference between efficacy beliefs based on past performance and efficacy not based on previous performance. Although Bandura (1977) has formulated self-efficacy as a task-specific construct it is not altogether unlikely that individuals may have global beliefs of efficacy. Non-performance-based efficacy, then, may be based on one's general belief about being able to successfully sustain effort rather than specific past behavior.

In terms of future research, it may be crucial to begin to study the dropout phenomena from a longitudinal perspective. For example, what happens to counseling motivational level over time? Does motivation wane if self-efficacy beliefs diminish during therapy? Is there a relationship between dropping-out and lowered efficacy

beliefs at later stages of therapy? What type of events may alter efficacy beliefs? Longitudinal, experimental, and path analytic designs may begin to explore the potential causal connections between self-efficacy, client engagement behaviors, and therapeutic outcome.

Additionally, the potential utility of other variables need to be explored relative to predicting client termination. A general measure of coping or problem solving ability, for example, may prove useful. It is possible that an individual with good coping ability may find immediate relief from an initial interview, and feel highly positive about their ability to engage, persist, and succeed in counseling. It may also be important to begin to investigate the relationship between self-efficacy and treatment outcome in general. For example, is self-efficacy predictive of therapeutic outcome? One may expect that individuals with strong beliefs about their ability to resolve problems may also be more successful at resolving their presenting difficulties than individuals with inefficacious beliefs.

Pending replication and extension of these findings, the present results may have eventual practical utility in the prediction and prevention of premature termination. For example, it is possible that efforts to educate the client about the therapeutic process and to enhance his or her counseling-related efficacy beliefs may facilitate

motivation for, and continuation, in counseling. Although highly speculative at this time, it may be plausible that at intake the focus on assessment, diagnosis and disposition may seem irrelevant to many clients. Increased efforts to educate the client as to the nature of counseling and its relevancy to problem resolution would impact the course of treatment. It is also important to study how clients construct their efficacy beliefs regarding counseling, particularly in the absence of prior counseling experiences.

This hypothesis could be tested by exposing some subjects to a brief intervention aimed at exploring and improving their self-efficacy beliefs. Their subsequent engagement in counseling could then be compared with that of other individuals exposed only to a conventional initial contact and assessment.

It is also imperative that researchers focus on specific interaction variables. For example, future research would do well to examine the client-counselor interaction and its impact on client engagement. It may be useful to assess the counselor's own efficacy beliefs about their ability to resolve clients' presenting difficulties. Counselors may indeed be tacitly communicating their beliefs to clients and thus affect the client's level of efficacy and desire to return for further counseling. If so, client and counselor self-efficacy beliefs may underlie formation

of the "working alliance" in counseling (cf. Horvath & Greenberg, 1989).

In conclusion, the present findings suggest that self-efficacy theory may have utility in illuminating the process by which clients commit to counseling. Although preliminary and limited in important respects, this study nevertheless supports further efforts to apply self-efficacy theory to counseling-related phenomena.

LIST OF REFERENCES

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- Acosta, F.X. (1980). Self-described reasons for premature termination of psychotherapy by Mexican American, Black American, and Anglo-American patients. Psychological Reports, 47, 435-443.
- Adelstein, D.M., Gelso, C.J., Haws, J.R., Reed, K.G., & Baron Spiegel, S. (1983). The change process following time-limited therapy. In C.J. Gelso & D.H. Johnson (Eds.) Explorations in Time-Limited Counseling and Psychotherapy (pp.63-81). New York: Teachers College Press.
- Anderson, T.R., Hogg, J.A., & Magoon, T.M. (1987). Length of time on a waiting list and attrition after intake. Journal of Counseling Psychology, 34, 93-95.
- Anderson, T.R., & Myer, T.E. (1985). Presenting problems, counselor contacts, and "no shows": International and American college students. Journal of College Student Personnel, 26, 500-503.
- Archer, J. (1984). Waiting list dropouts in a university counseling center. Professional Psychology: Research and Practice, 15, 388-395.
- Baekland, F., & Lundwall, L. (1975). Dropping out of treatment: A critical review. Psychological Bulletin,

82, 738-783.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84, 191-215.

Bandura, A. (1980). Gauging the relationship between self-efficacy judgment and action. Cognitive Therapy and Research, 4, 263-268.

Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist, 37, 122-147.

Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. Cognitive Therapy and Research, 8, 231-255

Bandura, A. (1986). Social Foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. Cognitive Therapy and Research, 1, 287-308.

Bandura, A., Adams, N. E., Hardy, A. B., & Howells, G. N. (1980). Tests of the generality of self-efficacy theory. Cognitive Therapy and Research, 4, 39-66.

Bandura, A., Adams, N.E., & Beyer, J. (1977). Cognitive processes mediating behavioral change. Journal of Personality and Social Psychology, 35, 125-139.

Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational

- effects of goal systems. Journal of Personality and Social Psychology, 45, 1017-1028.
- Bandura, A., Reese, L., & Adams, N. E. (1982).
Microanalysis of action and fear arousal as a function
of levels of perceived self-efficacy. Journal of
Personality and Social Psychology, 43, 5-21.
- Bandura, A., & Schunk, D.H. (1981). Cultivating competence,
self-efficacy, and intrinsic interest through proximal
self-motivation. Journal of Personality and Social
Psychology, 41, 586-598.
- Barrios, B. A. (1983). The role of cognitive mediators in
heterosocial anxiety: A test of self-efficacy theory.
Cognitive Therapy and Research, 7, 543-554.
- Beck, K.H., & Lund, A.K. (1981). The effects of health
threat seriousness and personal efficacy upon
intentions and behavior. Journal of Applied
Social Psychology, 11, 401-415.
- Bernier, M., & Avar, J. (1986). Self-efficacy, outcome,
and attrition in a weight-reduction program. Cognitive
Therapy and Research, 10, 319-338.
- Betz, N. E., & Hackett, G. (1981). The relationship of
career-related self-efficacy expectations to perceived
career options in college women and men. Journal of
Counseling Psychology, 23, 399-410.
- Betz, N. E., & Shullman, S. L. (1979). Factors related to
client return rate following intake. Journal of

Counseling Psychology, 26, 542-545.

Borgh, J.H. (1968). Premature termination of psychotherapy and patient-therapist expectations. American Journal of Psychotherapy, 22, 460-473.

Bottari, M.A., & Rappaport, H. (1983). The relationship of patient and therapist-reported experiences of the initial session to outcome: An initial investigation. Psychotherapy: Theory, Research, 20, 355-357.

Brown, I., & Inouye, D.K. (1978). Learned helplessness through modeling: The role of perceived similarity in competence. Journal of Personality and Social Psychology, 36, 900-908.

Carr, J. E. (1970). Differentiation similarity of patient and therapist and the outcome of psychotherapy. Journal of Abnormal Psychology, 76, 361-369.

Cartwright, R., Lloyd, S., & Wicklund, J. (1980). Identifying early dropouts from psychotherapy. Psychotherapy: Theory, Research, and Practice, 17, 263-267.

Christensen, K.C., Birk, J.M., & Sedlacek, W.E. (1977). A follow-up of clients placed on a counseling center waiting list. Journal of College Student Personnel, 18, 308-311.

Cochran, S. V., & Stamler, V. L. (1989). Differences between mutual and client-initiated nonmutual terminations in a university counseling center.

- Journal of College Student Development, 30, 58-61.
- Collins, J. L. (1982, March). Self-efficacy and ability in achievement behavior. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Condiotte, M.M., & Lichtenstein, E. (1981). Self-efficacy and relapse in smoking cessation programs. Journal of Consulting and Clinical Psychology, 49, 648-658.
- Craig, T.J., & Huffine, C.L. (1976). Correlates of patient attendance in an inner-city mental health clinic. American Journal of Psychiatry, 133, 61-64.
- Davis, F.W., & Yates, B.T. (1982). Self-efficacy expectancies as determinants of performance deficits and depressive affect. Cognitive Therapy and Research, 6, 23-35.
- Devins, G.M., & Edwards, P.J. (1988). Self-efficacy and smoking reduction in chronic obstructive pulmonary disease. Behavioral Research and Therapy, 26, 127-135.
- DiClemente, C.C. (1981). Self-efficacy and smoking cessation maintenance. Cognitive Therapy and Research, 5, 175-187.
- DiClemente, C.C. (1986). Self-efficacy and the addictive behaviors. Journal of Social and Clinical Psychology, 4, 302-315.

- Dorn, F.J. (1989). An examination of client motivation and career certainty. Journal of College Student 6, 456-460.
- Duckro, P., Beal, D., & George, C. (1979). Research on the effects of disconfirmed client role expectations in psychotherapy: A critical review. Psychological Bulletin, 86, 2, 260-275.
- Duckro, P., & George, C. (1979). Effects of failure to meet client preference in a counseling interview analogue. Journal of Counseling Psychology, 26, 9-14.
- Duehn, W. D., & Proctor, E. (1977). Initial clinical interaction and premature discontinuance in treatment. American Journal of Orthopsychiatry, 47, 284-290.
- Dunlap, W.P., & Kemery, E.R. (1987). Failure to detect moderating effects: Is multicollinearity the problem? Psychological Bulletin, 102, 418-420.
- Eastman, C., & Marzillier, J.S. (1984). Theoretical and methodological difficulties in Bandura's self-efficacy theory. Cognitive Therapy and Research, 8, 213-229.
- Epperson, D.L. (1981). Counselor gender and early premature terminations from counseling: A replication and extension. Journal of Counseling Psychology, 28, 349-356.
- Epperson, D. L., Bushway, D.J., & Warman, R.E. (1983). Client self-terminations after one counseling session:

- Effects of problem recognition, counselor gender, and counselor experience. Journal of Counseling Psychology, 30, 307-315.
- Eysenck, H. J. (1978). Expectations as causal elements in behavioral change. Advances in Behaviour Research and Therapy, 1, 171-175.
- Feltz, D.L. (1982). Path analysis of the causal elements in Bandura's theory of self-efficacy and an anxiety-based model of avoidance behavior. Journal of Personality and Social Psychology, 42, 764-781.
- Fiester, A.R. (1977). Clients' perceptions of therapists with high attrition rates. Journal of Consulting and Clinical Psychology, 45, 954-955.
- Fiester, A.R., & Rudestam, K. E. (1975). A multivariate analysis of the early dropout process. Journal of Consulting and Clinical Psychology, 43, 528-535.
- Fiester, A. R., Mahrer, A. R., Giambra, L. M., & Ormiston, D. W. (1974). Shaping a clinic population: The dropout problem reconsidered. Community Mental Health Journal, 10, 173-179.
- Foulks, E.F., Persons, J.B., & Merkel, R.L. (1986). The effect of patients' beliefs about their illnesses on compliance in psychotherapy. American Journal of Psychiatry, 143, 340-344.
- Garfield, S. (1986). Research on client variables in psychotherapy. In S. Garfield & A. Bergin (Eds.)

Handbook of Psychotherapy and Behavior Change (3rd ed.)

(pp. 213- 256) New York: Wiley.

Gauthier, J., & Ladouceur, R. (1981). The influence of self-efficacy reports on performance. Behavior Therapy, 12, 436-439.

Gotlib, I.H., & Robinson, L.A. (1982). Responses to depressed individuals: Discrepancies between self-report and observer-rated behavior. Journal of Abnormal Psychology, 91, 231-240.

Gottschalk, L.A., Mayerson, P., & Gottlieb, A.A. (1967). Prediction and evaluation of outcome in an emergency brief psychotherapy clinic. Journal of Nervous and Mental Disease, 144, 77-96.

Greenspan, M., & Mann Kulish, N. (1985). Factors in premature termination in long-term psychotherapy. Psychotherapy: Theory, Research, and Practice, 22, 75-82.

Gulas, I. (1974). Client-therapist congruence in prognostic and role expectations as related to client's improvement in short-term psychotherapy. (Doctoral Dissertation, Ohio University). Dissertation Abstracts International, 1974, 35, 243B. (University Microfilms No 74-23, 852.

Guilford, J.P. (1954). Psychometric Methods. N.Y.: McGraw-Hill.

- Gunzberger, T.K., Henggler, & Watson, S. (1985). Factors related to premature termination of counseling relationships. Journal of College Student Personnel, 26, 456-460.
- Hardin, S. I., & Yanico (1983). Counselor gender, type of problem, and expectations about counseling. Journal of Counseling Psychology, 32, 131-134.
- Hardin, S. I., & Subich, L. M. (1985). A methodological note: Do students expect what counselors do? Journal of Counseling Psychology, 45, 954-955.
- Hardin, S.I., Subich, L.M., & Holvey, J.M. (1988). Expectancies for counseling in relation to premature termination. Journal of Counseling Psychology, 35, 31-40.
- Heesacker, M., Heppner, P.P., & Shaw, T. (1988). Client motivation, expectations, and premature termination Paper presented at the annual meeting of the American Psychological Association in Atlanta, Georgia, on August 14, 1988.
- Heilbrun, A.B. (1961). Male and female personality correlates of early termination in counseling. Journal of Counseling Psychology, 8, 31-36.
- Heilbrun, A.B. (1972) Effects of briefing upon client satisfaction with the initial counseling contact. Journal of Consulting and Clinical Psychology, 38, 50-66.

- Heilbrun, A. B. (1974). Interviewer style, client satisfaction, and premature termination following the initial counseling contact. Journal of Counseling Psychology, 21, 346-350.
- Heilbrun, A. B. (1982). Cognitive factors in early counseling termination: Social insight and level of defensiveness. Journal of Counseling Psychology, 29, 29-38.
- Heilbrun, A.B., & Sullivan, D.J. (1962). The prediction of counseling readiness. Personnel and Guidance Journal, 41, 112-117.
- Heine, R., & Trosman, H. (1960). Initial expectations of the doctor-patient interaction as a factor in continuance in psychotherapy. Psychiatry, 23, 275-278.
- Helmstadter, G.C. (1964). Principles of Psychological Measurement. New York: Meredith Publishing Company.
- Heppner, P.P., & Claiborn, C.D. (1989). Social influence research in counseling: A review and critique. Journal of Counseling Psychology, 36, 365-387.
- Heppner, P.P., & Dixon, D.N. (1981). A review of the interpersonal influence process in counseling. Personal and Guidance Journal, 59, 542-550.
- Heppner, P.P., & Heesacker, M. (1983). Perceived counselor characteristics, client expectations, and client satisfaction with counseling. Journal of Counseling

Psychology, 30, 31-39.

Horenstein, D., & Houston, K.B. (1976). The expectation-reality discrepancy and premature termination from psychotherapy. Journal of Clinical Psychology, 32, 372- 378.

Horvath, A., & Greenberg, L. (1985). The development of the working alliance inventory. In L. Greenberg & W. Pinsoff (Eds.) The Psychotherapeutic Process (pp. 333-355). New York: Guilford Press.

Howard, K.I., Kopta, S.M., Krause, M.S., & Orlinsky, D.E. (1986). The dose-effect relationship in psychotherapy. American Psychologist, 41, 159-164.

Hunt, D.D., Carr, J.E., Dagadakis, C.S., & Walker, E. A. (1985). Cognitive match as a predictor of psychotherapy outcome. Psychotherapy, 22, 718-721.

Jackson, D.N. (1967). Personality Research Form Manual. Goshen, NY: Research Psychologists Press, Inc.

Jenkins, S.J., Fuqua, D.R., & Blum, C.R. (1986). Factors related to duration of counseling in a university counseling center. Psychological Reports, 58, 467-472.

June, L.N., & Smith, E. (1983). A comparison of client and counselor expectancies regarding the duration of counseling. Journal of Counseling Psychology, 30, 596-599.

- Kane, A.S., & Shick Tryon, G. (1988). Predictors of premature termination from counseling at semester recess. Journal of College Student Development, 29, 562-563.
- Kanfer, R., & Zeiss, A.M. (1983). Depression, interpersonal standard setting, and judgements of self-efficacy. Journal of Abnormal Psychology, 92, 319-329.
- Kaplan, R.M., Atkins, C.J., & Reinsch, S. (1984). Specific efficacy expectations mediate exercise compliance in patients with COPD. Health Psychology, 3, 223-242.
- Kirk, B., & Frank, A. (1976). Zero interviews. Journal of Counseling Psychology, 23, 286-288.
- Klecka, W. R. (1980). Discriminant Analysis. Sage University Paper series on Quantitative Applications in the Social Sciences. Beverly Hills: Sage Pubns.
- Kolb, D.L., Davis, C.S., Beutler, L.E., Crago, M., & Shandfield, S.B. (1985). Patient and therapy process variables relating to dropout and change in psychotherapy. Psychotherapy: Theory, Research, and Practice, 22, 702-710.
- Kokotovic, A.M., & Tracey, T.J. (1987). Premature termination at a university counseling center. Journal of Counseling Psychology, 34, 80-82.
- Krauskopf, C., Baumgardner, A., & Mandracchia, S. (1981). Return rate following intake revisited. Journal of

Counseling Psychology, 28, 519-521.

Krebs, R.L. (1971). Some effects of a white institution on black psychiatric outpatients. American Journal of Orthopsychiatry, 41, 589-597.

Larsen, D. L., Attkisson, C.C., Hargreaves, W.A., & Nguyen, T.D. (1979). Assessment of client/patient satisfaction: Development of a general scale. Evaluation and Program Planning, 2, 197-207.

Larsen, D.L., Nguyen, T.D. Green, R., & Attkisson, C. (1983). Enhancing the utilization of outpatient mental health services. Community Mental Health Journal, 19, 305-320.

Last, C.G., Thase, M.E., Hersen, M., Bellack, A.S., & Himmelhoch, J.M. (1985). Patterns of attrition for psychosocial and pharmacologic treatments of depression. Journal of Clinical Psychiatry, 46, 361-366.

Lawe, C., Horne, A., & Taylor, S. (1983). Effects of pretraining procedures for clients in counseling. Psychological Reports, 53, 327-334.

Lazarus, R.S., & Opton, E. M. (1966). The study of psychological stress: A summary of theoretical formulations and experimental findings. In C.D. Spielberger (Ed.), Anxiety and Behavior. New York: Academic Press, 225-262.

Lent, R.W., Russell, R.K., & Zamostny, K.P. (1981).

Comparison of cue-controlled desensitization, rational restructuring, and a credible placebo in the treatment of speech anxiety. Journal of Consulting and Clinical Psychology, 49, 608-610.

Lent, R.W., & Hackett, G. (1987). Career self-efficacy: Empirical status and future directions. Journal of Vocational Behavior, 30, 347-382.

Lent, R.W., Lopez, F.G., Mikolaitis, N.L., Jones, L., & Bischke, K.J. (1990). Self-efficacy and outcome expectations in the psychological adjustment of psychiatric patients. Manuscript submitted for publication.

Litt, M.D. (1988). Self-efficacy and perceived control: Cognitive mediators of pain tolerance. Journal of Personality and Social Psychology, 54, 149-160.

Locke, E.A., Frederick, E., Bobko, P., & Lee, C. (1984). Effect of self-efficacy, goals, and task strategies on task performance. Journal of Applied Psychology, 69, 241-251.

Lorr, M., & Dee Brazz, C. (1979). Measures of motivation. Journal of Personality Assessment, 43, 64-68.

Luborsky, L., Mintz, J., Auerbach, A., Christoph, P., Bachrach, H., Todd, T., Johnson, M., Cohen, M., & O'Brien, C.P. (1980). Predicting the outcome of psychotherapy. Archives of General Psychiatry, 37, 471-481.

- Maddux, J.E., & Stanley, M.A. (1986). Self-efficacy theory in contemporary psychology: An overview. Journal of Social and Clinical Psychology, 4, 249-255.
- Mallinckrodt, B. (1989). Social support and the effectiveness of group therapy. Journal of Counseling Psychology, 36, 170-175.
- Mallinckrodt, B., & Fretz, B. R. (1988). Social support and the impact of job loss on older professionals. Journal of Counseling Psychology, 35, 281-286.
- Manning, M.M., & Wright, T.L. (1983). Self-efficacy expectancies, outcome expectancies, and the persistence of pain control in childbirth. Journal of Personality and Social Psychology, 45, 421-431.
- McIntyre, K.O., Lichtenstein, E., & Mermelstein, R.J. (1983). Self-efficacy and relapse in smoking cessation: A replication and extension. Journal of Consulting and Clinical Psychology, 51, 632-633.
- McNeill, B.W., Lee, V.E., & May, R.J. (1987). Perceptions of counselor source characteristics by premature and successful terminators. Journal of Counseling Psychology, 34, 86-89.
- Mennicke, S.A., Lent, R.W., & Burgoyne, K. (1988). Premature termination from university counseling centers: A review. Journal of Counseling and Development, 66, 458-465.
- Miller, S.M. (1979). Coping with impending stress:

Psychophysiological and cognitive correlates of choice.
Psychophysiology, 16, 572-581.

Nash, J.M., & Garske, J.P. (1988). Warly dropout in a
university counseling center. Paper presented at
APA, Atlanta, on August 14, 1988.

Niemeyer, G.J., & Gonzales, M. (1983). Duration,
satisfaction, and perceived effectiveness of cross-
cultural counseling. Journal of Counseling Psychology,
30, 91-95.

Noonan, R.J. (1973). A follow-up of pretherapy dropouts.
Journal of Community Psychology, 1, 43-45.

Nowicki, S. Jr., & Duke, M. P. (1978). Examination of
counseling variables within a social learning
framework. Journal of Counseling Psychology, 25, 1-7.

Nunnally, J. C. (1978). Psychometric Theory. New York:
McGraw-Hill.

O'Leary, A. (1985). Self-efficacy and health. Behavioral
Research and Therapy, 23, 437- 451.

Otto, J. & Moos, R. (1974). Patient expectations and
attendance in community treatment programs. Community
Mental Health Journal, 10, 9-15.

Paulhus, D., & Christie, R. (1981). Sphere of control: An
interactionist approach to assessment of perceived
control. In H.M. Lefcourt (Ed.), Research with the
locus of control construct: Assessment methods (Vol. 1,
pp. 161-188). New York: Academic.

- Pekarik, G. (1983a). Follow up adjustment of outpatient dropouts. American Journal of Orthopsychiatry, 53, 501-511.
- Pekarik, G. (1983b). Improvement in clients who have given different reasons for dropping out of treatment. Journal of Clinical Psychology, 39, 909-913.
- Pekarik, G. (1985a). Coping with dropouts. Professional Psychology: Research and Practice, 16, 114-123.
- Pekarik, G. (1985b). The effects of employing different termination classification criteria in dropout research. Psychotherapy, 22, 86-91.
- Perfetti, L. J., & Bingham, W. C. (1983). Unemployment and self-esteem in metal refinery workers. Vocational Guidance Quarterly, 31, 195-202.
- Persons, J.B., Burns, D.D., & Perloff, J.M. (1988). Predictors of dropout and outcome in cognitive therapy for depression in a private practice setting. Cognitive Therapy and Research, 12, 557-575.
- Phillips, L. E. (1987). The ubiquitous decay curve: Service delivery similarities in psychotherapy, medicine, and addiction. Professional Psychology: Research and Practice, 18, 650-652.
- Plake, B.S., Smith, E.P., & Dumsteegt, D.C. (1981). A validity investigation of the achievement anxiety test. Educational and Psychological Measurement, 41, 1215-1222.

- Proctor, E., & Rosen, A. (1981). Expectations and preferences for counselor race and their relation to intermediate treatment outcomes. Journal of Counseling Psychology, 28, 40-46.
- Roback, H.B., & Smith, M. (1987). Patient attrition in dynamically oriented treatment groups. American Journal of Psychiatry, 144, 4, 426-431.
- Rodolfa, E.R., Rapaport, R., & Lee, V.E. (1983). Variables related to premature terminations in a university counseling service. Journal of Counseling Psychology, 30, 87-90.
- Rosenberg, M. (1965). Society and the Adolescent Self-Image. Princeton, NJ: Princenton University Press.
- Saltzman, C., Luetgert, M.J., Roth, C.H., Creaser, J., & Howard, L. (1976). Formation of a therapeutic relationship: Experiences during the initial phase of psychotherapy as predictors of treatment duration and outcome. Journal of Consulting and Clinical Psychology, 44, 546-555.
- Sandler, W. (1975). Patient-therapist dissimilarity of role expectations related to premature termination of psychotherapy with student therapists (Doctoral Dissertation, City University of New York, 1975). Dissertation Abstracts International 1975, 35, 6111E-6112B. (University Microfilms No. 75-12, 691).

- Schiller, L.J. (1976). A comparative study of the differences between client continuers and dropouts at two university counseling centers. Journal of Counseling Psychology, 23, 99-102.
- Schunk, D.H. (1981). Modeling and attributional effects on children's achievement: A self-efficacy analysis. Journal of Educational Psychology, 73, 93-105.
- Shueman, S.A., Gelso, C.J., Mindus, L., Hunt, B., & Stevenson, J. (1980). Client satisfaction with intake: Is the waiting list all that matters? Journal of College Student Personnel, 21, 111-114.
- Silber, E., & Tippet, J. S. (1965). Self-esteem: Clinical assessment and measurement validation. Psychological Reports, 16, 1017-1071.
- Silverman, W. H., & Beech, R.P. (1979). Are dropouts, dropouts? Journal of Community Psychology, 7, 236-242.
- Smith, T.W., Snyder, C.R., & Handelsman, M.M. (1982). On the self-serving function of an academic wooden leg: Test anxiety as a self-handicapping strategy. Journal of Personality and Social Psychology, 42, 314-321.
- Sobel, H.J., & O'Brien, B.A. (1979). Expectations for counseling success. Journal of Counseling Psychology, 26, 462-464.
- Spector, P.E. (1981). Research Designs. Sage University paper series on quantitative applications in the

social sciences, 7-023. Beverly Hills: Sage
Pubns.

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

Spielberger, C.D., Gorsuch, R.L., & Lushene, R.E. (1970).
Manual for the State-Trait Anxiety Inventory.
Consulting Psychologist Press. Palo Alto: CA.

Strassberg, D.S., Anchor, K.N., Cunningham, J., & Elkins, D.
(1977). Successful outcome and number of sessions:
When do counselors think enough is enough? Journal of
Counseling Psychology, 24, 477-480.

Strong, S.R. (1968). Counseling: An interpersonal influence
process. Journal of Counseling Psychology, 15,
215-224.

Subich, L.M. (1983). Expectancies for counselors as a
function of counselor gender specification and subject
sex. Journal of Counseling Psychology, 30, 421-424.

Sue, S. (1977). Community mental health services to
minority groups: Some optimism, some pessimism.
American Psychologist, 32, 616-624.

Sue, S., McKinney, H., Allen, D., & Hall, J. (1974).
Delivery of community mental health services to black
and white clients. Journal of Consulting and Clinical
Psychology, 42, 794-801.

Tabachnick, B.G., & Fidell, L.S. (1983). Using Multivariate

Statistics. Harper & Row, Publishers: N.Y.

Telch, M.J., Bandura, A., Vinciguerra, P., Agras, A., & Stout, A.L. (1982). Social demand for consistency and congruence between self-efficacy and performance.

Behavior Therapy, 13, 694-701.

Tinsley, H. E. A., Workman, K.R., & Kass, R.A. (1980).

Factor analysis of the domain of client expectancies about counseling. Journal of Counseling Psychology, 27, 561-570.

Tinsley, H.E.A., Bowman, S.L., & Ray, S.B. (1988).

Manipulation of expectancies about counseling and psychotherapy: Review and analysis of expectancy manipulation strategies and results. Journal of Counseling Psychology, 35, 99-108.

Tyson, R.L., & Reder, P. (1979). Aspects of the patient intake process in a psychotherapy clinic. British Journal of Medical Psychology, 52, 4, 309-320.

Tracey, T.J. (1986). Interactional correlates of premature termination. Journal of Consulting and Clinical Psychology, 54, 784-788.

Turner, A. J., & Vernon, J.C. (1976). Prompts to increase attendance in a community mental health center.

Journal of Applied Behavior Analysis, 9, 141-145.

Yuen, R. K., & Tinsley, H. E. A. (1981). International and American students' expectancies about counseling.

Journal of Counseling Psychology, 28, 66-69.

- Wampold, B.E., & Freund, R.D. (1987). Use of multiple regression in counseling psychology research: A flexible data-analytic strategy. Journal of Counseling Psychology, 34, 372-382.
- Weinberg, R.S., Gould, D., & Jackson, A. (1979). Expectations and performance: An empirical test of Bandura's self-efficacy theory. Journal of Sport Psychology, 1, 320-331.
- Weinberg, R.S., Yukelson, D., & Jackson, A. (1980). Effect of public and private efficacy expectations on competitive performance. Journal of Sport Psychology, 2, 340-349.
- Wolpe, J. (1978). Self-efficacy theory and psychotherapeutic change: A square peg for a round hole. Advances in Behaviour Research and Therapy, 1, 231-236.
- Zamostny, K., Corrigan, J., & Eggert, M. (1981). Replication and extension of social influence processes in counseling: A field study. Journal of Counseling Psychology, 28, 481-489.
- Ziemelis, A. (1974). Effects of client preference and expectancy upon the initial interview. Journal of Counseling Psychology, 21, 23-30.

APPENDICES

APPENDIX A

DDQ

S# _____

INSTRUCTIONS: Please do not administer to subject. This information will be obtained from client's file.

Client Demographics

Sex: (1) Male _____ (2) Female _____ Age _____

Race: (1) Asian _____ (2) Black _____ (3) Caucasian _____

(4) Hispanic _____ (5) Nat Am _____ (6) Other _____

Year in school: (1) Freshmen _____ (2) Sophomore _____

(3) Junior _____ (4) Senior _____

(5) Graduate Student _____ (6) Other _____

Problem type : (1) Academic/career _____ (2) personal/

social _____

(3) Other _____

Previous use of services
at the Counseling Center: (1) YES _____ (2) NO _____

1st Counseling Session: (1) No "SHOW" _____ (2) "SHOW" _____

Setting Demographics

C.C. Branch: (1) Olin (2) Brody (3) SSB

Length of wait (in days)
between intake
and first session _____

Intake Counselor Experience Level

(1) Staff _____ (2) Intern _____

Theoretical Orientation
of Intake Counselor _____

Degree of Intake Counselor: (1) MSW (2) M.A. (3) Ph.D

APPENDIX B

M-EAC

S# _____

Date _____

Instructions: Using the scale below, please indicate the extent to which each statement is true for you.

Please Circle Your Answer to Each Statement

Not True	Slightly True	Somewhat True	Fairly True	Quite True	Very True	Definitely True
1	2	3	4	5	6	7

I EXPECT TO...

1. Stay in counseling for at least a few weeks, even if at first I am not sure it will help.

1 2 3 4 5 6 7

2. See the counselor for more than three interviews.

1 2 3 4 5 6 7

3. Stay in counseling even though it may be painful or unpleasant at times.

1 2 3 4 5 6 7

4. Work hard in counseling because I believe I will not benefit from counseling unless I do.

1 2 3 4 5 6 7

5. Be motivated to work with the counselor.

1 2 3 4 5 6 7

6. Stay in counseling as long as necessary to achieve my goals.

1 2 3 4 5 6 7

7. Make some changes in
myself because I think that
what I get out of counseling
will depend on my willingness
to make some changes in how
I feel or what I do.

1 2 3 4 5 6 7

8. Work hard in counseling
because I believe that what I
get out of counseling depends
on the extent to which I
am willing to work.

1 2 3 4 5 6 7

APPENDIX C

SECB

This questionnaire asks about some tasks that people often face in counseling. Give your answer by circling the number that best describes how sure or unsure you are that you could do each task.

Please Circle Your Answer!

HOW SURE ARE YOU THAT YOU COULD:

	Not at all Sure					Completely Sure				
1. Solve the problems that brought you to the counseling center	0	1	2	3	4	5	6	7	8	9
2. Discuss your innermost feelings with a counselor	0	1	2	3	4	5	6	7	8	9
3. Remove any obstacles (like schedule conflicts) to attending future counseling sessions	0	1	2	3	4	5	6	7	8	9
4. Cope with unpleasant feelings (like fear or sadness) that might arise during counseling	0	1	2	3	4	5	6	7	8	9
5. Try out difficult new behaviors between counseling sessions that your counselor may recommend	0	1	2	3	4	5	6	7	8	9
6. Tell your counselor when you feel you no longer need counseling	0	1	2	3	4	5	6	7	8	9
7. Adjust your schedule in order to attend future counseling sessions	0	1	2	3	4	5	6	7	8	9
8. Discuss things with your counselor that might be embarrassing or painful	0	1	2	3	4	5	6	7	8	9

9. Find ways to work out difficult "everyday problems"	0	1	2	3	4	5	6	7	8	9
10. Tell your counselor when you don't understand something he or she said	0	1	2	3	4	5	6	7	8	9
11. Attend all scheduled counseling sessions	0	1	2	3	4	5	6	7	8	9
12. Describe your problems clearly to your counselor, even when you're upset	0	1	2	3	4	5	6	7	8	9
13. Change current behaviors that are troubling you	0	1	2	3	4	5	6	7	8	9
14. Talk about yourself during the counseling session	0	1	2	3	4	5	6	7	8	9
15. Get to the Counseling Center on time for your scheduled sessions	0	1	2	3	4	5	6	7	8	9
16. Tell your counselor when you are upset or uncomfortable with him or her	0	1	2	3	4	5	6	7	8	9
17. Persist with efforts to resolve your problems despite set-backs.	0	1	2	3	4	5	6	7	8	9
18. Discuss thoughts that are bothering you with your counselor	0	1	2	3	4	5	6	7	8	9
19. Keep all your appointments with your counselor	0	1	2	3	4	5	6	7	8	9
20. Discuss with your counselor when you are feeling discouraged about solving your problems	0	1	2	3	4	5	6	7	8	9

APPENDIX D

O-EAC

Instructions: Using the rating scale below, Please indicate the extent to which each statement is true for you.

Please Circle Your Answer

Not True 1	Slightly True 2	Somewhat True 3	Fairly True 4	Quite True 5	Very True 6	Definitely True 7
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I EXPECT THAT COUNSELING WILL HELP ME TO...

1. Get a better understanding of myself and others.	1	2	3	4	5	6	7
2. Become better able to help myself in the future.	1	2	3	4	5	6	7
3. Improve my relationships with others.	1	2	3	4	5	6	7
4. Get an understanding of my strengths.	1	2	3	4	5	6	7
5. Experience a significant change in my life.	1	2	3	4	5	6	7
6. See myself differently after counseling.	1	2	3	4	5	6	7
7. Become a better person.	1	2	3	4	5	6	7

8. Be less anxious and tense.	1	2	3	4	5	6	7
9. Become less defensive.	1	2	3	4	5	6	7
10. Change a particular behavior (e.g., stop smoking, become more assertive).	1	2	3	4	5	6	7
11. Really get at why I feel or act as I do.	1	2	3	4	5	6	7

Appendix E

R-SES

DIRECTIONS: This questionnaire is concerned with your overall feelings about yourself. Please respond to the following statements as honestly as you can, placing an "X" in the column that most closely describes how you generally feel. Once again, your answers will be kept strictly confidential.

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
1. I feel that I'm a person of worth, at least on an equal plane with others.	_____	_____	_____	_____
2. I wish I could have more respect for myself.	_____	_____	_____	_____
3. On the whole, I am satisfied with myself.	_____	_____	_____	_____
4. I feel I do not have much to be proud of.	_____	_____	_____	_____
5. I take a positive attitude toward myself.	_____	_____	_____	_____
6. I certainly feel useless at times.	_____	_____	_____	_____
7. I am able to do things as well as most other people.	_____	_____	_____	_____
8. At times I think I am no good at all.	_____	_____	_____	_____
9. I feel that I have a number of good qualities.	_____	_____	_____	_____
10. All in all, I am inclined to feel that I am a failure.	_____	_____	_____	_____

Appendix F

CPIQ

S#_____

Instructions: Using the following scale, please rate the severity of each of the following areas of concern that you may have.

	Not a significant Problem		Somewhat of a Problem		Very Severe Problem
<hr/>					
1. Education	1	2	3	4	5
2. Vocational	1	2	3	4	5
3. Personal	1	2	3	4	5
4. Interpersonal	1	2	3	4	5

YOU ARE DONE! THANK YOU VERY MUCH FOR YOUR
COOPERATION. PLEASE RETURN ALL QUESTIONNAIRES TO THE
SECRETARY.

Appendix G

INSTRUCTIONS

The purpose of this study is to learn more about factors involved in the utilization of counseling services by students at Michigan State University. We are particularly interested in how to best meet students' needs, and your participation will greatly help us in achieving this goal.

Your contribution to this research would involve you completing the enclosed questionnaires which assess your perceptions about various aspects of counseling and about yourself. This activity will probably involve about 10 to fifteen minutes.

Your participation is completely voluntary. You are also free to withdraw your participation at any time you wish. Choosing to participate or not to participate will not affect your receiving services at this facility in any way.

The results of this study will be treated in strict confidence, and you will not be personally identified in any reports. Your counselor will not have access to your questionnaire responses.

The results and additional information about this study will be made available to you at your request.

If you agree to participate, please sign the enclosed Consent Form which simply indicates your willingness to participate in this study. Then, follow the following instructions:

1. Complete the enclosed questionnaires immediately following your intake session.
2. Please return all materials to the receptionist at the front desk.

Thank you,

Dan A. Longo
Intern, Counseling Center

Appendix H

CONSENT FORM

1. I agree to participate in the study conducted by Dan A. Longo, under the supervision of Robert W. Lent, Ph.D. The study has been approved by the Counseling Center and the University Committee on Research Involving Human Subjects.

2. The nature of this study has been explained to me, and I understand that my participation will involve completing several short questionnaires on my perceptions of the counseling process and myself. In addition, some demographic and contact information from the Counseling Center records regarding me will be used.

3. I understand that my participation is completely voluntary, and that I can discontinue participation in this research at any time I choose. No risks or discomfort are posed by my participation.

4. Participation or lack of participation will not affect my receiving services at the Counseling Center now or in the future. I understand that involvement in this study does not guarantee any special benefits to me.

5. I understand that the data resulting from this research will be kept confidential and that I will never be personally identified in any report of this study. My counselor will not have access to my responses.

Signed: _____

Print Name: _____

Student # : _____

Date: _____

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