EFFECTS OF PARADOXICAL AND BEHAVIORAL INTERVENTIONS ON SOCIAL INFLUENCE, EXPECTATIONS AND ATTRIBUTIONS

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Oklahoma State University
in partial fulfillment
of the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
July, 1988

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ACKNOWLEDGEMENTS

There are several individuals whom I would like to thank for their assistance in making this study possible. Dr. Mark Johnson, my thesis director, has contributed a great deal to this study as well as to my professional growth in general. His tireless efforts in editing, advising and assisting me have been greatly appreciated. He has gone above and beyond what is usually expected of an adviser in helping me complete this research. Also I would like to thank Dr. Al Carlozzi, Chairman of my doctoral committee, for his assistance with this project as well as for his many contributions to my professional growth over the past several years. I consider both Dr. Johnson and Dr. Carlozzi to be my teachers and my friends, which is a combination I greatly value. In addition, I would like to thank the members of my doctoral committee, Dr. Robert Helm and Dr. Sherry Maxwell for their suggestions and direction in helping me refine this study.

Special thanks goes to my dear friend, Dr. Ross Atkinson who assisted me in data collection and moral support. Also I would like to thank my good friends,

Kyle and Carla Ross, who encouraged me when I needed it the most. Last but definitely not least, I would like to thank my wife Delia and my daughter Amber who have sacrificed in a countless number of ways so that I might finish this study. They have given of themselves and have also sacrificed their own goals and aspirations so that I might finish. Words can never really express my profound sense of love and gratitude for their contributions.

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CHAPTER I

INTRODUCTION

Overview of Study

This study examined the potential application of two social psychological theories to the psychotherapeutic interventions known as the paradoxical techniques. These theories were social influence theory (Strong, 1968) and attribution theory (Kelley, 1967). The effects of two of the paradoxical interventions, symptom scheduling and the negative consequences of change, were compared with a relaxation and a summary/control group interventions with respect to each's impact on the social influence and attributional processes.

There has been a great deal of attention focused on the paradoxical interventions within the last ten years, especially in the field of family therapy (Weeks & L'Abate, 1979). Initially there was very limited research done on these techniques and the primary evidence for their effectiveness was taken from case studies (Dowd & Milne, 1986).

As the interest in these interventions has increased, so has the controversy over their use

increased. For example, opponents of these techniques have claimed they are extremely manipulative, unethical and seriously jeopardize the counseling relationship (Weeks & L'Abate, 1982). On the other hand, proponents have argued that the question of manipulation is moot, since all counseling techniques involve some level of manipulation (Haley, 1976).

Experimental research is slowly being conducted in an effort to address some of these critical controversies (Dowd & Milne, 1986). As often is the case in any new area, this research has generated more questions, hypotheses and problems than it has definitive answers. The following section reviews some of the critical questions raised thus far.

Background of the Problem

A number of very complex theories have been used to explain how paradoxical interventions work. Dowd and Milne (1986) have indicated that these theories include communication theory, mathematical group theory, cybernetic theory and general systems theory. In fact, the predisposition of most theorists in this area appears to be that a whole new meta-theory needs to be developed in order to explain how the paradoxical interventions work (Dell, 1986).

Dell (1986) has taken exception with the use of

these complex theories to explain the paradoxical interventions. He believes that the term "paradoxical" is being used now for any technique that cannot be explained by current theories. He argues that what is needed is a revision of current theories to encompass and explain the paradoxical interventions rather than the development of a whole new theoretical system. One potentially relevant area that has received only limited attention is the application of some of the social psychological theories to the paradoxical interventions.

One theory that is partially embedded in social psychology and partially in counseling psychology is the social influence theory (Strong, 1968). In this theory, counseling is perceived as a social influence process. The relationship between this theory and the paradoxical interventions has received some limited attention in the literature (Conoley & Beard, 1984; McMillan & Johnson, 1988; Perrin & Dowd, in Press). The results of these investigations has been somewhat contradictory, with some studies indicating that these techniques do not have a negative impact on the social influence variables, while others have concluded the opposite.

Another social psychological theory which is beginning to receive limited attention in the paradoxical literature is attribution theory (Kelley,

1967). Some authors have suggested there is possibly a different attribution pattern associated with the paradoxical interventions then with other more traditional interventions (Beck & Strong, 1982; O'Connell, 1983). These authors have all suggested that perhaps paradoxical interventions facilitate internally attributed change more effectively than do more traditional approaches by effectively disqualifying the counselor from being a possible causal agent from the client's perspective. This disqualification occurs as a result of the counselor actively encouraging the client to stay the same or get worse, which is a standard component in paradoxical interventions.

To date, Feldman, Strong, and Danser (1982) have been the only researchers to research this disqualification process. While these authors were not able to support this hypothesis, they were able to identify other differences in the attributional process between paradoxical and other types of interventions. These authors found that, for paradoxical interventions, increases and decreases in internal attributions were associated with increases and decreases in feelings of depression. However, for more traditional interventions, increases in internal attributions were only found after a decrease in depression was maintained

over an extended period of time.

The theorists who have advocated for the internal attribution hypothesis have failed to consider one important variable. This variable is the affect of outcome expectation on the attributional process. House (1976), in a summary of the existing research, concluded that expected outcomes that are confirmed lead to internal attributions, while expected outcomes that are not confirmed lead to external attributions. Since the paradoxical interventions are very unorthodox, it follows that they may initially lead to negative expectations, which may, in some cases, possibly lead to external attributions rather than internal ones.

There are three critical issues which need to be addressed concerning the effect of expectations and the attributional process with respect to the paradoxical interventions. First, the research on outcome expectation has been criticized for using experimental tasks that are too simplistic and that possibly do not generalize to the more complex counseling process (Schoeneman, van Uchelen, Stonebrink, & Cheek, 1986). Second, the paradoxical interventions are actually a fairly diverse group of techniques which may have different attributional patterns associated with each of them. A related issue is whether the expectation

pattern is the same or different across all of the techniques. Third, if the different techniques generate different expectations, how do these differences affect the attribution process? No research to date has effectively addressed these questions.

It is also important to note that almost all of the studies to date have focused on only two of the paradoxical interventions, reframing and symptom prescription. This means that what is known about paradoxical interventions is almost entirely based on these two techniques. This may not be an adequate representation of these interventions, and information concerning the other techniques, including symptom scheduling and the restraining directives, is badly needed.

Statement of the Problem

In summary, there exist a number of basic problems and questions that need to be addressed with respect to paradoxical interventions. First, if the use of these techniques is to become any more than a fad, effort will need to be focused on relating these techniques to some of the more basic theories concerning social influence and social interactions. Proponents of these techniques have chosen to develop a grand theory rather than integrate these techniques within the

existing knowledge base. Cybernetics is a very good example of the search for a new grand theory. It is an extremely complex theory which has the ability to explain almost any process. In fact, the theory has some of the experimental problems that psychoanalysis has in that it tries to be so all encompassing that it becomes empirically untestable.

Next, the pattern of outcome expectations associated with the paradoxical interventions needs to be carefully examined and compared with other types of interventions. In general, while this is an area that is weak for counseling research as a whole, there is a total void with respect to the paradoxical interventions. Information in this area could lead to specific decision rules about when and how to use paradoxical interventions as the treatment of choice.

Thirdly, if any differences in expectancy patterns do exist, there needs to be study of how these patterns affect the attributional process. There has been some speculation in this area but to date only one study has actually examined this area (Feldman et al, 1982). It seems entirely reasonable that these interventions would generate different attributional patterns which in turn may affect therapeutic outcome and maintenance of progress. This information could also lead to a better

understanding of when these techniques would become the treatment of choice.

Fourthly, as mentioned previously, what is known about these interventions is primarily taken from research on only two of the techniques, symptom prescription and reframing. There is a great need for information on other paradoxical techniques. These techniques represent a very diverse group from simple reframing to declaring hopelessness. The assumption that the effect of all of these techniques is the same is preposterous and is an indication of the myopia that theorists in this area have had. Finally, since what is known about the attribution process is based primarily on very simple attribution tasks, there is a need to determine if it generalizes to more complex tasks such as the counseling process. Laboratory analogues may not be similar enough to the counseling process to apply the results of these investigations in a clinical setting. If differences between these settings do exist researchers and clinicians need to be aware of them in order to effectively intervene with clients.

Purpose of the Study

The purpose of this study was fourfold. First, the effect of paradoxical interventions on the social influence variables of attractiveness and expertness was

examined. This study compared the effect of paradoxical interventions on the social influence variables with both a relaxation intervention and a summary/control group. The two paradoxical interventions were ones which have not received a great deal of attention in the empirical literature previously. These interventions were symptom scheduling and the restraining directive known as the "negative consequences of change" (Weeks & L'Abate, 1982). Secondly, the effects of whether or not paradoxical interventions encourage negative outcome expectations was explored. Thirdly, the attributional patterns associated with two paradoxical interventions, a relaxation intervention, and a no intervention control group were compared. Fourthly, the relationship between outcome expectation and attribution pattern was examined across all methods of intervention.

Hypotheses

1. There will be significant differences between the effects of the paradoxical interventions (symptom scheduling and the negative consequences of change) and the other interventions (relaxation and control) on perceived attractiveness, expertness, and trustworthiness of the therapist as measured by the CRF-S. More specifically, the relaxation intervention will be seen as significantly more attractive and expert

than will either of the two paradoxical interventions. All three directive interventions will be seen as more attractive and expert than the summary/control.

2. There will be significant differences between outcome expectations, as measured by the Counseling Expectation Inventory, associated with paradoxical interventions (symptom scheduling and the negative consequences of change) and the other interventions (relaxation and summary/control). The relaxation intervention will generate the highest level of expectation, followed by the negative consequences of change, symptom scheduling and the summary group respectively.

3. There will be significant differences between attributional patterns, as measured by the CAVE technique, in which expectations are confirmed and patterns in which expectations are violated. It is predicted that confirmations will lead to significantly higher internal attributions than will expectancy violations.

4. There will be significant differences in the attributional patterns, as measured by the CAVE Technique, associated with each of the four types of interventions. More specifically, the paradoxical interventions will lead to significantly different

attribution patterns when compared with the relaxation and summary and control groups.

Assumptions and Limitations

There are several basic assumptions which underlie this study. The first assumption was that counseling is a social influence process and as such, is governed by the basic principles of all other social interactions as defined by the relevant theories of social psychology. The second assumption is that individuals actively make attributions about their environment. The next assumption is that these attributions are made in a predictable and systematic fashion and are related to the meaning that people give to events. The next assumption is that attribution theory and social influence theory have significant implications for all counseling approaches. The final assumption is that the attributions that individuals make are important and significantly related to behavior change.

There are four major limitations to this study. The first limitation is that it is an analogue design. Analogue designs have been challenged from a variety of perspectives, but for this particular study it represents the most efficient design available. The second limitation is that the subject pool will consist of college students, which limits the generalizability

to that group alone. The third limitation is that the attributions made in this study will be in a sense forced in that the subjects will be asked to make them as opposed to allowing them to occur spontaneously. The fourth limitation for this study is that the gender of the counselor and client was held constant in that both were female. This limits generalizability to situations in which both client and counselor are female and it may also have some effect on the subjects ability to effectively identify with the client.

Definitions

1. Paradoxical Interventions- For the purposes of this study, the taxonomy developed by Weeks and L'Abate (1982) will be used to define what is a paradoxical intervention. This approach to defining what is paradoxical was selected because it recognizes the wide diversity that exists between the paradoxical interventions. Weeks and L'Abate use five general categories of paradoxes which include reframing and relabeling, descriptive and prescriptive paradoxes, restraining directives, cryptic and indirect paradoxes, and insight producing paradoxes (see Chapter II for a detailed definition of each of these categories).

2. Symptom Scheduling- This is a paradoxical technique that involves instructing a client to set aside

some time to practice having the symptom they are experiencing. The therapist may also direct the client to practice having the symptom for a specified period of time.

3. Negative Consequences of Change- This paradoxical technique involves the therapist cautioning the client to consider all of the costs of changing before they actually decide if they want to change or not. The therapist actively advocates that the client stay the same until they thoroughly consider all of the negative aspects of changing.

4. Social influence variables- The social influence variable are defined as the perceived attractiveness, trustworthiness and expertness of the therapist. Attractiveness has been defined as the degree to which the client likes, admires, and would like to emulate the counselor (Schimdt & Strong, 1971). Trustworthiness has been defined as the degree to which the counselor is perceived to have an ulterior motive in their helping behavior (Strong, 1968). Expertness has typically been defined as the degree to which the counselor is perceived to be knowledgeable (Heppner & Dixon, 1981).

5. Attributions- These are the judgments that individuals make concerning the causes of behavior (Kelley, 1967). There are a variety of attributional

categories including internal versus external, stable versus unstable, and global versus specific. Internal versus external refers to whether the cause of the observed behavior is internal or external to the person. Stable versus unstable refers to whether the cause is believed to be maintained over time or only temporary. Global versus specific refers to whether the cause is believed to be pervasive across situations or limited to a single situation.

6. Outcome expectation- This refers to the degree to which a person believes or expects that a certain event will occur. For the purpose of this study, this term refers to the degree to which the subject believes the intervention will be successful or unsuccessful in helping to alleviate the client's difficulty.

7. Expectancy confirmation- This refers to when the subject's belief or expectation eventually occurs. For initially high expectations, success would be a confirmation. However, for initially low expectations failure is a confirmation.

8. Expectancy violation (disconfirmation)- This refers to when the opposite of the expected outcome occurs. For initially high expectations, a failure outcome is a violation. For initially low expectations, success represents a violation.

Organization of the Study

In Chapter II, a review of the related theories and research is presented. This review includes a discussion of the definitions of paradox, the social influence model, attribution theory, and the available literature on outcome expectations. Also presented in this review is a discussion of the research on the paradoxical interventions, with special emphasis on research that integrates the theories mentioned above with these techniques. In Chapter III, the research design is presented along with operational definitions, descriptions of instrumentation, and the data collection procedures. In Chapter IV the statistical results are presented and conclusions and recommendations are presented in Chapter V.

CHAPTER II

REVIEW OF RELATED LITERATURE

In this literature review, a number of theoretical areas and constructs will be presented. First, theory and research concerning paradoxical interventions will be presented. Secondly, the social influence model will be reviewed and related to the paradoxical interventions. This will be followed by a summary of attribution theory, along with an explanation of how this theory may relate to paradoxical interventions. Finally, a review of therapeutic outcome expectations will be presented along with a discussion of how these expectations relate to counseling and paradoxical interventions.

Paradoxical Interventions

Dowd and Milne (1986) state that paradox comes from the Greek word para-doxon, which basically means something unexpected or contrary to logic. One of the most frequently cited examples is the Liar's Paradox. The Liar's Paradox refers to a statement by Epimenides, a Cretan, that "all Cretans are Liars." The contradiction becomes especially apparent when one

tries to determine if Epimendes' statement is true or not. There are a number of other examples of paradox which are often cited in the literature including some of the teachings of Jesus and also one derived from the Barber of Seville. The widespread application of paradox to the psychotherapeutic process, however, is a fairly recent occurrence (Weeks & L'Abate, 1979).

O'Connell (1983) reports the earliest use of paradox as a therapeutic technique may have occurred around 1786. He stated that a physician named Hunter successfully treated a case of impotence by having the patient attempt to prevent himself from having an erection. Weeks and L'Abate (1982) indicate that Alfred Adler is probably the first therapist to actively use paradoxical interventions. For example, Adler suggested a therapist should never engage in a power struggle with a client and instead should go with the resistance presented by the client (Adler, 1956). This strategy is very similar to what would now be termed "positioning." Furthermore, Adler developed a number of other therapeutic interventions which are very similar to several of the modern paradoxical interventions, including relapse prediction, reframing, and a form of symptom prescription (all of which will be explained in detail later in this section).

Historically, the next theorist to use a paradoxical strategy was Dunlap (1928, 1930). Dunlap developed a strategy which involved having the patient practice the symptomatic behavior under certain prescribed conditions with the goal being the eventual alleviation of the symptom. He termed this technique "negative practice" and it is very similar to what some present day authors would call symptom prescription. Raskin and Klein (1976) indicated a number of behavioral researchers have mentioned the effects of flooding and massed practice on decreasing behaviors. Raskin and Klein suggest that massed practice may very well form the basis for the effectiveness of several of the paradoxical interventions, including symptom prescription.

In recent years, a number of different schools of psychotherapy have developed specific paradoxical interventions. Riebel (1984) indicates that paradox is not one approach but actually a group of approaches that have grown out of several different schools of psychotherapy. She has identified eight different approaches to paradoxical psychotherapy including the Interactional group, the Milan group, and the Ackerman Group. Riebel also indicates that numerous paradoxical interventions have been associated with logotherapy,

gestalt therapy, psychoanalysis, and behavioral approaches as well as the work of Milton Erickson.

Definitions of a Paradoxical Intervention

One of the most heated debates in the literature involves the question of what constitutes a paradoxical intervention. Cade (1984) defined paradoxical interventions as techniques in which the therapist appears to encourage the client to get worse rather than get better. Feldman et al (1982) defined these interventions as the therapist encouraging a client to maintain the presenting symptom. Bross (1982) described paradoxical interventions as any time the therapist prescribes dysfunctional behavior with the intent of increasing resistance against the prescription and ultimately reducing the occurrence of the symptom.

The basic problem with all of these definitions is that it is assumed that these interventions are a cohesive group that can be adequately defined with one definition. Actually, these techniques are quite diverse and, as such, a different approach to definition must be taken. Weeks and L'Abate (1982) have attempted to address this problem by operationally defining the paradoxical techniques into categories. To date, this taxonomy represents the most comprehensive approach to defining and categorizing the

paradoxical interventions. Weeks and L'Abate (1982) have included a wide variety of techniques under five general categories: 1) reframing and relabeling paradoxes; 2) descriptive and prescriptive paradoxes; 3) restraining paradoxes; 4) cryptic and indirect paradoxes; 5) insight producing paradoxes.

1) Relabeling and reframing paradoxes. Both reframing and relabeling involve changing the meaning of a particular situation or experience. Reframing changes the meaning by presenting an alternative interpretation that actually fits the parameters of the original experience as well as the original meaning. Relabeling differs from reframing in that it does not necessarily involve changing the frame surrounding the experience but instead involves changing the label given the experience. Weeks and L'Abate (1982) indicate relabeling involves changing a negative label to a more positive one. The basic assumption underlying both reframing and relabeling is that changing the meaning given to an experience leads to a subsequent change in behavior.

2) Descriptive and prescriptive paradoxes. The basic component of this category is the notion of prescribing the symptom. Symptom prescription involves encouraging a client to exaggerate or increase the

problematic symptoms. Weeks and L'Abate (1982) theorize that symptoms are complex behavioral interactions composed of cognitive, affective, behavioral, contextual, relational, attitudinal, and symbolic components. They suggest any one of these components can be used in a symptom prescription. While symptom prescriptions can be presented in a variety of ways with a variety of rationales, the basis of all of the techniques in this category is encouraging the client to increase symptomatic behavior (O'Connell, 1983). Descriptive paradoxes are actually a type of symptom prescription in which the therapist gives a detailed explanation of the symptom, which is followed by a symptom prescription or a restraining paradox.

Weeks and L'Abate (1982) identify one particular subclass of this category that they call "time-related prescriptions" (p. 121). Time-related prescriptions usually involves the client increasing the symptom on a set time schedule. One example of a time-related prescription is symptom scheduling. In symptom scheduling the therapist instructs the client when to practice having the symptom, as well as how long to have it. Symptom scheduling has been used frequently to treat anxiety, fear and depression (Weeks & L'Abate,

1982).

3) Restraining paradoxes. Restraining paradoxes involve either discouraging a client from changing or warning them not to change too quickly. The rationale behind the technique is that it returns the responsibility for change to the client. That is, restraining paradoxes prevent the therapist from getting caught in the self-defeating cycle of trying to convince an ambivalent client to change. Restraining statements, like all of the paradoxical techniques, can be presented in a variety of ways and with a variety of rationales. One example of a restraining technique is "the negative consequences of change" strategy (Weeks & L'Abate, 1982, p.127). In this strategy, the therapist restrains the client from changing by encouraging him or her to consider all of the consequences and costs that will have to be dealt with if change does occur. Weeks and L'Abate (1982) believe that restraining paradoxes are very effective ways of helping the client to deal with their own ambivalence about changing.

In addition to the negative consequences of change strategy, Weeks and L'Abate have identified three additional types of restraining paradoxes: inhibiting and forbidding change, declaring hopelessness, and predicting and prescribing relapses. Inhibiting change

involves telling a client to proceed very slowly;

forbidding change involves directing a client not to risk changing at all; and declaring hopelessness is informing a client that there is very little chance that he or she will be able to change and that in fact the situation is basically hopeless. Prescribing and predicting relapses are self explanatory.

4) Cryptic and indirect paradoxes. These types of paradoxical interventions are based on the therapeutic use of confusion with clients. Weeks and L'Abate (1982) state that these types of techniques "contain vague or ambiguous terms, undefined referents, contradictions, double meanings, and a variety of other linguistics devices which make interpretation difficult" (p.139). The cryptic paradoxes are most commonly used with clients who are excessive intellectualizers or veteran clients who have become very educated about the therapeutic process. The purpose of these interventions is to confuse the client and, thus, preempt their habitual defenses. For example, intellectualizers frequently use a "yes, but" strategy to rationalize a direct intervention by a therapist. A cryptic paradox could then be used to confuse and block this rationalization process.

Cryptic paradoxes frequently contain some form of

embedded suggestion in an effort to communicate important ideas to the client without encountering the client's defenses. Weeks and L'Abate (1982) report one of the most important effects of a cryptic paradox is it requires the client to work very hard to make sense out of the communication. This intense effort often leads to important changes in the perspective of the client.

5) Insight-producing paradoxes. Insight has not traditionally been a goal of most of the proponents of paradoxical psychotherapy. However, Weeks and L'Abate (1982) believe insights are often produced when clients attempt to carry out paradoxical directives. They suggest the most basic form of this type of paradoxical intervention is when a therapist directs a client to do a specific, concrete behavior whenever he or she thinks, feels or experiences a certain thing. An example of this would be for a therapist to tell a client to act out or instigate an argument whenever they feel a certain way. The reader will note the element of symptom prescription which is often present in this type of paradox.

Research on the Paradoxical Interventions

It is beyond the scope of this paper to present an exhaustive review of all related theories and research

on paradoxical interventions. Therefore, only a brief overview concerning the relevant theories and research will be given in this section. The literature concerning how paradoxical interventions work is a maze of complex and confusing constructs and theories, many of which lack parsimony. Dowd and Milne (1986) indicate a variety of theoretical orientations have been used to explain the effects of the paradoxical interventions including communications theory, cybernetic theory, the philosophy of dialecticism, mathematical group theory, and the philosophy of Whitehead and Russell. Dell (1986) reports the term "paradox" has been used so loosely that it simply represents a group of techniques which cannot be explained by current counseling theories. He argues that "what is needed is a theory that will integrate paradoxes so well with our larger superstructure of theory that these interventions will no longer appear to be even vaguely paradoxical" (Dell, 1986, p. 224).

The early results concerning the effectiveness of the paradoxical interventions were based primarily on case reports and anecdotal evidence. Dowd and Milne (1986) reviewed the results of this case study literature and found the majority of these studies reporting positive results. However, they criticized

the methodological limitations of these studies, including lack of control groups and a predominant focus on a limited number of problems.

In recent years, there has been more and more attempts at experimentally validating these techniques. Hill (1985) conducted a meta-analysis on the use of paradoxical techniques and concluded paradoxical strategies were significantly more effective than nonparadoxical interventions, and no treatment and placebo control conditions. He stated that there was no evidence in the available literature of any significant adverse side effects associated with the use of paradoxical techniques. The most significant limitation of Hill's analysis was that it was based on only 15 outcome studies. Conversely, Dowd and Milne (1986) conducted a review of the outcome studies on paradoxical interventions which included the results of 16 experimental studies as well as 16 case studies. These authors concluded these interventions are equally as effective as other approaches to psychotherapy.

However, two studies have indicated that the paradoxical interventions might possibly cause change to occur by a slightly different process and at a slightly different rate than other approaches. Lopez and Wambach (1982) compared paradoxical and

self-control interventions for the treatment of procrastination. These authors concluded there was a more rapid rate of change for the paradoxical treatment then the self-control group. However, these authors found that while the subjects in the paradoxical group did not view their procrastination as significantly more controllable after treatment, the self-control group did.

In a similar study, Mavissaklian, Michaelson, Greenwald, Kornblith, and Greenwald (1983) compared the use of paradoxical directives with self-statement training in treating agoraphobics. While both treatments were reported effective, the paradoxical group was reported to experience more rapid alleviation of anxiety than the self-statement training group. However, by the sixth month follow-up, the self-statement group had achieved the same level of alleviation as the paradoxical group. The differences in the subjects' view of the controllability of the problem and the differential progress supports the notion that perhaps paradoxical interventions cause clients to change by a slightly different process than do other approaches.

Another area of research on paradoxical interventions has been conducted within the conceptual

framework of reactance theory. Brehm (1966) states that all individuals will resist influence if they perceive that their freedom to act is threatened. She coined the term reactance to refer to this resistance. Brehm also indicated that reactance was closely tied to the number of free behaviors involved, the relative importance of the affected behavior and the intensity of the threat.

Rohrbaugh, Tennen, Press and White (1981) have attempted to apply reactance theory to the use of paradoxical interventions. These authors view reactance as the basis for the effectiveness of the paradoxical interventions. They believe that reactance is generated when a client is given a paradoxical directive, perceives their freedom to act is threatened, and rebels against the intervention. By rebelling against the directive the client consequently moves toward the desired therapeutic outcome.

Hughes and Dowd (1985) attempted to study the reactance hypothesis with female college students who were having difficulties with procrastination. Based on reactance theory it was predicted that subjects who where high in reactance would respond better to a paradoxical restraining directive then subjects low in reactance. Results of the study indicated the

restraining directive was as effective as the nonparadoxical directive in decreasing procrastination regardless of the reactance level of the client. Thus Hughes and Dowd were unable to support the reactance hypothesis. To date this has been the only research directed toward assessing this hypothesis.

Social Influence Model of Counseling

In a landmark paper, Strong (1968) characterized the counseling process as an interpersonal influence process. Based on this theory, he posited a two-stage model of counseling. In the first stage, counselors enhance their perceived attractiveness, expertness, and trustworthiness. In the second stage, counselors use their influence to precipitate change in the clients. Since publication of this theory, numerous studies have investigated the effects that these three social influence variables have on the counseling process (see Corrigan, Dell, Lewis, & Schmidt, 1980 for review).

Attractiveness

Schmidt and Strong (1971) have defined attractiveness as being heavily related to the degree to which the client likes, admires and would like to emulate the counselor. Strong (1968) felt that attractiveness was heavily dependent on the degree to

which the counselor successfully demonstrates unconditional positive regard for the client. Heppner and Dixon (1981), in a summary of the literature, indicated perceived attractiveness is influenced by nonverbal attending behavior, verbal behavior (tone of voice), as well as counselor self-disclosure. Corrigan et al. (1980) in an exhaustive review of the literature concluded the "impact of counselor physical attractiveness appears to be limited to a debilitative effect in unattractive conditions" (p. 421). These authors further elaborated that this debilitative effect only occurs under extreme conditions of unattractiveness.

Expertness

Heppner and Dixon (1981) indicated perceived expertness has been defined as the degree to which the client believes that the counselor is knowledgeable enough to help. The perceived expertness of the therapist can be influenced by a number of factors which can be grouped into three general categories --objective evidence of training, counselor behaviors, and evidence of professional competence. The existing research indicates a combination of cues from all three of these categories leads to the greatest perception of expertness. Corrigan et al. (1980) concluded that,

generally, behavioral information which is consistent with the counselor's reputation and the client's expectations has the most significant effect on the perceived expertness. They did state, however, the research in this area should be interpreted with caution since almost all of the studies in this area have examined the clients' initial impressions of the counselor.

Trustworthiness

Trustworthiness has been defined by Strong (1968) as being highly dependent on the client's perceptions of the counselor's motivations. If a counselor is perceived as having no ulterior motive for helping clients, then the counselor is viewed as trustworthy. Heppner and Dixon (1981) stated that there are a number of factors that influence the perceived trustworthiness of the counselor, including responsive non-verbal behavior, interpretations, limited self-disclosure and observance of confidentiality. Corrigan et al. (1980) warned that the actual number of studies examining trustworthiness is very limited and therefore, what is known about this construct can only be seen as tentative. Corrigan et al. (1980) indicated there is some developing evidence that counselors in general are seen as trustworthy. They suggest this is due

primarily to the expectations that society in general has about the role of the counselor.

Social Influence and Therapeutic Outcome

Corrigan et al. (1980) have summarized the outcome literature concerning the social influence variables and have made three specific conclusions. First, the social influence variables have been shown to be significantly and positively correlated with attitude change on the part of the clients. Second, these social influence variables have been demonstrated to be less significantly related to actual behavior change. In addition, the relationship between behavior change and the social influence variables is further weakened if the desired behavior change requires a greater degree of commitment. Finally, they concluded there is most likely a general societal expectation concerning the role of the counselor. This societal expectation states that a counselor is believed to be expert, trustworthy, and attractive unless she or he does something to violate these expectations. Corrigan et al. suggested there is a threshold concerning the social influence variables. Below the threshold, the counselor is generally expected to be expert, attractive, and trustworthy, while above the threshold the counselor is expected to be the opposite.

Social Influence and Paradox

Only a few studies have examined the effects of paradoxical interventions on the social influence variables. Perrin and Dowd (in Press) studied the effects of symptom prescription and counselor self-disclosure on the social influence variables. The authors hypothesized that symptom prescription would lead to a decrease in the perceived social influence of the counselor and that moderate amounts of self-disclosure would compensate for this phenomenon. These authors found that the symptom prescription did not significantly damage the social influence variables and that self-disclosure did not raise the perceived social influence of the therapist.

Conoley and Beard (1984) compared the effects of paradoxical and nondirective interventions on the core dimensions (empathy, warmth and genuineness) and social influence dimensions. These authors came to several conclusions. First, the paradoxical as well as the nondirective interventions could be presented in such a way as to enhance the core dimensions. Secondly, nondirective interventions presented in a way that enhanced the core dimensions were rated as consistently higher than paradoxical directives presented in a similar way. Thirdly, these authors found no

differences between either of the types of intervention on the attractiveness or the trustworthiness variables. Finally, Conoley and Beard found the paradoxical directives were rated significantly more expert than nondirective interventions. They attributed this difference to the fact that directives are typically rated higher on the social influence variables then are nondirective interventions. Conoley and Beard felt that based on this, paradoxical interventions did not severely damage the therapeutic relationship.

McMillan and Johnson (1988) compared the effects of an unframed symptom prescription, a framed symptom prescription and a behavioral intervention on the social influence variables. Results indicated that the counselor presenting a behavioral intervention was viewed as significantly more expert, attractive and trustworthy than the same counselor presenting two paradoxical interventions. Interestingly, these authors also directly manipulated the perceived expertness of the therapist across all of the interventions and the subjects still viewed the behavioral therapist as more expert, trustworthy and attractive. However, McMillan and Johnson speculated that the paradoxical interventions were not perceived as being so damaging to the perceived expertness,

trustworthiness, and attractiveness that they jeopardized the therapeutic relationship. These authors hypothesized that the paradoxical interventions did not cross the social influence threshold that Corrigan et al. (1980) mention.

In summary, the available research indicates that like other types of directives, paradoxical directives are perceived as more expert than nondirective interventions. However, therapist using paradoxical directives are typically viewed as less expert than other therapist using other types of directives. Furthermore, the use of paradoxical interventions leads to lower client ratings of attractiveness and trustworthiness than other types of directives do, at least initially. However, it should be noted that because the research is extremely limited and the focus has been on only a few of the paradoxical interventions, definitive conclusions can not be drawn at this time.

Attribution Theory

Kelley (1967) has defined attribution theory as the "process by which an individual interprets events as being caused by particular parts of the relatively stable environment" (p. 193). More specifically, attribution theory attempts to explain the manner in

which individuals draw causal inferences for observed behavior (Jones, Kanhouse, Kelley, Nisbett, Valins, & Weiner, 1971). The basic philosophical premise of attribution theory is individuals are motivated to understand the causal connections and patterns within the environment. Weiner (1972) explains it by stating individuals "want to know why an event has occurred --to what source, motive, or state it may be ascribed" (p.312).

Assumptions and Tenets of Attribution Theory

Jones et al. (1972) identify three major assumptions that underlie attribution theory. The first assumption is that individuals attempt to assess causality of their own behavior as well as the behavior of others. Related to this, the individual actively seeks additional information as needed in order to determine causality. The second assumption is that people determine causality or make attributions systematically and in a predictable fashion. The third assumption is that the meaning given to a certain event or pattern of behavior is based on the individual's causal attributions concerning that event.

There are several key concepts in attribution theory including the principle of covariation, the method of difference, and multiple plausibility.

Kelley (1972) defines the principle of covariation as being when individuals make attributions based on events which consistently occur together over time. Basically a causal connection is made when the hypothetical cause is consistently temporally related to the observed effect. Kelly further elaborated that the assessment of covariation is heavily dependent on the prior causal attributions that the person makes concerning the phenomenon. These initial causal assumptions are generated in an information acquisition phase in which the individual observes patterns and develops and tests hypotheses.

The principle of covariation forms the basis for another key concept in attribution theory, the method of difference. In essence, the method of difference is actually an extension of the principle of covariation to not just temporal relatedness but also to covariation across persons, things, and modalities (Kelley, 1967). This extension is very important for two specific reasons. First, temporal covariation establishes the connection between "condition and reaction" (Strong, 1970, p. 389). Secondly, covariation across the other categories establishes whether or not the cause and effect relationship is due to the person or the environment. For example, if in

widely varying social situations, an individual recognizes a similar cause and effect pattern, then they would most likely attribute the pattern to some aspect of themselves rather than to the environment. This internal attribution would be arrived at based on the inconsistency in the environmental conditions that were present when the effect was present.

Another key concept in attribution theory is multiple plausibility. Multiple plausibility refers to the degree to which rival hypotheses are present in any causal pattern. Kelly (1972) says that "the role of a given cause in producing a given effect is discounted if other plausible causes are present" (p.8). In a classic study on plausibility, Thibaut and Riecken (1955) examined the effect of differing levels of social status on attributional statements. Subjects were placed in an experimental situation in which they had to ask for assistance from either an individual with higher or lower status. After receiving the requested assistance, subjects were asked to make attributions concerning why the individuals provided help.

The results of this study revealed a significantly larger portion of the higher status individuals being given internal attributions then the lower status

individuals. The researchers concluded this was because there was no rival plausible hypothesis present for the higher status individuals. In effect, the subjects believed the higher status individual rendered assistance because she or he so desired. On the other hand, subjects believed that due to their perceived lack of power and the external pressure applied, lower status individuals gave assistance because they felt obligated. The presence of a single rival hypothesis significantly altered the attributional pattern. Similarly, Kelley (1972) concluded that when plausible rival hypotheses are present, subjects will typically attribute causality externally.

Attributional Patterns of Observers Versus Actors

Over the years, there has been a great deal of controversy in the literature over whether or not observers make different attributions concerning events than do the actual participants. Bem (1965, 1967) has argued there is no difference between the attributions concerning an event between observers and actors. His perspective is commonly referred to as the convergent hypothesis.

In recent years the convergent hypothesis has been disputed by a number of researchers. Jones and Nisbett (1972) have articulated a divergent view of causality

that basically states actors and participants have different views of causality. The divergent hypothesis posits that actors tend to attribute things more to situational factors, while observers will typically attribute causality to some internal aspect of the actor.

The divergent hypothesis has direct bearing on attribution studies that use an analogue design, since in all analogue designs, the subjects are observers rather than actors. It should be noted that in analogue studies, the data generated is the observer's view of the attribution process and not the actors. The divergent hypothesis raises some interesting questions concerning whether or not the attributional process of actual clients can be simulated and studied in an analogue design.

Galper (1976), in an effort to deal with the problem that the divergent hypothesis presents to analogue studies, examined whether or not observers, who were asked to empathize with the actor, made more situational attributions then observers who were not asked to empathize. She found significantly more situational attributions being made by observers who were asked to empathize, then those who were asked to picture the events clearly. This research suggests

observers can more closely approximate actors if asked to take the role of the actor.

Attribution and Counseling

Very little research has been done to determine the effects of client attributional pattern within the counseling process. Strong (1970), in a review of the available research in the area on attribution and counseling, states "what evidence we have suggests that self-attributed change is more lasting than impersonally attributed change" (p. 396). He presents the point of view that traditional counselors have attempted to create self-attributions by communicating to clients the need to take personal responsibility for change and by presenting interventions in the form of suggestions rather than commands.

Attribution Theory and Paradox

A few authors have begun to suggest that the paradoxical techniques may actually be a method of stimulating positive self- attributions. O'Connell (1983) stated the paradoxical technique known as symptom prescription shifts the locus of control for the symptom to the patient. He indicated that when the symptom is prescribed, the problem is changed from one that controls the client, to one that is controlled by the client, suggesting an attributional change from

external to self.

Beck and Strong (1982) examined the effects of negative and positive connotation of behavior on depression and found both stimulated change in subjects. Those subjects who received the positive connotations, however, maintained the therapeutic change while those subjects in the negative connotation condition did not maintain change at the same level. These researchers interpreted the findings as being due to differences in attributional patterns. They based their argument on the principle of multiple plausibility. Beck and Strong believed subjects in the positive condition had no plausible rival hypothesis to attribute their change to and as a result, they made internal attributions. On the other hand, subjects in the negative condition had a rival plausible hypothesis available to them (the negative attributions of the counselor), and thus they developed an external attribution pattern. One problem with Beck and Strong's study is that since attributions were never measured, their conclusions about the attributional patterns can only be seen as speculation.

Feldman et al. (1982) have conducted the only study to date comparing attributional patterns of paradoxical and nonparadoxical interventions. In their study, the

authors compared the paradoxical techniques of reframing and symptom scheduling with a more traditional confrontational style of counseling. The subjects were depressed college students and the dependent variable was the degree to which the different interventions affected both the social influence variables and the attributional process of the client. Feldman et al. (1982) hypothesized the paradoxical methods would be associated with greater self-attributions on the part of the subjects, while the nonparadoxical method would be associated with more external attributions. This hypothesis was again based on the principle of multiple plausible hypotheses. These hypotheses were not supported by the data.

In this study, however, Feldman et al. (1982) did identify two very different attributional patterns associated with the nonparadoxical and the paradoxical treatment methods. For the paradoxical interventions, any increase or decrease in internal attributions were associated with an increase or decrease in depressive symptoms. However, for the nonparadoxical interventions, internal attributions only increased as the change in depressive symptoms was maintained over an extended period of time following termination of counseling. These researchers believed the results

were due to the fact that the subjects knew they were going to have to give a follow up report and thus, made extra effort to maintain any therapeutic gains. Additional research is greatly needed in order to determine the effects of the paradoxical and nonparadoxical interventions on the attributional process.

Expectations

Bandura (1977) has provided the most comprehensive theoretical base for understanding how expectations relate to behavior. He has differentiated between two specific types of expectations, efficacy and outcome expectations. Bandura (1977) defines efficacy expectations as " the conviction that one can successfully execute the behavior required to produce the outcome" (p. 79). Efficacy expectations are related to the individual's belief concerning whether or not they have the ability to accomplish a task. Bandura defined outcome expectations as the individual's belief concerning whether or not a given behavior will lead to a specific outcome. According to Bandura, both outcome and efficacy expectation affect behavior. He hypothesized that efficacy expectations act as a sort of cognitive moderating variable between outcome expectation and actual behavior. For example,

a person may believe that certain behavior will lead to a certain outcome (outcome expectation), but they must also believe that they are capable of performing the required behavior (efficacy expectation) before they will actually attempt it.

Bandura (1977) suggests that efficacy expectations are significantly related to the effort an individual expends in order to accomplish a task. He further suggested that the higher the efficacy expectations that an individual has, the more effort they will put forth in attempting a given behavior. He argues that increased effort usually leads to mastery, which in turn reinforces the individual's efficacy expectations. Conversely, if an individual has low efficacy expectations, they will usually not expend a great deal of effort toward any given behavior. This failure to expend adequate effort often reinforces the low efficacy expectations.

In extending Bandura's ideas to the counseling process, efficacy expectations and outcome expectations are critical on at least two levels. On the first level, the client must believe that counseling has a good chance of helping them (outcome expectation) before initiating it. On the second level, the client must believe that both he or she and the counselor are

capable of successfully performing the required behavior necessary to resolve the problem. Clients will greatly decrease their efforts if they expect that they or the counselor are not capable of performing the necessary behavior to solve the problem. A client's doubts concerning their own efficacy can effectively be dealt with in therapy. However, doubts concerning the therapist's efficacy are not as easily dealt with and can seriously jeopardize the counseling relationship.

In support of these notions, Tinsley, Workman, and Kass (1980) have argued that both the client's and the counselor's expectations are significant causal factors in the successfulness of therapy. Apfelbaum (1958) suggested that the client's expectation can significantly increase or decrease the likelihood of success in therapy. It can be concluded that the expectations of the client concerning the potential effectiveness of therapy is an extremely important variable that has a significant influence on the successfulness of therapy.

Summary of the Research on Expectations

Tinsley, Brown, Aubin, and Lucek (1984) indicate that the information concerning the effects of expectations on the counseling process is extremely limited. In a summary of the existing research on

expectations about counseling, Tinsley et al. (1984) concluded that clients expect counselors to be warm, expert, confident, problem centered, personable, at ease and trustworthy. In short, clients expect therapists to be relatively attractive, expert and trustworthy. Tinsley et al. (1984) also indicated that counseling outcomes are strongly affected by the degree to which clients' expectations about the counselor and the counseling process are met.

Expectations and Attributions

There has been a great deal of research on the relationship of expectancy confirmation/disconfirmation and the attributional process in the social psychological literature (Feather, 1969; Feather & Simon, 1971a, 1971b). House (1976) summarized the results of these investigations and concluded that it has been demonstrated consistently that unexpected outcomes are attributed to external factors such as luck, while expected outcomes are most often attributed to internal causality such as effort and ability. Schoeneman et al. (1986) have criticized the research concerning expectancy violations on the basis that the studies used simple anagram tasks which do not generalize well to the real world. Schoeneman et al. studied the attributional process as it relates to more

complex social and academic situations and found significant differences between their results and the results of the research which used the anagram format. Counseling represents a very complex form of human interaction and little is known about whether or not the expectancy violation research generalizes to it.

Expectation, Attribution and Paradox

In a sense, the studies to date on the paradoxical interventions have been too simplistic. These studies have typically relied solely on the principle of multiple plausibility as the basis for the hypotheses which were studied. One critical factor which these studies have ignored is the effect of the client's expectancy violations on the attributional process. In essence, the principle of multiple plausibility and the research on expectancy confirmation and disconfirmation actually leads to contradictory hypotheses concerning the effect of the paradoxical interventions on the attributional process. Multiple plausibility leads to the prediction that paradoxical interventions should increase internal attributions of clients; while the research on outcome confirmation indicates that unexpected results lead to external attributions. Since it is believed that the paradoxical interventions actually lead to expectancy violations, then it follows

that any success that clients might have when presented with a paradoxical intervention would lead to an external attribution. This theoretical conflict can only be resolved by further research in the areas of outcome expectancy, expectancy confirmation/ disconfirmation, and the attributional process with respect to the paradoxical and nonparadoxical interventions.

Summary

One of the major criticisms of the current literature on the paradoxical interventions concerns how these interventions relate to the larger theoretical superstructure. A number of complex theories have been developed which rely on a variety of equally complex constructs. Most of these theories have lacked parsimony and have not utilized what is already known about the psychotherapeutic process.

In addition to this criticism, there are also a number of very pressing questions which remain unanswered. One of the most pressing questions concerns how these techniques affect the therapeutic relationship. The current research tentatively indicates paradoxical directives, like other forms of directives, are typically perceived as more expert than nondirective interventions. However, when

paradoxical interventions are compared to other types of directives such as behavioral interventions, they typically are seen as less expert. One problem with all of the studies to date is they have only focused on a few of the paradoxical interventions such as reframing and symptom prescription. More information is needed concerning the effects of the other paradoxical interventions on the social influence variables.

Another pressing question concerns how paradoxical interventions compare with other types of interventions in terms of overall effectiveness. The general findings across comparative studies have indicated paradoxical interventions are approximately as effective as other approaches to therapy. However, several studies have indicated paradoxical interventions elicit a slightly different pattern and rate of change.

Attribution theory has been used to explain some of the differences in the change process. While advocates of the paradoxical approaches have argued the paradoxical interventions actually encourage internal attributions, the research to date has yielded mixed results for this notion. In general, the research on the attributional process, as it relates to the paradoxical interventions, has been somewhat simplistic

and has not addressed a number of critical areas. One neglected area has been the degree to which paradoxical interventions create expectancy violations. Related to this, it is unknown how expectancy violations might effect the attributional process and ultimately the therapeutic process.

CHAPTER III

METHODOLOGY

Subjects

The sample consisted of 83 female and 82 male undergraduate students at a large midwestern University who participated in the experiment for partial course credit. The subjects' ages ranged from 18 to 47 years, with a mean of 22.43. Subjects' year in college was as follows: Freshmen, N=2, 1%; Sophomore, N=41, 25%; Junior, N=62, 38%; and Senior, N=60, 36%. The racial composition of the subjects was primarily Caucasian, with 11 Native Americans, 1 Asian American, 5 Black Americans, and 2 Hispanic Americans.

Twenty-nine of the subjects reported receiving professional counseling services in their lives. The number of counseling sessions that these subjects had attended ranged from 1 to 25. Of those with prior counseling experience, 10 attended for personal problems, four for career problems, six for marriage and family difficulties, four for substance abuse problems, and five for academic related issues.

Prior to involvement, subjects were given a general

description of the study and informed of their rights as human subjects. This informed consent form included information indicating that participation was voluntary, that it could be discontinued at any time without recourse, and that all responses would be kept anonymous and confidential (see Appendix A). At no time were subjects asked to put names on any of the materials nor were names kept on any sort of record for coding purposes. Individuals who were interested in obtaining more information about the study, were asked to provide names and addresses on a separate sheet of paper. A written synopsis of the final results was mailed to them after completion of the study.

Instrumentation

There were three instruments and/or procedures used to measure the dependent variables. The Counselor Rating Form (CRF-S) was used to measure the subjects perceptions about the counselor's attractiveness and expertness; the Counseling Expectation Inventory (CEI; Turner & Schwartzbach, 1983) was used to measure subjects' expectations about counseling; and the Content Analysis of Verbal Explanations (CAVE Technique; Peterson & Seligman, 1984) measured causal attributions subjects made concerning therapeutic outcomes.

Counselor Rating Form --Short Version

The Counselor Rating Form-Short Version (CRF-S; see Appendix C) was developed by Corrigan and Schmidt (1983) based on the original Counselor Rating Form (CRF; Barak & Lacrosse, 1975). The original CRF consists of 36 items assessing the three social influence variables of trustworthiness, expertness, and attractiveness with 12 items per scale (each scale represents one of the three variables). In developing the CRF-S, Corrigan and Schmidt conducted a factor analysis on data from 288 subjects. Based on these results, the four items for each scale with the highest factor loadings were incorporated into the CRF-S, yielding a total of 12 items.

However, recent factor analytic studies have not consistently supported the original three factor organization of the CRF-S (Corrigan & Schmidt, 1983; Johnson & Prentice, 1985; Tryon, 1987). The results of two of these studies, Johnson and Prentice (1985) and Tryon (1987), found the instrument has two factors rather than three, with the trustworthiness factor not holding up as an independent factor. Tryon advocates for a two scale configuration which includes an expertness and attractiveness factor, with the items from the trustworthiness factor being equally divided

between these two scales. This two scale configuration was used in this study.

Each of the twelve items has a seven-point Likert scale anchored on one end with the descriptor "not very" and on the other end with the descriptor "very." The revised Expertness scale consists of the items experienced, honest, expert, reliable, prepared, and skillful. The revised attractiveness scale consisted of the items friendly, likeable, socialable, sincere, warm, and trustworthy. Scores for Expertness and Attractiveness are obtained by summing the reponses to all of the relevant items, leading to a score range for each scale of between six and 42.

In terms of predictive validity of the original CRF, Lacrosse (1980) reported correlations ranging between .37-.62 when the instrument was compared with counseling outcomes as measured by a Goal Attainment Scaling procedure. Lacrosse also reported concurrent validity correlations for the CRF-Long as ranging from .47 to .62. Barak and Dell (1977) reported concurrent validity for the CRF-Long ranged from .23 to .67.

Epperson and Pecnik (1985) compared the CRF-S with the CRF-Long and reported coefficient alpha correlations of .76-.87 across all three of the scales. Corrigan and Schmidt (1983) report that the CRF-S has

mean split-half reliabilities of .90 for expertness, .91 for attractiveness, and .87 for trustworthiness.

Counseling Expectation Inventory

The CEI (see Appendix D) was developed by Schwartzbach and described in Turner and Schwartzbach (1983). The CEI is a 14-item scale that measures the expectations that subjects have for the counseling process. Completing the scale is a two part process. In the first part, subjects rate each of the items according to the probability that the outcome can be achieved by this counselor with this client. Examples of the items include, "Counseling can help me to become more self acceptant" and "Counseling can help me get rid of disturbing behaviors." The rating for each item is based on a 1 to 10 scale with one being "not at all likely" and 10 being "completely likely."

In the second part, respondents are asked to rate the importance of each outcome on a 1 to 7 point scale with 1 being "extremely unimportant" and 7 being "extremely important." A total expectation score is then generated by multiplying the probability rating by the importance ratings and then summing these products across all items, with total scores ranging from 14 to 980. A low score indicates that the subject believes the counselor will have difficulty in assisting the

client; and a high score indicates that the subject believes that the counselor will most likely be able to help the client.

Turner and Schwartzbach (1983) established content validity by generating a large initial item pool from three separate sources. These sources were experts in the field, experienced college counselors and clients. They then randomly selected a smaller pool of items and administered them to approximately 300 graduate students. This data was then factored analyzed and the items that had factor loadings greater than .50 were included in the instrument.

Turner and Schwartzbach (1983) report internal consistencies reliability for the CEI as ranging between .88 to .93 (coefficient alpha) and construct validity of .36 for convergent and .48 for divergent validity. Currently no other psychometric data is available for the CEI. For the purposes of this study the CEI will be modified slightly in order to assist the subjects in more closely approximating the role and responses of an actual client. These modifications are primarily in the instructions for the CEI and none of the actual items were altered in any fashion. This modification differed from the original instructions only in that it asked the subjects to respond to the

instrument as if they were the client on the videotape.

Content Analysis of Verbatim Explanations

The Content Analysis of Verbatim Explanations technique (CAVE; Peterson & Seligman, 1984) is a method of analyzing explanatory statements made by subjects in response to open-ended questions. More specifically, the CAVE technique is designed to identify and rate causal attributions based on Seligman's attributional style hypothesis (Peterson and Seligman, 1984). style hypothesis. This theory posits attributions are made on three dimensions: internality, globality, and stability.

The CAVE technique basically has three general parts. In the first part, the verbatim statements made by the subject are reviewed and causal explanations are identified. Following this, these causal statements are separated from the other verbatim material presented by the individual and placed on note cards. One causal explanation is written on one note card. Finally, the cards are presented to independent judges, who rate the statements on a series of three seven-point Likert-type scales. The three Likert scales assess the attribution categories of internality, stability, and globality.

Peterson and Seligman (1984) report single event

consistency as estimated by Cronbach's coefficient alpha as being .89 for internality, .94 for stability, .90 for globality. In a similar study, Peterson and Seligman (1984) reported single event consistency as estimated by coefficient alpha as being .90 for internality, .76 for globality and .81 for stability. In a study that looked at explanatory consistency across two different events, Peterson and Seligman reported correlations of .25 ($p.<.05$) for internality, .49 ($p.< .001$) for stability, .33 ($p.< .01$) for globality and .41 ($p.< .001$) for composite. These authors indicate that these correlations would have been much higher if more than two events were used. Using the Spearman-Brown formula, they estimated that the correlations across 10 events would have been .77 for internality, .91 for stability, .83 for globality, and .87 for the composite.

Peterson and Seligman (1984) also report evidence supporting the concurrent validity for the CAVE technique. In this study, college students were asked to write about the two worst events that they had experienced in the previous year. The CAVE technique was used to analyze their written responses according to Seligman's learned helplessness hypothesis of depression. In addition to the CAVE, the subjects were

given the Attributional Style Questionnaire which can also be used to predict depression via the learned helpless model (ASQ; Seligman, Abramson, Semmel, & von Baeyer, 1979). Seligman and Peterson report correlations between the ASQ and the CAVE technique as being .41 ($p.<.001$) for internality; .19 ($p>.05$) for stability; .23 ($p. <.10$) for globality; and .30 ($p.<.01$) for composite. It should be noted that this study was done with an extremely small sample size.

Peterson and Seligman also reported on another study wherein the ASQ was compared with the CAVE technique to predict depression among an actual clinical population. In this study they found a composite correlation of .38 ($p.< .02$) between the ASQ and the CAVE technique. In summary, Peterson and Seligman indicated that the CAVE technique has been shown consistently to be both reliable and valid. However, while reliability appears to be adequate the validity correlations are somewhat low and this is one limitation of this procedure.

Peterson and Seligman (1984) have studied different methods for training judges and have concluded that the CAVE technique can be easily learned, even by individuals who do not have an extensive background in psychology. They found there was no significant

difference in reliability estimates between judges that received extensive training in the use of the technique and those which received minimal training.

The judges for the current study were three advanced doctoral students in counseling psychology. For the purposes of this study, the judges were trained according to the procedure recommended by Peterson and Seligman (1984). Basically, this procedure involved familiarizing the judges with the attributional categories and the Likert scales by having them fill out the ASQ. Next, the judges were presented with a series of 10 causal statements to rate and asked to practice making ratings on these causal statements. After the judges made their ratings, there was a brief comparison and feedback period. This feedback period was followed by practice with another series of 10 attribution statements. Judges continued to practice using the attribution rating system until they reached a criterion level of .90 as measured by Winer's procedure (1971).

After this training, judges were asked to make ratings on the subjects' causal attribution statements across two categories, internality and counselor-related change. Internality was rated on a 7 point Likert-type scale. The internality scale is

anchored on both ends, with 1 being "caused by something in the situation" and 7 being "caused by something characteristic to the person." Gloability and stability were not included because it was deemed that neither was particularly relevant to this study. Winer's (1971) technique for estimating reliability through use of the ANOVA procedure was computed on these evaluations, to insure an adequate level of reliability across all judges.

Peterson and Seligman indicate that additional attribution categories can be added to the basic technique without compromising the reliability or validity of the procedure. They encourage adding additional categories when this assists the researcher in understanding the specific phenomenon under investigation. For this purpose the counselor-related change category was added. The counselor related change category was also a 7-point Likert-type scale, with 7 being "cause due to the counselor" and 1 being "cause related to some other situational factor." Thus, each subject had a total of two scores for the CAVE technique: internality and counselor-related change.

Design

The study was an analogue format which utilized a

randomized-control group posttest only design. There were four independent variables. These independent variables were presented in a multi-stage process in order to adequately assess the effect of expectations on the attribution process. Figure 1 gives an overview of the research procedures utilized in the current study. The first independent variable, intervention, consisted of exposing the subjects to one of four videotaped counseling interventions (two paradoxical interventions, one relaxation training and one summary/control group). For each of these interventions the subjects viewed a brief interview of approximately 10 minutes in length followed by presentation of the intervention, which lasted approximately three minutes (see Appendix E for script of the inital tape).

The two paradoxical interventions were symptom scheduling and the negative consequences of change (Appendix F). As described in Chapter II, symptom scheduling consists of encouraging the client to practice having the symptom at a specified time and also for a specified length of time. Negative consequences of change involves the therapist cautioning the client against changing and helping them

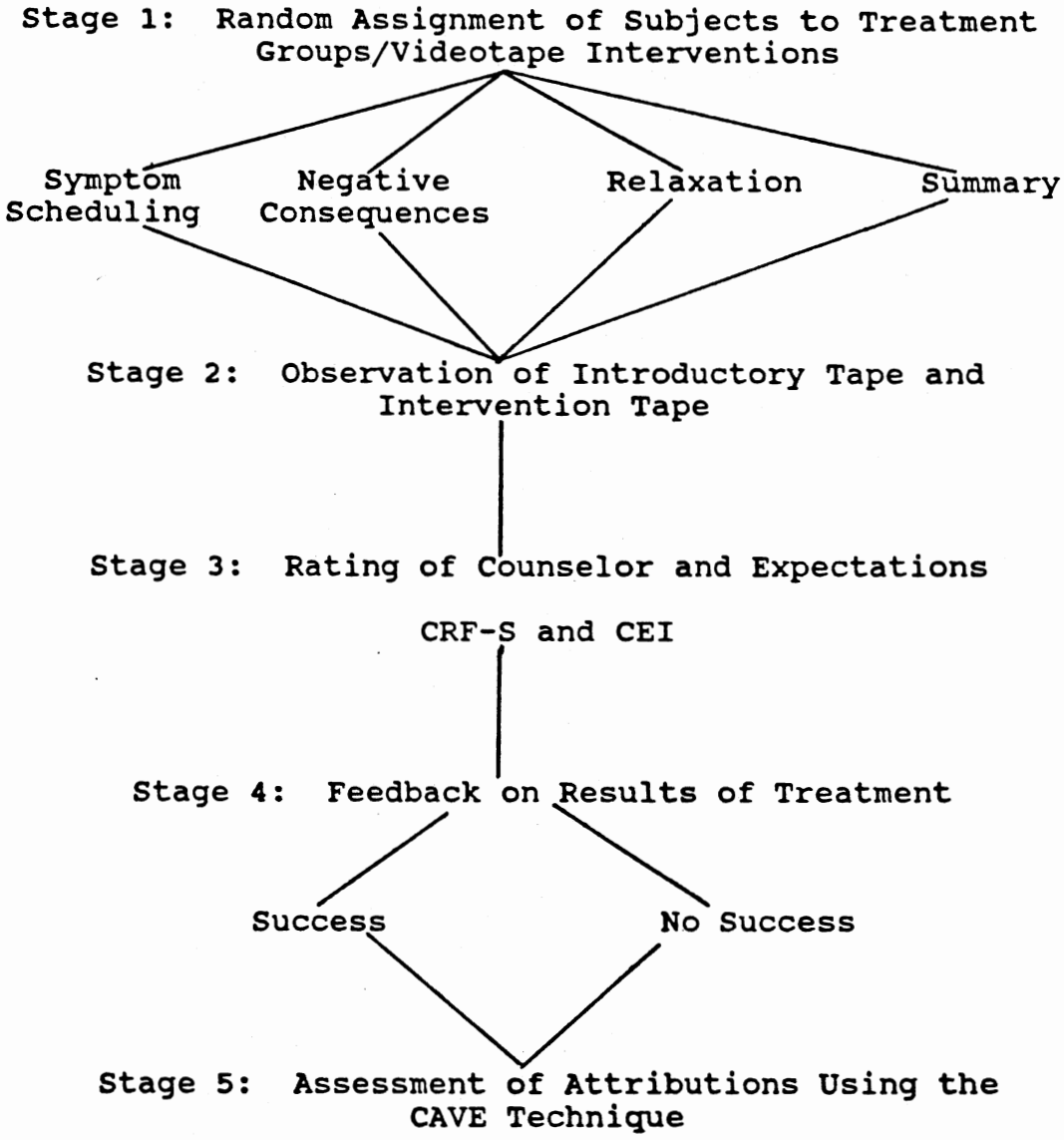

Figure 1. Flowchart of the Multi-stage Research Process Utilized in this Study

to develop a list of all of the negative things which would occur if they chose to give up the symptom. The relaxation condition consists of a counselor describing a relaxation training procedure (see Appendix F). In the summary intervention subjects were exposed to a counselor presenting a closing summary of the session (see Appendix F).

The second independent variable, outcome, consisted of providing subjects with information obtained at a hypothetical follow-up contact eight months after the counseling session (see Appendices H and I for follow-up reports). Subjects were given information similar to a contact note which indicated whether or not the client had improved at the time of follow-up. The third independent variable consisted of subject gender.

The final independent variable was expectation. This variable was actually a conversion of the Counseling Expectation Inventory from a dependent to an independent variable. This conversion was accomplished by calculating a median split for each intervention on the CEI. Those subjects that fell above the median were grouped into a high expectation classification and those that fell below were given a low expectation classification. The conversion of the CEI from an

dependent variable to an independent variable is directly related to the multi-stage process mentioned earlier. Since this study focused on expectations and eventual outcome, it was necessary to find a way to measure expectations before subjects had any knowledge of what the eventual outcome was. Otherwise the data on expectations would have been biased by the subjects knowledge of the outcome.

In order to avoid this bias, the independent variables were presented in two stages. In the first stage, the subjects were presented with one of the four interventions, which was followed by measurement of their perception of the social influence variables (CRF-S) and their expectations for the counseling process (CEI). In the second stage the subjects were classified according to their expectations (high or low) using the median split procedure. Then they were given information about the therapeutic outcome, which was followed by their response to an open-ended attribution question.

Dependent Variables

There were five dependent variables in this study. The first two dependent variable were the social influence variables of attractiveness and expertness, as measured by the CRF-S. The third dependent variable

was the subjects' expectation of the counseling outcome, as measured by the CEI. The other two dependent variables consisted of the subjects attributions as provided by the internality and counselor-related ratings yielded by the CAVE technique (see Appendix G for the open-ended question).

Procedure

Subjects were recruited from several undergraduate classes in the College of Education at Oklahoma State University. A graduate assistant was given time in each participating class to describe the study and ask for volunteers. Volunteers were given credit for participation in the study. However, it was made clear that there would be no penalty for nonparticipation. Volunteers were asked to sign up for a particular time slot when the research would be conducted. After recruitment, subjects were randomly assigned to one of eight possible treatment conditions (see Figure 2). Data was collected from subjects in groups of four to six at a time. Each group was monitored by a confederate experimenter who was blind to the specifics of the study. The group leader's job was primarily to hand out the materials and to insure cross talk did not occur. These research assistants had written

	Successful Outcome	Unsuccessful Outcome
Symptom Scheduling	N=19	N=21
Negative Consequences	N=19	N=21
Relaxation	N=21	N=20
Summary/Control	N=19	N=25

Figure 2. Treatment Groups After Initial Assignment of Subjects in Stage One.

instructions that were read verbatim to the subjects. (see Appendix J).

After the research assistant read the instructions, subjects filled out a demographic questionnaire (see Appendix K). Then, each subject viewed a videotaped counseling intake involving a female counselor and a female client. As a presenting problem, the client discussed some anxiety reactions. The interview portion of the videotapes was the same across all four of the videotapes (see Appendix E for script). This tape was introduced by the research assistant as being the first few minutes of a counseling session. The research assistant emphasized to the subjects on several different occasions that they were to place themselves in the role of the client in tapes.

The script for this tape was developed by this researcher and was adapted from a script used in a previous research study. Efforts were made to make the language of the tape as well as the presenting problem relatively gender free. The actors in these tapes were two doctoral students in counseling psychology who had been trained by this experimenter to play their particular role. The entire tape, as well as subsequent tapes, was filmed over the shoulder of the client, directly facing the counselor. The subjects

only saw the back of the client's head and left shoulder. This was filmed in this manner in an effort to assist the subjects in putting themselves in the place of the client.

After viewing the initial tape, subjects saw a brief tape segment of an intervention, introduced by the research assistant as the last few minutes of the same interview. Scripts for these tapes were developed to closely follow examples of the various techniques presented in Weeks and L'Abate (1982) (see Appendix F). Following the development of these tapes as well as the initial 10 minute tape, two doctoral level counseling psychologists were asked to view these tapes to insure that they were adequate representations of the counseling process and the specific interventions. Also they looked for indications of biasing effects and other technical difficulties. Both of these psychologists approved these tapes for use in this study.

The initial interview tape was approximately 10 minutes in length and the intervention tapes were approximately three minutes in length. Each intervention tape was timed and the total length of the tape was held constant for all groups. Also, the length of counselor and client talk was held constant

across all intervention tapes.

After viewing the videotapes, the subjects completed the CRF-S and the CEI. Then all subjects received the written follow-up report (see Appendices H and I). This information indicated the degree to which the client had or had not improved, eight months after the counseling session. The group leader told subjects not to discuss this information with other subjects. After reading the follow-up report, subjects responded to an open-ended attribution question concerning the outcome (see Appendix G). Subjects were then asked to respond to a series of manipulation checks. These manipulation checks were designed to assess the degree to which the subjects accurately recalled the interventions, the client presenting problem, and the therapeutic outcome (see Appendix L). The data from any subjects who did not accurately respond to the manipulation checks was excluded from the study.

Statistical Analyses

There were three primary statistical analyses performed on the data. The first was a 4 (Intervention) X 2 (Gender) MANOVA which was used to examine effects of the independent variables on the CRF-Short variables of expertness and attractiveness. The second analysis was a 4 (Intervention) X 2 (Gender)

ANOVA which was used to examine the effects of type of intervention and subject gender on the subjects expectations about counseling as measured by the CEI. The third analysis was a 4 (Intervention) X 2 (Outcome) X 2 (Expectations) MANOVA which was used to examine the effects of type of intervention, expectations and outcome on the internal and counselor-related change causal attribution categories.

On each of the MANOVAs, univariate ANOVA'S were computed for all significant main effects and interactions. In addition to this for the three way MANOVA, a stepdown analysis was performed on the data because of the high intercorrelation between the dependent variables of internal and counselor-related change (Tabachnick & Fidell, 1983). Stepdown analysis, first involves prioritizing the dependent variables in the analysis. Next, the alpha level is reduced in order to compensate for the multiple F tests that the stepdown procedure uses. After this, the dependent variable with the highest priority is analyzed with an ANOVA. Subsequently, the next dependent variable is analyzed through analysis of covariance with the first dependent variable becoming the covariant. This procedure helps to analyze the relative contribution of each dependent variable when there is a high degree of

intercorrelation among all dependent variables. Both Duncan's Multiple Range procedure and Scheffe's method were used as post hoc tests. Duncan's procedure was used to make simple comparisons between individual cell means and Scheffe's procedure was used to make more complex comparisons across various groupings of cell means. SYSTAT MGLH was used to perform all of the multivariate and univariate analyses.

CHAPTER IV

RESULTS

In this chapter is presented the results of the investigation. First, preliminary analyses are provided in which tests of statistical assumptions and estimates of reliability are provided. Next, the main analyses for the study are provided, broken down for each hypothesis. Finally, to conclude this chapter, a summary of the results is provided.

Preliminary Analyses

Tests of Statistical Assumptions

There were several specific procedures used to insure that the basic assumptions of the analysis of variance and multivariance analysis of variance were not violated. First, normality was checked by calculating the skewness values of all dependent variables. Results of this analyses indicated that all dependent variables were found to fall well within the acceptable range. Next, frequency distributions were plotted for all dependent variables in an effort to identify outliers and also to further check the normality of the distributions. An examination of frequency distributions

revealed that there were no significant outliers on any of the dependent variables. However, the frequency distributions for the internal and counselor related change attributional categories indicated that these variables more closely approximated a rectangular distribution than they did a normal curve. Tabachnick and Fidell (1983) indicate that ratings, such as are used in the CAVE technique, frequently do not have normal distributions but instead they most commonly approximate a rectangular distribution. They further indicate that this does not significantly affect the assumptions underlying MANOVA and ANOVA as long as the sample size is fairly large.

Next, Pearson correlations were calculated on all dependent variables to rule out the possibility of multicollinearity by insuring that no dependent variables were highly correlated. Table 1 provides the resultant correlations and only the attribution variables (Internal and Counselor-related) were highly correlated. As a result as mentioned in Chapter 3, a stepdown analysis was used to ultimately compensate for this. Finally, all dependent variables were plotted on a scatterplot to analyze the linearity. A review of these scatterplots indicated no significant threats to the assumption of linearity.

Table 1

Pearson Correlation Matrix for All Dependent Variables

Variables	1	2	3	4	5
1 CEI	1.00				
2 CRF-EXPERT	.59	1.00			
3 CRF-ATTRACTIVE	.58	.60	1.00		
4 INTERNAL ATTRIBUTION	.28	.17	.21	1.00	
5 COUNSELOR RELATED ATTRIBUTIONS	-.26	-.14	-.22	-.90	1.00

CAVE Interrater Reliability

As described in Chapter 3, reliability estimates were calculated on the CAVE technique using Winer's (1971) procedure. The judges reached the criterion level of .90 after two trials. At the completion of scoring all protocols, interrater reliability was assessed. Results indicated the judges achieved a reliability estimate of .88 for internality and .89 for the counselor related change variable. These estimates indicate that a high degree of reliability was established across all three judges.

Main Analyses

Hypothesis One: The Effects of the Interventions on the Perceived Social Influence Variables

The first hypothesis for this study was:

> There will be significant differences between the effects of the paradoxical interventions and the other interventions (relaxation and summary) on perceived attractiveness and expertness of the therapist. More specifically, the relaxation intervention will be seen as significantly more attractive and expert then will either of the two paradoxical interventions. All three directive interventions will be seen as more

attractive and expert than the summary/control group.

A 4 (Intervention) X 2 (Gender) MANOVA was used to examine this hypothesis with expertness and attractiveness, as measured by the CRF-S, being the dependent variables. A significant main effect for intervention was found, Theta=.064, s=2, m=.0, N=77.0, $p<.05$. Table 2 provides the means, standard deviation and subsequent univariate analyses of variance results. These ANOVA's indicated that only the dependent variable of expertness was significantly affected by the type of intervention, $F(3,157)=3.504$, $p<.05$. Eta^2 revealed that 7% of the variance in the dependent variable was attributable to the manipulation of the independent variable, Type of Intervention.

Simple post hoc analyses using Duncan's Multiple Range Tests revealed that only the means for relaxation and summary differed from one another significantly, $p<.05$. As shown in Table 2, the therapist using the relaxation intervention was seen as significantly more expert than was the one using a summary intervention.

Complex post hoc analyses using Scheffe's test, revealed that the therapist using symptom scheduling and negative consequences of change interventions were viewed as significantly less expert than the relaxation

intervention, $p<.05$. Furthermore, all three directives, symptom scheduling, negative consequences and relaxation training were seen as more expert than was the summary intervention $p<.05$.

Neither Gender or the interaction of Intervention and Gender significantly affected the dependent variables. Thus, hypothesis one was only partially supported. The therapist that used the paradoxical interventions was seen as significantly less expert than the therapist that used the relaxation intervention and all three directive interventions were seen as more expert then the summary intervention. However, there was no significant differences observed across any of the interventions on perceived attractiveness. Furthermore there were no significant differences between either of the paradoxical interventions.

Hypothesis Two: The Effects of the Interventions on Expectations

The second hypothesis in this study was:

> There will be significant differences between outcome expectations associated with each of the four types of interventions. The relaxation intervention will generate the highest level of expectations, followed by the negative consequences of change,

Table 2

Means, Standard Deviations and the Univariate Source Table for the Intervention Main Effect with CRF-Attractiveness and Expertness as the Dependent Variable

I. Group Means and Standard Deviations

Intervention	Expertness		Attractiveness	
	Mean	SD	Mean	SD
Symptom Scheduling	27.85	5.70	27.35	7.42
Negative Consequences	27.13	6.14	26.60	7.02
Relaxation	29.85	6.35	29.63	5.91
Summary	25.52	6.41	26.11	7.44

II. Univariate F Tests

Source	SS	DF	MS	F
CRF-EXPERTNESS	404.96	3	134.99	3.504*
ERROR	6047.99	157	38.52	
CRF-ATTRACTIVENESS	294.31	3	98.10	1.98
ERROR	7773.65	157	49.51	

* $p < .05$

symptom scheduling and the summary group respectively.

In order to test this hypothesis, a 4 (Intervention) X 2 (Gender) ANOVA was calculated with outcome expectations, as measured by the CEI, as the dependent variable. Table 3 provides group means, standard deviations and the ANOVA source table for this analysis. Examination of Table 3 reveals that only the main effect for Intervention was significant, $\underline{F}(3,157)=3.74$, $\underline{p}<.05$. Eta^2 revealed that 7% of the variance associated with the expectations was accounted for by the manipulation of intervention.

Simple comparisons between pairs of means using Duncan's Method, revealed that the relaxation intervention generated significantly higher expectations then either the summary or the negative consequences intervention did, $\underline{p}<.05$. Post hoc Scheffe tests revealed one significant complex comparison. This comparison combined both symptom scheduling and negative consequences and compared them with the relaxation intervention, $\underline{p}<.05$. Examinations of the means in Table 3 revealed that the relaxation intervention elicited significantly higher expectations then did either of the paradoxical interventions.

Hypothesis two was also partially supported in that

subjects had significantly different expectations for the paradoxical interventions when compared with the relaxation intervention. However, there were not any significant differences between either of the paradoxical interventions or between the paradoxical interventions and the control group (summary intervention) in terms of expectations.

Hypothesis Three : The Effects of Expectations and Outcome on the Attributional Process

The third hypothesis in this study was:

> There will be significant differences between attributional patterns in which expectations are confirmed and patterns in which expectations are violated. It is predicted that confirmations will lead to significantly higher internal attributions than will expectancy violations.

To test this hypothesis a 4 (Intervention) X 2 (Outcome) X 2 (Expectation) MANOVA was calculated with the internal and counselor related change categories as dependent variables. Results of the MANOVA revealed two significant interactions, one relevant for testing Hypothesis Three, the other relevant for testing Hypothesis Four. The first interaction was Expectation by Outcome, $F(6,284)=1.80$, $p<.05$. Table 4 provides the

Table 3

Means, Standard Deviations and Source Table for the 4X2 ANOVA with Intervention and Subject Gender as Independent Variables and Expectations as the Dependent Variable

I. Group Means and Standard Deviations

Intervention	Mean	SD
Symptom Scheduling	389.90	161.60
Negative Consequences	358.55	156.52
Relaxation	461.54	167.71
Summary	350.52	179.62

II. F Test

Source	SS	DF	MS	F
Intervention (I)	318947.24	3	106315.75	3.74*
Gender (G)	734.95	1	734.95	0.03
IXG	19216.82	3	6405.61	.23
Error	4466614.54	157	28449.77	

* $p<.01$

means standard deviations and subsequent univariate ANOVA results for this interaction. Inspection of Table 5 reveals that the combined dependent variables were significantly affected by the independent variables, $F(6,284)=1.803$, $p<.05$. Inspection of the univariate analysis of variance revealed that both the internal and the counselor related change attributions were significantly affected by the independent variables, $F=(1,143)=5.99$, $p<.05$; $F(1,143)=6.539$, $p<.05$; respectively. As discussed earlier, because of the high correlation between these two variables, the stepdown procedure was also calculated. In this analysis, the internal attribution variable was entered into the stepdown procedure first, due to the relative theoretical importance of internal attributions over the counselor related change variable. Analysis of Table 4 reveals that only the internal attribution variable reached significance in the stepdown procedure, due to the fact that both dependent variables are highly intercorrelated, stepdown $F(1,143)=5.990$, $p<.025$. The Eta^2 strength of association revealed that 3% of the variance in the internal attribution variable was attributable to the manipulation of expectation and outcome.

Comparison between pairs of means using Duncan's

Table 4

Means, Standard Deviations, Univariate and Stepdown Source Tables for Expectations X Outcome Interaction with Internal and Counselor Related Change Attributions as Dependent Variables

I. Group Means and Standard Deviations

Group	Internal		Counselor-Related	
	Mean	SD	Mean	SD
Low Expect./Success	4.61	1.72	3.84	1.68
High Expect/Success	4.16	1.87	4.17	1.72
Low Expect/Failure	3.02	2.05	4.87	2.13
High Expect/Failure	3.99	2.32	3.73	2.34

II. Univariate F Tests

Variable	SS	DF	MS	F
Internal	23.41	1	23.41	5.99*
Error	559.02	143	3.91	
Counselor Related	24.84	1	24.84	6.53*
Error	543.22	143	3.80	

III. Stepdown Procedure

Dependent	SS	DF	MS	F
Internal	23.41	1	23.41	5.59**
Error	559.02	143	3.90	
Counselor Related	.39	1	.39	.60
Error	91.96	142	.65	

* $p<.05$ **$p<.025$

Method, revealed three statistically significant comparisons (see figure 3 for graph of means). The first comparison was between the high expectation/ failure group and the low expectation/ failure group. In this comparison, signficantly higher internal attributions were given to the high expectation/failure group then the low expectation/failure group, $p<.05$.

The second comparison was between the high expectation/successful group and the low expectation/failure group. In this comparison, the high expectation/successful group generated signficantly higher internal attributions then did the low expectation/failure group, $p<.05$. The findings of both of these comparison suggest that, initially high expectations, regardless of eventual outcome, lead to significantly higher internal attributions then do low expectations which are eventually confirmed.

The third comparison was between the low expectation/successful group and the low expectation/failure group. In this comparison, the low expectation/successful group produced significantly higher internal attribution then did the low expectation/failure group, $p<.05$. This finding suggest that when initial expectations are low, expectancy violations lead to significantly higher internal

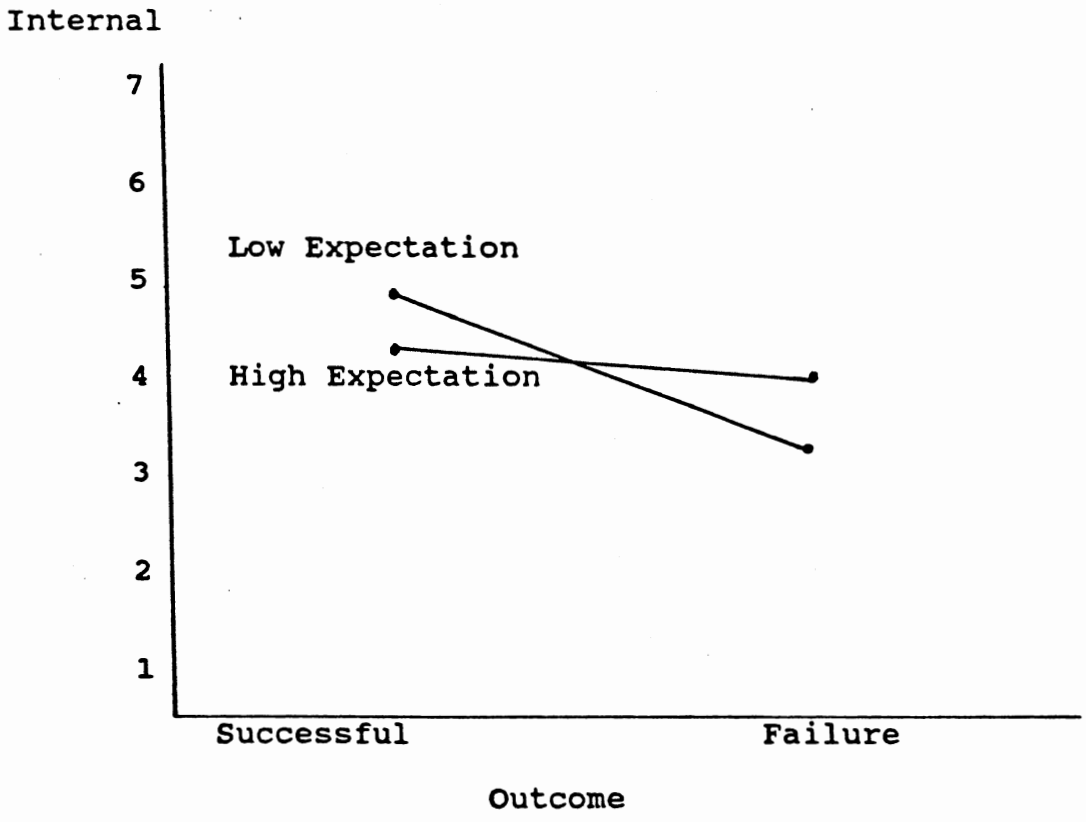

Figure 3. Means for the Expectation X Outcome Interaction with Internal Versus External Attributions as the Dependent Variable.

that when initial expectations are low, expectancy violations lead to significantly higher internal attributions then do expectancy confirmations.

Post hoc analyses using Scheffe's test revealed only one statistically significant complex comparison, $p<.05$. This comparison revealed that the successful outcome groups (both high and low expectation) had significantly different means than the failure outcome groups (also high and low expectation); $p<.05$. In this comparison the successful outcomes were attributed significantly more to internal causality then were the unsuccessful outcomes regardless of the initial expectation.

To summarize, hypothesis three was not supported -- there was no evidence that expectancy confirmations led to significantly higher internal attributions. To summarize, initially high expectations led to signficantly higher internal attributions, regardless of outcome, then did initially low expectations which were confirmed. In addition, when initial expectations were low, expectancy violations led to significantly higher internal attributions then did confirmations. A final interesting finding was that across all groups, successful interventions received significantly higher internal attributions then did failures regardless of the initial expectation for counseling.

Hypothesis Four: Intervention, Expectation, Outcome and Attributions

The fourth hypothesis in this study was:

There will be significant differences in the attributional patterns associated with each of the four types of interventions.

The other significant two way interaction from the previously discussed 4(Intervention) X 2(Gender) X 2 (Outcome) MANOVA addressed this hypothesis. This significant interaction involved the Intervention by Outcome interaction, $F(6,284)=2.47$, $p<.05$. Inspection of Table 5 indicates that neither dependent variable achieved significance independently (F-internal=1.481, df=3,143, $p>.05$; F-counselor-related change=2.460, df=3,143, $p>.05$). This is not uncommon in multivariate research especially when the dependent variables are highly correlated.

The results of the stepdown analysis for the intervention by outcome interaction are presented in Table 5. Again, due to the higher degree of theoretical importance for the internal attribution variable it was entered into the stepdown analysis first. Examination of Table 5 indicates that only the mean differences associated with the counselor-related change variable achieved statistical significance.

Table 5

Means, Standard Deviations, Univariate and Stepdown Source Table for Tape X Outcome Interaction

IA. Means and Standard Deviations for Counselor-Related Change

Intervention	Successful		Unsuccessful	
	Mean	SD	Mean	SD
Symptom Scheduling	3.74	1.64	5.18	1.87
Negative Consequences	4.40	1.59	4.51	2.36
Relaxation	4.19	1.43	3.57	2.42
Summary	3.69	2.17	4.10	2.32

IB. Means and Standard Deviations for Internal Attributions

Intervention	Successful		Unsuccessful	
	Means	SD	Means	SD
Symptom Scheduling	4.94	1.63	2.98	2.04
Negative Consequences	3.68	1.59	3.13	2.20
Relaxation	4.44	1.65	3.87	2.39
Summary	4.41	2.24	3.90	2.26

Table 5 (Continued)

II. Univariate F Tests

Source	SS	DF	MS	F
Internal	17.37	3	5.79	1.48
Error	559.02	143	3.91	
Coun. Related	28.03	3	9.34	2.46
Error	543.22	143	3.80	

III. Stepdown Procedure

Dependent	SS	DF	MS	F
Internal	17.37	3	5.79	1.48
Error	559.02	143	3.91	
Counselor Related	6.79	3	2.27	3.50**
Error	91.96	143	.65	

* $p<.05$ ** $p<.025$

(stepdown F=3.497, df=3,142, p<.025). Internal attribution did not contribute significantly more variance than was already contributed by the counselor-related change variable.

The results of the Duncan procedure revealed three significant comparisons (see Table 5 and Figure 4 for means and standard deviations). The first significant comparison was between the symptom scheduling/ unsuccessful outcome group and the relaxation/ unsuccessful outcome group, p<.05. These results suggest that unsuccessful outcomes are attributed significantly more to the counselor when a symptom scheduling intervention is used than when a relaxation intervention is used.

The second significant comparison was between the symptom scheduling/unsuccessful outcome group and the summary intervention/successful outcome group, p<.05. The results of the post hoc test reveal that the unsuccessful outcome associated with a symptom scheduling intervention were also seen as more caused by the counselor than the successful outcome associated with a summary intervention. Thus in situations were a negative outcome followed a symptom scheduling intervention, subjects held the counselor more responsible then they did in the successful control

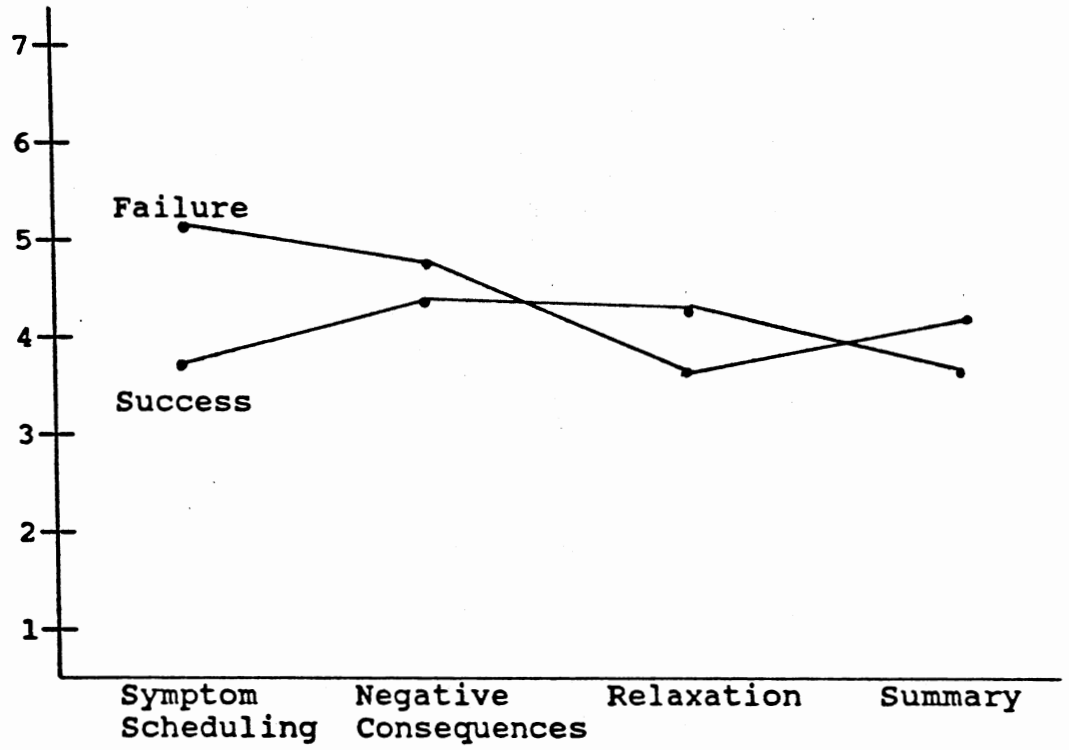

Figure 4. Means for the Intervention X Outcome Interaction with Counselor Related Change as the Dependent Variable.

group situation.

The third significant comparison was between the symptom scheduling/unsuccessful outcome group and the symptom scheduling/successful outcome group, $p<.05$. In his comparison the unsuccessful outcomes associated with symptom scheduling interventions were attributed more to the actions of the counselor then were the successful outcomes associated with the same intervention. In reviewing all three of these significant post hoc comparisons, it appears that when a failure occurs after a counselor has used a symptom scheduling intervention, the subjects were more likely to blame the counselor and less likely to give the counselor credit when these interventions were successful then subjects exposed to the other interventions.

Thus, relative to hypothesis four, there did appear to be some differences between the attributional process associated with symptom scheduling and the other interventions. However, excluding symptom scheduling, none of the other interventions generated significantly different attributional patterns. Thus only partial support was established for this hypothesis.

Summary

The results indicated that, of the two CRF-S

variables, only perceived expertness was significantly influenced by the various interventions. More specifically, the paradoxical interventions were seen as significantly less expert then the relaxation intervention, but more expert than the summary intervention. However, there were no significant differences across any of the interventions for perceived attractiveness.

The results further suggest that there were significant differences between the paradoxical interventions and the relaxation intervention in terms of the subjects initial expectation for counseling. The relaxation intervention generated significantly higher expectations then did either of the paradoxical interventions.

There were several interesting findings regarding casual attributions. First, initially high expectations were related to significantly higher internal attributions, for both successful and unsuccessful outcomes when compared with low expectations which were confirmed. Secondly, when initial expectations were low, expectancy violations led to significantly higher internal attributions then did confirmations. Finally, across the board, significantly higher internal attributions were given to successful outcomes then to

failures.

With respect to differences in the attributional process associated with the various interventions, there were some differences noted between symptom scheduling and the other interventions. Specifically, there was a tendency to attribute the responsibility for failures associated with symptom scheduling more to the counselor then there was for a failure associated with the relaxation intervention. Also, the outcome was more attributed to the counselor for failures associated with symptom scheduling then were success associated with the same intervention. Finally, failures associated with symptom scheduling were attributed significantly more to the counselor then were success associated with the summary intervention.

CHAPTER V

DISCUSSION

The current study was designed to investigate two social psychological theories as they apply to the paradoxical interventions. The first theory examined was the social influence theory (Strong, 1968). Both gender and intervention were studied with respect to each's effect on the social influence variables. Specifically, the effects of two of the paradoxical interventions, symptom scheduling and negative consequences of change, were compared with a relaxation intervention and a summary/control group in terms of relative effects on the social influence variables of attractiveness and expertness. In addition, the effects of gender and intervention was examined with respect to expectations about the counselor and the counseling process.

The second social psychology theory examined was attribution theory (Kelley, 1967). Three specific variables intervention, expectation and outcome, were studied in terms of each's relative effects on the attribution process. The specific attribution

variables intervention, expectation and outcome, were studied in terms of each's relative effects on the attribution process. The specific attribution variables which were examined were internal versus external locus and counselor-related change.

To explore these issues four hypotheses were generated. What follows in this chapter is a discussion of the findings and implications of each of the four hypotheses. In addition, recommendations for further research are also presented.

Effects of the Interventions on the Perceived Social Influence Variables

The results for hypothesis one, which dealt with the effects of gender and the interventions on the social influence variables revealed that only expertness was significantly affected by intervention. A sort of order developed across all of the interventions with relaxation seen as the most expert, followed by the two paradoxical interventions and finally by the summary/ control group. However, there was no significant difference found between the two paradoxical interventions on expertness. Neither was there any effect for gender or the interaction of gender and intervention.

With respect to the effect of the paradoxical

interventions on the social influence variables there appears to be a growing body of literature including this study which supports several specific findings. First this study as well as the results of McMillan and Johnson (1988) indicates that relaxation interventions are perceived as significantly more expert than are paradoxical interventions. This finding has held up across both of these studies as well as across three different types of paradoxical interventions: symptom prescription, symptom scheduling, and the negative consequences of change. The differences in expectations associated with relaxation interventions when compared with paradoxical interventions may in part be a reason for this difference in perceived expertness.

Second, this study, as well as the work of Conoley and Beard (1984) indicate that paradoxical interventions are viewed as significantly more expert then summary and other types of nondirective interventions. This finding further supports the notion that while paradoxical interventions do lead to a decrease in the perceived expertness of the therapist, this decrease is not so substantial that it seriously jeopardizes the therapeutic relationship. In other words as McMillan and Johnson (1988) have

hypothesized, paradoxical interventions do not go below the social influence threshold.

In essence, this study as well as the work of Conoley and Beard (1984) and McMillan and Johnson (1988) have all supported the notion that paradoxical interventions are directive and as such are typically seen as more expert than nondirective interventions. Therefore, clinicians should realize when using paradoxical interventions, that they are loosing some perceived expertness as well. However, this loss may be offset if the client accepts greater responsibility for their own actions as a result of the decrease in perceived expertness of the counselor. This brings up another interesting research question, namely are directive or nondirective interventions more effective at assisting the client in accepting responsibility for their own actions? The assumption of Social Influence Theory is that expertness is desirable and as such interventions which are high on this variable are desirable as well. However, if nondirective interventions facilitated more responsibility taking by the client, then interventions which were lower in expertness would be more desirable. In other words the paradoxical interventions would be more effective than more traditional behavioral directives in assisting the

client in accepting responsibility. Further research in this area is needed before this issue can be conclusively addressed.

As of yet, the literature on perceived attractiveness and the paradoxical interventions has not yielded as consistent results as it has for perceived expertness. For example, McMillan and Johnson (1988) found that symptom prescription decreased the perceived attractiveness of the therapist when compared with a relaxation intervention. Conversely, Perrin and Dowd (1986) were unable to demonstrate a significant difference between a cognitive intervention and symptom scheduling in terms of perceived attractiveness. In addition, Conoley and Beard (1984) were unable to demonstrate a significant difference between a nondirective intervention and symptom scheduling in terms of perceived attractiveness. Finally in the present study there were no significant differences found for perceived attractiveness across any of the interventions including relaxation, symptom scheduling, the negative consequences of change, or the summary intervention. At this time the results of these studies suggest that paradoxical interventions do not negatively affect perceived attractiveness.

However, there is one plausible rival hypothesis which warrants some discussion here. In all of the studies except for McMillan and Johnson (1988), the paradoxical interventions under investigation were symptom scheduling and in the case of the current study the negative consequences of change. In all of these studies except for McMillan and Johnson, there was no significant effect found for the paradoxical interventions. However, in McMillan and Johnson, symptom prescription, which is arguably a more obtrusive intervention then either negative consequences of change or symptom scheduling, was used and a significant effect on attractiveness was found. While the level of obtrusiveness has not been studied in any previous study, it does appear that paradoxical interventions might have different effects on attractiveness if they were varied on this dimension. This hypothesis must be viewed as highly speculative at this time and further research will be needed to support it.

Effects of the Interventions on Expectations

Hypothesis two, which dealt with the effects of gender and intervention on the subject's expectations about the counselor and the counseling process also revealed that the paradoxical interventions generated

significantly lower expectations then did the relaxation intervention. One interesting finding was that the paradoxical interventions did not differ significantly from the summary/control group in terms of expectations. Also, the effect of gender and the interaction of gender and intervention was not statistically significant.

It is difficult to tell how this reduction in expectations affects the counseling process. As indicated earlier, Apfelbaum (1958) believed that expectations can have a highly significant impact on the outcome of therapy. Tinsley et al. (1980) have also echoed this sentiment. As Tinsley et al. have suggested, it is obvious that therapists cannot meet every possible expectation of the client. The questions then become on what issues is it important to meet clients expectations and to what degree can expectations be violated without jeopardizing the therapeutic alliance? Also, are there any specific issues and situations in which violation of expectations can lead to beneficial effects? The literature in this area is very limited and much more research is needed. With respect to the current investigation all that can be definitively concluded is that the paradoxical interventions of symptom

scheduling and negative consequences of change lead to significant reductions in positive expectations for successful therapy when compared with a relaxation intervention. Counselors should understand that this reduction in expectations is one potential risk when using a paradoxical intervention.

Timing of interventions is another important factor which warrants more attention in the literature. One of the limitations of this study is that the interventions were presented in a very short period of time from the subjects' frame of reference. However in a therapeutic setting, the alliance would probably be more firmly established before a paradoxical intervention would even be attempted. The alliance then forms a sort of therapeutic context that surrounds the delivery of a paradoxical intervention and that may actually reduce the negative effect generated by the client's loss in expectations.

Effects of Expectation and Outcome on the Attributional Process

Some of the most interesting findings in this study are in the area of attributions. Hypothesis three which dealt with the effects of expectancy violations and confirmations on the attributional process revealed three statistically significant findings with respect

to internal attributions. First, high expectations, both confirmed and violated led to significantly higher internal attributions than did low expectancy confirmations. Secondly, when initial expectations were low, violations led to significantly higher internal attribution ratings then did confirmations. Finally, successful outcomes led to significantly higher internal attributions when compared with unsuccessful outcomes.

The results clearly did not support the notion that expectancy confirmations led to significantly higher internal attribution ratings across the board. The expectancy confirmation hypothesis has been primarily taken from research that has used anagram tasks. Schoeneman et al. (1986) have argued that anagram tasks are too simplistic to be an adequate model for more complex interpersonal situations such as found in a counseling context. Indeed some of the results of the anagram research generalized to this study and some did not. For example, the finding that successful interventions were viewed as more related to internal causality than unsuccessful interventions is a fairly consistent phenomenon in the literature (Shoeneman et al., 1986; Weary Bradley, 1979). Also, the results regarding the increase in internal attributions

associated with high expectancy confirmations generalizes from the anagram research to this study (House, 1976).

However, the anagram findings regarding high and low expectancy violations did not generalize to the current research. The area of high and low expectancy violations is particularly intriguing in this study. The findings in this area indicate that violations, both high and low tend to increase internal attributions, but the meaning of these internal attributions changes based on the level of expectation. Initially, high expectations that are violated lead to blaming the client for their failure to change. On the other end, low expectations which are violated in effect lead to giving the client credit for changing. This finding suggests that the attribution process differs in part as a function of not only the complexity of the situation but also the level of expectations involved.

If the research on expectancy confirmations does not readily generalize to the current study, what principle from attribution theory offers an explanation for these results? The answer would appear to be the principle of multiple plausibility. As mentioned earlier, multiple plausibility refers to the degree to

which rival hypotheses are present in any causal pattern. Kelley (1972) indicated that "the role of a given cause in producing a given effect is discounted if other plausible causes are present" (p. 8). When expectations are high regarding the counseling process, the counselor becomes more likely to get credit for success and less likely to get responsibility for failure, due in part to the counselor's perceived competence. In other words as subjects gain additional information about the eventual outcome, a bias develops in favor of the counselor due to their increased credibility. Thus, the client becomes more responsible for failure and less responsible for success because of the enhanced credibility of the counselor. In effect, the counselor's increased credibility becomes a rival hypothesis which affects the attributional process.

The principle of multiple plausibility also applies to the lower expectancy confirmations and violations, but somewhat in reverse of the process associated with higher expectations. When expectations are low the counselor becomes more likely to receive responsibility for failure and less likely to receive credit for success, due to their perceived incompetence. As a result, the client becomes more likely to receive credit when therapy is successful and less likely to be

blamed if it fails, which is exactly what happened in this study. In essence, the perceived incompetence of the counselor becomes the biasing factor in the attributional process. As a result, the changes in the attributional pattern associated with expectancy violations are based on predictable variations of the principle of multiple plausibility. This brings up the question mentioned previously about whether or not decreasing expectations can ever be helpful in therapy. The results of this study indicate that low expectations can be helpful to the client when the eventual outcome is successful in that this leads to an increase in positive internal attributions. Also, to a lesser extent, lower expectations also tend to insulate the client from negative self-attributions associated with therapeutic failure, at least from an observer's point of view, because the counselor becomes the likely target for blame. As will be seen in the next section symptom scheduling was the only intervention which effectively demonstrated this pattern.

Interaction of Intervention and Outcome on Attributions

Hypothesis four which dealt with the attributional patterns associated with each of the four interventions was supported by a significant two-way interaction

between outcome and intervention. The specific structure of this interaction indicated that the subjects tended to attribute more responsibility to the counselor for failures associated with symptom scheduling then they did for failures associated with the relaxation intervention. Also, they tended to attribute the responsibility to the counselor for failures associated with symptom scheduling more than they did successes associated with the summary intervention. Finally, success associated with the symptom scheduling intervention were seen as less attributable to the counselor than were failures associated with the same intervention. The interaction of expectancy and intervention as well as the interaction of intervention, expectancy and outcome were all found to be statistically nonsignificant.

Symptom scheduling generated a significant decrease in expectations as mentioned previously. In this study, low expectations had specific attributional patterns associated with both confirmations and violations. Namely, expectancy confirmations lead to a tendency to blame the counselor for failures and to not give them credit for success. This attributional pattern fits exactly the results associated with symptom scheduling. Failures associated with symptom

scheduling were attributed significantly more to the counselor than were failures associated with the relaxation intervention or successes associated with the summary or symptom scheduling interventions. While the counselor-related change variable is not exactly the same as the internal attribution variable, both are very similar and are most likely measuring elements of the same construct.

The attributional pattern associated with symptom scheduling is very similar to the disqualification process described by Beck and Strong (1982) and O'Connel (1983). These authors have speculated that when paradoxical interventions are used, the counselor in effect disqualifies themselves as the cause of any subsequent changes because of the unusual nature of their recommendations. The attributional pattern associated with symptom scheduling fits this disqualification process. However to date no previous study has been able to clearly support the relationship of this process to the paradoxical interventions.

Based on these results, it can be postulated that symptom scheduling is probably the most risky intervention for the counselor, due to the significant decrease in expectations. However, from the observer's point of view, the risk to the client is minimal since

they most likely receive credit for success and less likely receive the blame for the failure. In effect, for the counselor, the use of this intervention is analogous to throwing themselves on a grenade to save the client. A romantic concept, but not one that most counselors will be extremely interested in doing. The question then becomes when is the potential risk to the counselor outweighed by the potential benefits to the client? The answer appears to be when other high expectation interventions have failed to produce therapeutic change.

Review of Limitations

The generalizability of these findings is limited in several ways. First, this study utilized an analogue format, which may or may not generalize to a real therapeutic situation. Second, subjects were asked to make attributions rather than allowing them to occur spontaneously. It is not known how much this forced attributional process differs from a more spontaneous one. Thirdly, the subject pool was college students and as a result the findings are only generalizable to that group. Finally, the gender of the client and the counselor was female and as a result the findings may not hold true for other client/counselor gender dyads.

Recommendations for Further Research

As with any analogue study, generalization to clinical research and practice is not always guaranteed. The results and conclusions must be viewed as tentative and further research is needed in a number of areas. First and foremost, information is needed about attributional patterns associated with the actual therapeutic process. Because this study used observers as subjects, there is the possibility that actual clients may make very different attributions. Related to this, little is actually known about the relationship between attribution patterns and actual outcome in therapy. It has been hypothesized that positive internal attributions lead to successful therapeutic outcomes but this has not been clearly established as of yet.

Secondly, further research needs to be done in the area of the social influence variables. Specifically, to date there has been no research which has clearly established where the social influence threshold is and what it takes to violate it. In other words, it is not known how much clients will accept before they terminate the therapeutic relationship. Nor is it known if there is a optimal level of social influence which is therapeutically advantageous. Related to this

it is not specifically known whether increases in expertness have a positive or a negative affect on client's responsibility taking in therapy. Strategies which promote clear ownership of both positive and negative behaviors by the client are central to the whole psychotherapeutic endeavor.

Thirdly, related to the paradoxical techniques, there needs to be further research on the level of obtrusiveness associated with each of the interventions. Research needs to be directed towards whether or not the different techniques vary in the level of obtrusiveness and if so how does this effect the attributional process and therapeutic outcome. Also related to the paradoxical techniques, other interventions need to be studied in relationship to the social influence variables, expectations, and attributional patterns. This research as well as previous research indicates that all of these interventions are not the same on these dimensions. Global theories which attempt to deal with all of these interventions as if they are one are most likely erroneous.

Finally, clinical research, with real clients and counselors, needs to be done in the area of the paradoxical interventions and associated attribution

patterns, expectations, and outcomes is needed. The use of a paradoxical intervention within the context of a strong therapeutic relationship may yield very different results than in an analogue study.

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APPENDICES

APPENDIX A

INFORMED CONSENT

Informed Consent Form

Thank you for agreeing to participate in the study. We are interested in collecting information about college students' perceptions of counseling. Your participation is entirely voluntary and you may withdraw at any time. All of your responses will be held strictly anonymous and confidential and no attempt will be made to match names with responses. Your involvement in this study should take approximately 30 minutes. You will be asked to watch a brief videotaped counseling session and then answer some questions regarding your perceptions of the counselor. Again, thank you for your participation.

I have read the above statement and understand it completely.

Name_____ Date_____

If you are interested in the results of this study, please provide your name and receiving address below. A summary of the results will be mailed to you once the research is completed. This page will be separated from your responses.

Name_____

Address_____

City_____

State_____

Zip_____

APPENDIX B

PERMISSION

UNIVERSITY of PENNSYLVANIA

Psychology Department
Professor Martin E. P. Seligman
3815 Walnut Street
Philadelphia, PA 19104-6196

May 28, 1987

Mr. Doug McMillan
1202 East Will Rogers St.
Stillwater, Oklahoma 74074

Dear Mr. McMillan:

With regard to your request, I would be glad to grant you my permission to use the CAVE technique in your dissertation research. Likewise, I would be interested in your results.

Please write if I can be of any further assistance. Best of luck.

Sincerely,

Martin E. P. Seligman

Martin E. P. Seligman, PhD
Professor of Psychology

/tbs

APPENDIX C

COUNSELOR RATING FORM-SHORT VERSION

COUNSELOR RATING FORM

Instructions

The purpose of this inventory is to measure your perceptions of the counselor by having you react to a number of concepts related to counseling. In completing this inventory, please make your judgments on the basis of what the concepts mean to you. For example, EXPERT may mean different things to different people, but we want you to rate the counselor based on what expertness in counseling means to you.

Below you will find 12 concepts and beneath each concept a scale on which to record your reaction to the counselor in the audiotape. Please note that the "not very" and "very" scales are reversed every other time. Mark an "X" where you would rate the counselor on each of the 12 concepts.

FRIENDLY

not very _____:_____:_____:_____:_____:_____:_____ very

EXPERT

very _____:_____:_____:_____:_____:_____:_____ not very

HONEST

not very _____:_____:_____:_____:_____:_____:_____ very

LIKEABLE

very _____:_____:_____:_____:_____:_____:_____ not very

EXPERIENCED

not very _____:_____:_____:_____:_____:_____:_____ very

RELIABLE

very _____:_____:_____:_____:_____:_____:_____ not very

SOCIABLE

not very _____:_____:_____:_____:_____:_____:_____ very

PREPARED

very _____:_____:_____:_____:_____:_____:_____ not very

SINCERE

not very _____:_____:_____:_____:_____:_____:_____ very

WARM

very _____:_____:_____:_____:_____:_____:_____ not very

SKILLFUL

not very _____:_____:_____:_____:_____:_____:_____ very

TRUSTWORTHY

very _____:_____:_____:_____:_____:_____:_____ not very

APPENDIX D

COUNSELING EXPECTATION INVENTORY

For each item, circle the percentage that you believe accurately reflects the probability that this counselor will help the client achieve the desired outcome. As you answer put yourself in the place of the client and respond as if this counseling session had actually happened to you.

For example if you felt on a given item that there was a 50% probability, you would mark it in the following way:

VERY UNLIKELY 10% 20% 30% 40% (50%) 60% 70% 80% 90% VERY LIKELY 100%

If I were this client working with this counselor I believe this counselor would help me to.....

	VERY UNLIKELY									VERY LIKELY
1. BECOME MORE SELF-ACCEPTANT	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
2. TRUST MYSELF MORE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
3. UNDERSTAND MYSELF MORE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
4. BE ABLE TO ACCEPT UNCERTAINTY IN LIFE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
5. BECOME MORE INDEPENDENT	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
6. RELATE BETTER TO OTHERS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
7. BE ABLE TO TAKE RISKS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
8. GAIN A BETTER PERSPECTIVE ON LIFE	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
9. REDUCE MY DEPENDENCY ON OTHERS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
10. DEVELOP MORE TOLERANCE FOR OTHERS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
11. GET RID OF DISTURBING BEHAVIORS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
12. REDUCE SYMPTOMS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
13. UNDERSTAND OBSTACLES TO FURTHER GROWTH	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
14. CHANGE MY PERSONALITY	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

(YOU MAY TURN TO THE NEXT PAGE WHEN YOU ARE READY)

Please use the level of importance scale provided below to decide the importance that you would give to each desired outcome if you were the client on the tape. Circle the number that represents your choice. For example, if you felt that a particular outcome was neither important or unimportant you would circle number 4.

	EXTREMELY UNIMPORTANT	MODERATELY UNIMPORTANT	SLIGHTLY UNIMPORTANT	NEITHER IMPORTANT OR UNIMPORTANT	SLIGHTLY IMPORTANT	MODERATELY IMPORTANT	EXTREMELY IMPORTANT
I WOULD WANT COUNSELING TO HELP ME TO.....							
1. BECOME MORE SELF ACCEPTANT	1	2	3	4	5	6	7
2. TRUST MYSELF MORE	1	2	3	4	5	6	7
3. UNDERSTAND MYSELF MORE	1	2	3	4	5	6	7
4. BE ABLE TO ACCEPT UNCERTAINTY IN LIFE	1	2	3	4	5	6	7
5. BECOME MORE INDEPENDENT	1	2	3	4	5	6	7
6. RELATE BETTER TO OTHERS	1	2	3	4	5	6	7
7. BE ABLE TO TAKE RISKS	1	2	3	4	5	6	7
8. GAIN A BETTER PERSPECTIVE ON LIFE	1	2	3	4	5	6	7
9. REDUCE MY DEPENDENCY ON OTHERS	1	2	3	4	5	6	7
10. DEVELOP MORE TOLERANCE FOR OTHERS	1	2	3	4	5	6	7
11. GET RID OF DISTURBING BEHAVIORS	1	2	3	4	5	6	7

	EXTREMELY UNIMPORTANT	MODERATELY UNIMPORTANT	SLIGHTLY UNIMPORTANT	NEITHER IMPORTANT OR UNIMPORTANT	SLIGHTLY IMPORTANT	MODERATELY IMPORTANT	EXTREMELY IMPORTANT
I WOULD WANT COUNSELING TO HELP ME TO.....							
12. REDUCE SYMPTOMS	1	2	3	4	5	6	7
13. UNDERSTAND OBSTACLES TO FURTHER GROWTH	1	2	3	4	5	6	7
14. CHANGE MY PERSONALITY	1	2	3	4	5	6	7

DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE ANSWERED ALL PREVIOUS QUESTIONS

APPENDIX E

COUNSELOR-CLIENT TYPESCRIPT

COUNSELOR: Ann, my name is Joan Clark and I will be working with you. I would like to begin today by asking you what brings you here?

THE CLIENT: Well lately I have been getting very upset and also I have been having difficulty in thinking straight. I seem to worry all of the time.

THE COUNSELOR: Ann, how long have you been experiencing these feelings?

THE CLIENT: It seems like it just started three weeks ago. I just found myself constantly being worried and on edge. I just.....look at my hands they are shaking ...they are just trembling and that's the way I am all of the time. It seems like I get real jittery and my hands shake and I can't stay in one place very long and it seems like I am..... like I said I am on edge.

THE COUNSELOR: Ann, are there any times in particular when you notice that these feeling seem to get significantly better or worse?

THE CLIENT: It seems like there will be sometimes when it gets a little better .....maybe like for a half of an hour....but it 's like it is always there....but it always in the back of my mind and sometimes it seems a little worse but not .....mostly it is just this bad.

THE COUNSELOR: Ann have you noticed any physical sensations that seem to go along with your feelings of being on edge?

THE CLIENT: Like for instances right now, I have such a knot in my stomach ....I feel like I might be sick or something. When I try to talk to people I get a lump in my throat and my heart starts pounding and I get dizzy. It is awful to feel this way. I went to the doctor and he said that there wasn't anything wrong witn me and I told him like I can't sleep at night....I just lay awake thinking about all these things....and then I might wake up a couple of times during the night. He wanted to give me sleeping pills but they leave me feeling drugged out the next day and I can't function at all if I am already tired and lethargic.

THE COUNSELOR: Ann, is there anything in your life right now that really seems to be distressing you that

could possibly be causing these reactions?

THE CLIENT: It doesn't seem like I worry about any one thing ...sometimes I worry about what I going to do after I finsih school. Sometimes I worry about my grades or if I am going to have enough time to finish all of my semester projects. But their really does not seem to be any one thing that really bothers me. You know my family is fine, my parents are good, I have a boy friend and we get along fine....my roomate and I get along pretty well, she is my best friend and I just

THE COUNSELOR: Ann, has this ever happened to you before? Have you experienced these intense anxiety feelings before in your life?

THE CLIENT: I have been anxious before, but it has never lasted this long. I don't know why I started worrying like this ...nothing has happened significant in the last three weeks or so ..... it seems like one day I kind of woke up and started having these depressing thoughts. I mean I have tried ....I have tried to snap myself out of this, but I really haven't been able to.

THE COUNSELOR: Ann, let me summarize just a minute and see if I really have an adequate picture of what you have been experiencing. For the last three weeks you have been worrying a great deal. You are not really sure what you are so concerned about but you have felt some very intense anxiety. Along with your anxiety you have also had a number of physical reactions which have frightened you and made you even more anxious. Is this an accurate picture of what you have been experiencing?

THE CLIENT: Yes that is it. I don't know how to quit worrying I feel like it is controlling me .....I want to get control of it I don't want to worry all of the time, I don't want to be like this.

THE COUNSELOR: How has this affected the other areas of your life such as work?

THE CLIENT: Well it has made it pretty difficult to prepare for exams and in general I have had difficulty concentrating on my studies. Also, it seems like I have been biting peoples heads off lately. I think they are just saying well Ann's going through a bad time. I

am really not like that I am really a patient and nice person, I like to think I am anyway.

THE COUNSELOR: It has affected your ability to study and your interpersonal relationships. Has there been any other part of your daily life that it has affected?

THE CLIENT: I can still do things, I can still do my laundry and go to the grocery store and pay my bills and I worry about those thing too...I worry about my bills. It is really stupid, some of the things I lay awake at night and think about.

THE COUNSELOR: This anxiety really appears to be overpowering you and it is causing you a great deal of fear.

THE CLIENT: Yes, it is very scarey. I just feel so nervous ..my hands are really shaking and my back muscles hurt so bad....I have this tension in my neck. I don't know what to do. I want to be able to get control of this thing. It really worries me because I am not like this. I am not a worrier....I probably should worry sometimes when I don't but it just seems so impossible. It just seems like I am never going to get better....I am always going to be like that and it is so depressing. Then I start worrying about me and, I don't know, do you think you can help me ...I just feel like maybe I shouldn't even be here, maybe I should be helpless.

APPENDIX F

INTERVENTION TYPESCRIPTS

Symptom Scheduling

COUNSELOR: Ann, I would like to take the last few minutes here to present to you my recommendations for the way that I believe that we should approach your problem. Anxiety can be a very difficult problem to deal with as you have experienced yourself. My experience in dealing with anxiety has been that it is very important to realize that it is going to happen no matter what you do. Because of the inevitability of anxiety, I believe it is important to take charge of it as much as possible. I believe the most effective way to take charge of your anxiety is to practice having it. I realize that this may sound a little funny, but I have found it very effective. What I am going to recommend is that you set aside some time every day when you can practice having an anxiety attack. Ideally you should practice twice a day, once in the morning and once in the evening. You should practice for at least an hour and you should try to have all of the various symptoms that we have discussed earlier today. I want you to concentrate in these practice sessions and try to make them as severe as you possibly can. Is this assignment clear to you?

Negative Consequences of Change

COUNSELOR: Ann, I would like to spend that last few minutes of our session sharing some observations with you. Anxiety is a problem which is often difficult to deal with as you have experienced yourself recently. Anxiety has a number of uncomfortable symptoms which make it very difficult for a person to function adequately. I have dealt with a number of individuals who have experienced intense anxiety attacks and I have noticed an important pattern that is frequently present. This pattern is that often these patients don't fully consider all of the consequences of giving up their anxiety. By this I mean that there are often positive and negative parts of having anxiety attacks. Most people only consider the negative aspects of having anxiety, but I believe that there can also be a number of positive aspects of having anxiety. For example people who have difficulties with anxiety, frequently get a great deal of positive attention from family and friends. Also anxiety can be a way of coping with life's troubles. For this reason, I often caution my patients to carefully consider all of the consequences of giving up their anxiety. Let's spend the remainder of our time today discussing all of the positive things you will have to give up if you stop your anxiety.

Relaxation

COUNSELOR: Ann, I would like to spend the last few minutes of our time in discussing with you what I feel might be an appropriate place to start. As you have experienced lately, having an anxiety attack can be an extremely frightening experience. Not only does anxiety have a definite affect on our thoughts but it also has a very definite physiological affect. Some of the physical reactions that you have experienced, such as excessive sweating, rapid heart rate, and an inability to breath adequately are all representative of the physiological part of anxiety. Because of this patients often need help in learning to control their physical reactions before attempting any other form of treatment. Based on this I would like to recommend that we begin relaxation training. This training will assist you in gaining some control over your physical reactions. This training involves learning to relax your body on command. We will go through a series of exercises which are designed to help you become aware of when you are tense and also to help you learn how to relax your body when you begin to feel an anxiety attack coming on. We will practice these exercises here in the office until you learn them and then you will need to practice them twice a day at home for the next three to four weeks. Any questions?

Summary/Control

COUNSELOR: Ann, I would like to spend the last few minutes of our session in summarizing what your problem is so that we can both be sure of what we are dealing with. For the last several weeks you have been experiencing some severe anxiety attacks which don't really seem to be caused by any one single thing. Usually these attacks have a variety of symptoms including difficulty in concentrating, thought racing, anxious feelings, heart racing, excessive sweating, and difficulty in breathing. You have attempted to talk yourself out of these attacks, but this has not been very helpful and in some cases it has only made the anxiety worse. On the average you have about 3-5 attacks per week and they normally last for approximately 30 minutes. You feel that everything about these attacks is completely out of your control and this has frightened you even more. You have become very frightened of these attacks and you now believe this fear may be causing the anxiety to get even worse. You have recently had a complete physical, But your physician was unable to find any physical cause for your anxiety. He has referred you here to see if there is a psychological component to your problem. Does that pretty much sum it up?

APPENDIX G

OPEN-ENDED ATTRIBUTION QUESTION

Based on what you know about the client and the counselor please print legibly below what you believe is the major cause for the client's success or failure in her efforts to make changes in her life. In answering this question, put yourself in the client's place and respond as if the situation had actually happened to you. Please elaborate on your response as much as possible and make sure that your answer can be clearly understood. If you need additional room, you may use the back of this page.

APPENDIX H

SUCCESSFUL FOLLOW-UP REPORT

Eight months later this is what Ann was like: Ann was totally free of any of the anxiety. She reported that she no longer felt any of the anxiety or any of the physiological symptoms. She also reported that she was very relieved and satisfied with her life.

APPENDIX I

UNSUCCESSFUL FOLLOW-UP REPORT

Eight months later this is what Ann was like: Ann reported that she was still having frequent anxiety attacks and that in fact they had even gown more severe. She was still experiencing all of the anxiety as well as all of the physical symptoms. Ann reported that she was extremely dissatisfied with her life.

APPENDIX J

RESEARCH ASSISTANT'S INSTRUCTIONS

You have been asked to participate in a study which examines college students perceptions of counselors. You will be asked to first fill out a brief questionnaire about yourself. Following this you will see a brief videotape of an initial counseling interview between a counselor and a client. After this you will see another brief videotape of the counselor's recommendations which actually occurred at the end of the same session. Following the second tape you will be asked to fill out some questionnaires about the counselor and her recommendations. As you answer each questionnaire you are to put yourself in the place of the client on the videotape and respond to the questions as if you were the client dealing with the same problem. Imagine how you would respond to the counselor if you were in the same situation. If you do not understand the instructions for any of the questionnaires, please raise your hand and I will come over to you and attempt to make the instructions more clear to you. Once the videotape has been started, please do not talk to each other until everyone has completed their entire packets. Also please do not turn ahead in your packets until I tell you to do so. Are there any questions? Thank you for your participation.

APPENDIX K

DEMOGRAPHIC QUESTIONNAIRE

In participating in this study, first please complete all of the following demographic information.

1. Sex _____ Male
   _____ Female

2. Age _____

3. Year in college:
   _____ Freshmen
   _____ Sophomore
   _____ Junior
   _____ Senior
   _____ Graduate Student

4. Ethinicity:
   _____ Asian American
   _____ Black
   _____ Caucasian
   _____ Hispanic
   _____ Native American
   _____ Other (please specify _____

5. Have you ever received professional counseling?
   _____ Yes, if yes answer #6
   _____ No

6. Prior counseling experiences: Approximate No. of Sessions
   Check if you have received:

_____ Personal Counseling	_____
_____ Career counseling	_____
_____ Family counseling	_____
_____ Marital counseling	_____
_____ Substance abuse counseling	_____
_____ Academic Counseling	_____

APPENDIX L

MANIPULATION CHECKS

1. Please circle below the recommendation that the counselor made to the client.

A. The counselor recommended that the client begin relaxation training.

B. The counselor recommended that the client should begin to practice having the anxiety attacks on a daily basis.

C. The counselor recommended that the client consider very carefully whether or not she actually wanted to give up her anxiety attacks. The counselor also indicated that the client might be getting some positive things from having the attacks.

D. The counselor made no recommendation.

2. Please circle below how you think the client was doing at the eight month follow-up.

1	2	3	4	5	6	7
no changes						significant changes

VITA

Douglas N. McMillan

Candidate for the Degree of

Doctor of Philosophy

Thesis: EFFECTS OF PARADOXICAL AND BEHAVIORAL INTERVENTIONS ON SOCIAL INFLUENCE, EXPECTATIONS AND ATTRIBUTIONS

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Pensacola, Florida, November 16, 1957, the son of David and Patricia McMillan. Married to Delia McMillan on June 2, 1979.

Education: Graduated S.H. Rider High School, Wichita Falls, Texas, in May, 1976; received the Bachelor of Science in Education degree in Psychology from Midwestern State University in December, 1980; received the Master of Science degree in Counseling Psychology from the University of Southern Mississippi in May, 1984; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in July, 1988.

Professional Experience: Shift Supervisor and House Parent, Wichita Falls Mental Health Center, Wichita Falls, Texas, April, 1977-September, 1977; Training Coordinator, Wichita Falls Mental Health Center, October, 1977-October, 1978; Program Supervisor, Wichita Falls Mental Health Center, October 1978-November, 1979; Coordinator of Fairweather Lodge Services, Wichita Falls Mental Health Center, December, 1979-April, 1981; Director of Youth and Education, First Assembly of God; Hattiesburg, Mississippi, May, 1981-October, 1983; Clinic Supervisor,

Permian Basin Mental Health Center, Odessa, Texas, October, 1983-August,1985; Staff Therapist, O.S.U. Student Mental Health Clinic, Stillwater, Oklahoma, September, 1985 - May, 1986; Practicum Student and Staff Counselor, O.S.U. Marriage and Family Clinic, Stillwater, Oklahoma, September, 1985-December, 1986; Practicum Student and Staff Counselor, O.S.U. University Counseling Services, Stillwater, Oklahoma, August, 1986-May, 1987; Psychology Intern, Wichita Guidance Center, Wichita, Kansas, August, 1987-August, 1988.