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The nature of trait empathy in clients with chronic pain and their counselors and its impact on the development of the working alliance and outcome

Forman, Nancy Walker, Ph.D.
The Ohio State University, 1990

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THE NATURE OF TRAIT EMPATHY IN CLIENTS WITH CHRONIC PAIN AND THEIR COUNSELORS AND ITS IMPACT ON THE DEVELOPMENT OF THE WORKING ALLIANCE AND OUTCOME

DISSERTATION
Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By
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* * * *
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DEDICATION

To My Parents, Ike and Sarah

They taught me that I could accomplish anything and have always been there with their loving support. I feel blessed.
Create ideas with humility knowing that behind the idea he calls his own are thoughts and efforts of many men.

-- W.A. Peterson

I want to express my gratitude to all of the Health Psychology counselors and David Hopkins of the Industrial Commission, Rehabilitation Division, who took the time and energy to participate in this study. I am grateful to Andy Hinkle, the director of the Health Psychology Department, and the Industrial Commission, Rehabilitation Division for allowing me to collect data there. I also want to thank the many chronic pain clients who were willing to participate in this study. Without their involvement, this project would not have been possible.

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Donald Tosi who helped formulate the design for this study and got the dissertation rolling;

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My brothers, sister-in-laws, and parents who have been so patient, understanding and supportive;

My children, Lindsay and Kristin, who were born while I was writing my dissertation, and who were a great diversion and lesson in keeping my perspective;

My husband, Michael, who was incredibly loving and supportive throughout this process, and who has a gift for giving strength and hope at the most trying times. He was totally dedicated to my completing this enormous project. For that, I am eternally grateful.
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CHAPTER I

INTRODUCTION

The concept of empathy has been in existence for over 200 years (Davis, 1980). The term empathy was originally derived from the Greek word empatheia, meaning the appreciation of what another person is feeling (Astin, 1967). Since its conception, empathy has been a difficult construct to define and study. It is an elusive concept that has had several diverse definitions during its history. Perhaps part of the reason for this diversity has been the confusion of the word empathy with other psychological concepts, such as sympathy, projection, and identification (Goldstein & Michaels, 1985). In addition, confusion may have resulted from the fact that empathy has been viewed from the perspective of three fields of study; counseling and psychotherapy, social psychology, and developmental psychology. Finally, empathy has been difficult to define because it encompasses different phenomenological referents, and the English language is rather impoverished in explaining psychological concepts (Hogan, 1975). Consequently, rather than being viewed as a phenomenon with multiple referents, empathy has typically been looked at as being unidimensional.
Within the counseling/psychotherapy realm, empathy has been viewed diversely as an affective response, as raw identification, as resonance, as a cognitive or role-taking response, and as a communication skill (Gladstein, 1983). These differing perspectives have produced various definitions and inventories for measuring empathy, and have typically isolated the affective and cognitive components of this construct. Much of the research in this area has been to determine the effect that therapist empathy has on the outcome of therapy (Gladstein, 1977). The results remain ambiguous.

In social psychology, empathy has also been viewed as having affective and cognitive components, although the primary focus has been on the cognitive aspects. Affective empathy has often been researched with regard to its effect on altruistic behavior. Various measures have been developed to study empathy, using different approaches to the concept (Gladstein, 1983). Again, most of these measures have isolated empathy into its cognitive or affective components, with the exception of an inventory by Davis (1980). This multidimensional measure is designed to focus on both cognitive and affective empathy.

The developmental psychology literature has been greatly influenced by the work of Piaget (1967) and his cognitive developmental theory. Although he did not speak
of empathy, per se, Piaget found that children normally initially view the world egocentrically, later developing the ability to take the perspective of others. Research in the developmental literature has focused on when changes in cognitive and affective role-taking abilities take place (Greenspan, S., Barenboim, C. & Chandler, M.J., 1976), whether or not children can be taught empathic behavior (Chandler, 1973), and whether or not empathy leads to helping behaviors (Rushton, 1980). The age related changes of cognitive empathy have remained controversial.

Gladstein (1983) points out two significant findings important to the understanding of the development of empathy. First, each area has its own empathy literature, and there is minimal overlap. Second, each has its own measures of empathy. Given the different theoretical approaches to defining and measuring empathy, across, as well as within the counseling and psychotherapy, social psychology, and developmental literature, it is understandable that confusion exists regarding exactly what empathy is and whether or not it is significant to the process and outcome of therapy. Within the counseling and psychotherapy realm, different aspects and stages of empathy have been emphasized, so that outcome research could not be expected to be highly correlated (Barrett – Lennard, 1981).
In addition, outcome measures have varied across studies (Gladstein, 1983), making comparisons difficult.

Ever since Rogers (1957) suggested that empathy is a critical element in counseling and psychotherapy, psychologists have been interested in the importance of counselor empathy and its impact on outcome in therapy. Rogers pioneered this area with his person-centered approach when he hypothesized that the attitude of the counselor, particularly empathic understanding, was critical in order for growth to take place in the client. Rogers (1957) broadly defined empathy as the counselor's understanding of the client. Throughout the development of the Rogerian theory, empathy has continually been viewed as being important and basic to therapy. Truax (1966) contended that counselor empathy was not only important in Rogerian theory, but in many diverse interventions. Comparisons of psychodynamic, behavioristic, and humanistic treatments have shown counselor empathy to have impact across therapies (Fischer, Pavez, Kikert, Hubbard, & Grysen, 1975; & Traemeo-Plaetz, 1980). There is also some support for the importance of empathy and outcome in time-limited group psychotherapy (Truax, Wargo, & Silber, 1966) and rational restructuring (Smith, 1979).

Several other authors have challenged these results, however. For example, Sloane et al. (1975) examined
analytical and behavioral therapies and did not find that the "facilitative conditions" predicted outcome. Bergin (1971), Meltozoff & Kornreich (1970), and Luborsky et al. (1971) also reported being skeptical regarding the significance of empathy to outcome in therapy. Numerous studies and inventories have evolved out of Roger's original theory regarding the importance of empathy. In a review of outcome research studies, Gladstein (1970, 1977) reported that even though there are a large number of articles describing the positive effects of empathy on outcome, the results remain equivocal.

Despite the remaining controversy regarding empathy and its effect on counseling, it continues to be taught not only to counselors/therapists and trainees, but to nurses, teachers, and other health care professionals (Gladstein and Michaels, 1985). In addition, textbooks continue to assume the importance of empathy in counseling. Gladstein (1983) suggests that empathy continues to be viewed as an important construct due to the mixed research findings. He explains the need to study the multiple aspects of empathy through the use of both cognitive and affective measures. He encourages researchers to specify the type of empathy being studied and the instruments to be used to measure those types (Gladstein, 1977). This may help in clarifying the confusion that still remains.
As previously stated, empathy has typically been viewed as being a unidimensional construct, with researchers examining only a part or parts of the totality (Gladstein, 1983). Over its long history it has been defined as being either a cognitive, intellectual reaction of an individual to the experience of another, or its emotional facets have been emphasized, along with altruistic behaviors. There has been renewed interest in this concept in recent years, with the desire to better understand and clarify its meanings. The unitary and simplistic view that empathy is either cognitive or affective is beginning to be rejected for a more complex definition, including multidimensional characteristics which interact with each other (Greenberg & Goldman, 1988; Barrett - Lennard, 1981; Chandler, 1976; Davis, 1980; Feshback, 1980; Gladstein, 1983; Hoffman, 1977a; Rogers, 1975; & Stewart, 1956).

Although Davis (1979, 1983) broadly defines empathy in terms of reactions of the observer resulting from the experience of another, he agrees with a multidimensional approach. Empathy, according to Davis, consists of four components, two cognitive and two affective. Although they are related with regard to responsivity to others, they are four distinct and independent types. Perspective-taking empathy is the tendency to cognitively take the psychological viewpoint of another. The second form of
cognitive empathy, fantasy, is a condition in which a person imagines himself/herself into the feelings and behaviors of a fictitious person. Empathic concern is an affective form of empathy in which an observer feels concern for the experience of another. In contrast, personal distress empathy, the other form of affective empathy, results from "self-oriented" feelings that are experienced as anxiety and unease, due to unfortunate experiences of another. Davis (1980) points out that the components of empathy must be viewed individually so that the independent, as well as the interactive effects, can be evaluated.

Another shortcoming in the study of therapeutic empathy has been in the overemphasis on counselor empathy. What has not been addressed is the importance of empathy in the client and its impact on counseling. Typically, research has focused on the contribution of counselor traits to the therapeutic process, without regard for counselor-client joint variables (Tosi, 1970). Horvath and Greenberg (1986) point out that when examining the process of therapy, a model that suggests that the therapist is the primary influencing variable is an incomplete view of the process. They suggest that the inclusion of therapist and client variables would obviously account for more of the change in therapy. Leary (1955) has explained that "interpersonal relationships can never be fully understood unless both
sides of the interaction are studied. When only one side, the self, or subject side, is studied or isolated, there is a risk of distortion" (p. 156).

Studies in the empathy literature are beginning to examine the counselor-client relationship. Characteristics of both counselor and client are being looked at for their influence on empathy (Goldstein & Michaels, 1985). The trait of empathy, however, has not been examined directly as a characteristic of the client in order to determine its effect on the process or outcome of therapy.

There are individual differences in empathy (Davis, 1980). It is not known what effect client empathy has on the therapeutic relationship. It is quite possible that client empathy impacts the therapeutic process. Presumably, highly empathic clients will be better able to develop a relationship in therapy. On the other hand, the lack of empathy in a client may have a negative impact on the relationship, and ultimately the process and outcome of therapy.

**Need For The Study**

The importance of further pursuing the study of empathy has been discussed by several authors in terms of its relevance to the quality of life and therapeutically. Feshbach (1980) notes that empathy affects human bonding and personal intimacy. According to Clark (1980), the lack of
empathy adds to social tension, conflict and violence. It has been determined that there is a relationship between aggression and empathy. It appears that empathy may hinder and decrease aggression (Feshbach & Feshbach, 1969; & Feshbach & Feshbach, 1981). Role theorists speak also of the importance of empathy, with regard to relationships. If empathy is impaired, the development of relationships is hindered (Grief & Hogan, 1973). Mead, as early as 1934, realized that perspective-taking (a cognitive form of empathy) causes people to be more socially sensitive and helps in the development of self-concept and self control, so that relationships are more easily developed. Mead goes further to say that perspective taking is crucial in social and moral development. Cottrell and Dymond (1949) contend that empathy is basic to all social interaction. Baier (1958) speaks of empathy from a moral point of view and its importance with regard to considering consequences of one's behaviors and the welfare of others.

It is evident from the literature that empathy is a vital part of relationships, allowing people the ability to be sensitive and responsive to others, thus making it an important concept to understand. Given the lack of research that examines the multidimensional components and client contribution of empathy, as well as the mixed research findings regarding therapeutic empathy, continued research
is needed for clarification of these issues. In addition, empathy research could be improved by the use of a generic and process oriented measure. Outcome has been defined very specifically and differently across studies, making comparisons difficult. Also, the outcome of counseling is often examined, without regard for the stages of the process. Examining the development of the working alliance is a method of looking at the process of therapy, using a generic variable that is common to all psychotherapies (Bordin, 1976, 1979, 1980, 1985; & Horvath & Greenberg, 1986). It appears to be a key ingredient in therapeutic outcome success, as well.

The concept of the working alliance has been in existence a long time and has gained renewed interest for its importance in the therapeutic relationship. The working alliance stems from the psychoanalytic viewpoint and is an alliance that occurs between the counselor and the client's reasonable side, aside from the transference the client develops (Gelso & Carter, 1985). It is this aspect of the relationship, according to these authors, that makes it possible for the counselor and client to work through negative transference and feelings and continue to proceed in a cooperative relationship.

The importance of this alliance is supported by many authors. Bordin (1976) and Greenson (1967) contend that the
working alliance, rather than the type of therapy, may be the key to client change in all counseling/psychotherapy, and that the strength of that alliance strongly determines how effective counseling is. Research supports these authors, and adds to this the importance of the alliance developing in the early sessions in order for treatment to be successful (Hartley & Strupp, 1982; Luborsky et al, 1983; & Morgan et al., 1982). In addition, it was found that the beginning counseling sessions are important in the development of the alliance, because its strength does not significantly change beyond that point. The assessment of the working alliance appears to be an effective way of generically investigating the process of therapy at different points in time, as well as predicting the outcome of therapy early in the treatment process (Horvath & Greenberg, 1986). Horvath and Greenberg have developed the Working Alliance Inventory for this purpose and have included a counselor and client form so that the perceptions of each can be examined. This allows for client-counselor joint variables to be assessed.

In addition to being a generic process and outcome measure of therapy, additional information can be gained by examining the relationship between empathy and the working alliance. Although it is known that counselors and clients vary in their ability to form and cultivate working
alliances (Gelso & Carter, 1985), it is not understood what factors account for these abilities. According to Gelso and Carter, "a growing edge of counseling research is to determine the client and counselor factors that constitute these abilities" (p. 168). They theorize that "the client-centered conditions of empathy, genuineness, and respect are probably central to developing the alliance, and it may well be that these conditions have their primary impact through the alliance they foster" (p. 163). It is not clear what empathy's role is in creating positive effects therapeutically (Gladstein, 1983). Perhaps the working alliance has its primary impact on outcome, and empathy's impact is through the working alliance (Bordin, 1979; & Hansen, Stevic & Warner, 1982) in a recursive sequence.

An appropriate population to research with regard to empathy and the working alliance is clients with chronic pain. This population has not been researched specifically in relationship to this trait, although many of them manifest characteristics that would indicate a lack of it. Chronic pain, according to Philips (1988), causes growing helplessness, depression, fear of facing the implications, and reduced capacities. Behavioral avoidance develops. These individuals become increasingly isolated, and there is disruption of intimacy and relationships. Sternbach (1974) and Fordyce (1976) reported that individuals with chronic
pain often display neurotic characteristics, hypochondriasis and hysteria, and depression, so that they are inclined to be self-absorbed and narcissistically egocentric (Webb, McNamara, & Rodgers, 1981).

It could be concluded that given their tendencies toward narcissism, depression, and relationship problems, many chronic pain clients are lacking in the ability to cognitively take the perspective of and affectively feel the emotions of others. One might also expect these individuals to have difficulty in a therapeutic relationship, (Wickramasekera, 1989; Greenson, 1967; & Zetzel, 1956), particularly the bonding aspect, which requires caring, trust, and understanding on the part of the client (Bordin, 1976, 1979). As previously mentioned, relationships have been disrupted, there have been multiple interventions that have been impotent (Holzman & Turk, 1986), and chronic pain clients are often hypersensitive to being judged regarding their situation (Wickramasekera, 1989). Consequently, it may be easier for these individuals to develop the goals and tasks aspects of the alliance, which requires agreeing on relevant goals and reasonable tasks (Bordin, 1979, 1976).

The continued study and understanding of chronic pain clients is of importance because of the consequences to the individual and his/her family (depression, helplessness, reduced capacities, financial strain, isolation, disruption
of relationships), but also to society. There is lost time from employment, the expense of litigation, medical expenses, as well as disability compensation (Holzman & Turk, 1986). These individuals continuously and inappropriately seek medical attention and are a massive drain on the medical resources of this country (Wickramasekera, 1989).

**Purpose of the Study**

There has been no previous investigation to describe the trait empathy in the chronic pain population. Neither has research been conducted to determine the existence of a relationship between client empathy and the therapeutic process, particularly, the development of the working alliance. Most research has focused on unidimensional measures of counselor empathy and the outcome of therapy, and has produced equivocal results.

The purpose of this study was to investigate the impact of the trait empathy on the development of the working alliance and an outcome measure by:

1. Exploring the trait of empathy in a population of clients with chronic pain and their counselors;
2. Using a multidimensional approach to trait empathy;
3. Exploring the working alliances developed between clients and their counselors, using a measure of both client and counselor perception of the working alliance;
4. Examining the impact of client and counselor trait empathy on the development of the working alliance and an outcome measure;
5. Examining the impact of the development of the working alliance on an outcome measure.

Research Questions

Descriptive Questions
1. What is the nature of trait empathy (affective and cognitive) and the working alliances developed in a sample population of chronic pain clients?
2. What is the nature of trait empathy (affective and cognitive) and the working alliances developed in the counselors of these clients?
3. Are there significant differences in client empathy, working alliance, and outcome scores as a result of gender, age, marital status, education or race?

Two Way Regression Questions
4. Are there correlations between the client or counselor empathy types and the different aspects of the working alliance, as perceived by the client?
5. Are there correlations between the client or counselor empathy types and the different aspects of the working alliance, as perceived by the counselor?
6. Are there correlations between third and fifth week client working alliances?
7. Are there correlations between the client working alliance components and the counselor working alliance components?
8. Are there correlations between the different components of the client or counselor working alliance and the client outcome scores?
9. Are there correlations between the different components of the client or counselor working alliance and the counselor outcome scores?
10. Is there general agreement between clients and counselors regarding their perceptions of the outcome of counseling?
11. Are there correlations between client empathy and client or counselor outcome? Are there correlations between counselor empathy and client or counselor outcome?

Pathanalysis Questions (Appendix A)
12. Is there a relationship between client/counselor trait empathy (independently and together) and the
development of the working alliance, as perceived by the client/counselor?

a. Is the impact of trait empathy on the working alliance dependent on the type of empathy?

b. Is this impact more through the bonding, goals, or tasks aspect of the working alliance?

c. Does empathy have its impact more through the third or fifth session of therapy?

d. Is this impact more through client or counselor trait empathy, or an interaction effect of the two?

e. Is this impact more dependent on client or counselor perception of the working alliance?

13. Is the impact of trait empathy more through the outcome measure, rather than the working alliance?

a. Is this impact more through client or counselor empathy or an interaction effect of the two?

b. Is this impact dependent on the type of empathy?

14. Is there a relationship between the working alliance and the success of outcome?

a. Do different aspects of the working alliance (bonds, goals, tasks) have more impact on the outcome measure?

b. Is the impact of the development of the working alliance more through the third or fifth session?
c. Is this impact more through client or counselor perception of the working alliance?

Definition of Terms

1. Chronic pain: For purposes of this study, chronic pain will refer to the condition in which the original tissue damage has healed, but the pain persists. This implies the existence of psychological factors mediating the pain experience. Pain can be experienced or elevated due to anxiety, depression, tension, and anger, and can be provoked by a situation independent of the pain (Philips, 1988). Previous experience, present events, consequences of the pain, cultural patterning and training (Fordyce, 1976), and personality factors (Sternbach, 1974), can provoke and mediate the pain experience.

2. Client: For purposes of this study, client will refer to individuals who are experiencing chronic pain due to an industrial injury, are presently unable to work as a result of that pain, and are attending a rehabilitation program through the Industrial Commission, Rehabilitation Division.

3. Counselor: For purposes of this study, counselor will refer to those individuals at the Industrial Commission, Rehabilitations Division, who are in a therapeutic counseling relationship with chronic pain clients.
4. **Empathy**: A multidimensional construct having affective and cognitive components, empathy begins developing in early childhood (Feshbach, 1980). Davis (1979) has broadly defined empathy as reactions of the observer resulting from the experiences of another. Although there are probably many other possible reactions to others, he has suggested four (two cognitive, two affective) that are related to the broad definition of empathy, but are distinct and independent components. **Perspective-taking empathy** is the tendency to cognitively take the psychological viewpoint of another. The other form of cognitive empathy, **fantasy**, is a condition in which a person imagines himself/herself into the feelings and behaviors of a fictitious person. **Empathic concern** is an affective form of empathy in which an observer feels concern for the experiences of another. **Personal distress empathy**, also a form of affective empathy, results from "self-oriented" feelings that are experienced as anxiety and unease, resulting from the unfortunate experiences of another. For purposes of this study, these four empathy types will be measured by the Interpersonal Reactivity Index (Davis, 1980).

5. **Outcome**: For purposes of this study, outcome will refer to the assessment by the counselor/client of the accomplishment of the goals of individual counseling
sessions. The ultimate goal is moving the client closer to returning to work, by dealing with the emotional and personal problems hindering their return. Outcome is measured using a rating system of excellent, satisfactory, minimal, and no progress made toward the goals of counseling.

6. Transference: A mechanism by which a client is reacting to the counselor as if he/she was a significant person from his/her past. The significant person is typically a mother, father, and sometimes a sibling. The transference is positive if the feelings transferred onto the counselor are warm and caring. If the feelings being transferred are of a hostile nature, the transference is said to be negative (Gelso & Carter, 1985).

7. Working Alliance: The working alliance stems from psychoanalytic theory and is the process of the client's reasonable side aligning with the counselor's working side, allowing for negative transference and feelings toward the counselor, without disruption of counseling (Gelso & Carter, 1985). Bordin (1976, 1979) has suggested that it is the strength of the working alliance that is the basic therapeutic force common across counseling/psychotherapies. He has conceptualized it as consisting of three components; goals, tasks, and bonding. In a strong alliance the counselor and the client will have a sense of mutual
agreement about the goals, and the client will feel that the goals are relevant to him/her. The counselor and client will also agree that the tasks of each are reasonable and relevant to the goals. Finally, both parties will experience a bond existing between them, characterized by mutual trust, liking, understanding and caring. The client's perception of the working alliance is believed to be the more significant of the two measures (Bordin, 1976). For purposes of this study, the working alliance and its components (goals, tasks, and bonds) will be measured using the Working Alliance Inventory (Horvath & Greenberg, 1986).

Limitations of the Study

Several limitations of this study should be mentioned at the outset. First, the instruments utilized (the Working Alliance Inventory and the Interpersonal Reactivity Index) are self-report measures that do not contain statistically derived validity scales for the detection of intentional misrepresentation or mistakes. Items can be misunderstood or distorted by subjects wishing to present themselves falsely. Therefore, caution was taken to assure subjects of the confidentiality of inventory results, as well as to explain the purpose for utilizing the instruments.

Second, due to time constraints, counselors were not able to complete the therapist form of the Working Alliance
Inventory on all of their clients. Consequently, they did a sample of the total sample population. This limited conclusions that could be drawn based on the therapist form of the Working Alliance Inventory. The small sample size reduced the power of the findings and increased the chances for error. Similarly, conclusions based on a counselor sample size of eight are tentative, at best.

Third, ideally, these instruments should be administered in the therapeutic environment. Since this was not allowed in the present study, due to client time constraints, participating subjects were asked to complete the forms privately in their dormitory room in the evening. Consequently, there was less control of the inventory administration, so that any questions regarding inventory items and inventory instructions could not be immediately addressed. Very specific instructions were given by this examiner to participating subjects in order to minimize these problems.

Fourth, the majority of the population studied was white, married, had at least a high school education, and ranged in age from 34 - 46. Approximately 50% of the total population of chronic pain clients participated in this study. Therefore, generalizations cannot be made to all individuals with chronic pain who have been injured on the job.
Finally, the counselor subjects who participated in this study did not demonstrate significant variability in empathy scores. This made it difficult statistically to demonstrate a relationship between counselor empathy scores and any other variable.
CHAPTER II
REVIEW OF LITERATURE

This chapter contains a review of the literature that is presented in four sections. First, there is a review of the empathy literature which includes a historical overview, empathy from the perspective of three psychological areas, conceptualizations of empathy, and trends in empathy research.

The second section contains a review of the literature on the working alliance. Other aspects of the relationship in counseling/psychotherapy are discussed in the context of the working alliance, as are historical considerations and the significance of this alliance across therapies.

The third section deals with the problems of chronic pain in individuals with no underlying organic pathology. This population is described, the long-term effects of pain are presented, and the multidisciplinary approach to treatment is discussed.

The fourth section contains a selective discussion of brief therapy. This includes the theoretical differences between long- and short-term therapy, maximizing the effect
of short-term contact, and a review of cognitive directive therapy.

**Empathy**

This section includes a review of the empathy literature from three psychological areas. There is a focus on the counseling/psychotherapy literature that includes current conceptualizations of empathy and trends in research.

**Historical Conceptualizations of Empathy**

The notion of empathy has been in existence for over 200 years (Davis, 1980). From its inception, there have been several conceptualizations of this elusive concept. Smith (1979) and Spencer (1984) recognized cognitive and affective components to empathy, a view that would not be held again until much later. Empathy was defined differently by Boring in 1929, when it was viewed as a person's emotional response to an object, rather than another person. It was used to describe the feelings one had when viewing art or listening to music (Hackney, 1978).

In 1897, Lipps spoke of a similar view of empathy. His term Einfühlung, or "feeling oneself into," was later translated in 1910 by Tichener to mean empathy. Initially, he spoke of empathy in terms of projection, identification,
and inner imitation of a person toward an object, nature, music, or art.

Several years later (1926, 1935), Lipps expanded his conceptualization of empathy to be the response of one person to another, in which the experience of one is shared and understood by the another. Although he continued to include the notions of projection and identification in his description, he focused more on the inner imitation aspect. He felt that imitation of the target object or person produced inner cues which lead to increased understanding of an object or person, and a shared feeling with another person. This is a view more similar to empathy's original meaning, a view that was later shared by Buber (1948) and Koestler (1949).

In 1934, Mead also spoke of the cognitive and affective aspects of empathy, but altered the affective focus to a cognitive one. He defined empathy as an understanding, not a perception, of an individual's emotional reaction and emphasized the importance of the environment, or context. In addition, Mead abandoned the notion of blended identities for the notion of differentiation between self and other. In empathy, the individual temporarily takes the perspective of another in order to better understand him/her, an ability he believed to be related to intelligence.
Theordore Reik's (1949) definition of the empathic process demonstrates this momentary perspective-taking conceptualization. In identification, individuals allow themselves to become absorbed in another's experiences, a projection of self into another. Incorporation involves the introjection of the other individual into self. In the process of reverberation, the experiences of both interact, causing an appreciation of the other individual. In the final phase, detachment, the identification that has occurred is deliberately broken, so that objective analysis can occur (Katz, 1963, p. 41).

Several authors have shared this view of an emphasis on cognitive perspective-taking (Dymond, 1949; Coutu, 1951; Katz, 1963; & Bachrach, 1976). Dymond believed that emotional detachment was necessary in order for accurate understanding and prediction of another's feelings and thoughts to occur. Rogers (1957), Cline and Richards (1960), Hatch (1962), Kerr and Speroff (1951), & Mahoney (1960) also followed this line of thinking and viewed empathy in terms of predictive accuracy.

Other authors have defined empathy from an affective perspective. Kohler (1929, 1947), and later Stotland (1969; & Stotland, et.al., 1971), argued that empathy existed when affect was shared by the observer. The recognition of another's feelings was not sufficient. In addition to the
focus on emotional response, no distinction was made between self and other by these and several other authors (Deutsch, F. & Madler, R.A., 1975; Freud, 1961; Ferreira, 1961; Fromm-Reichman, 1950; & Sullivan, 1940, 1953). The accuracy of one's perception was not an issue, so that empathy was explainable in terms of identification and projection (Bandura & Coalters, 1963).

Stotland, Sherman & Shaver's (1971) notion of empathy suggested that opposite emotions could exist. They gave the example that a sadist may experience joy at another's pain. They defined opposite emotions as contrast empathy and conditions where the emotions are similar as simple empathy. Other authors have made this distinction, i.e., Heider's (1958) concordant and discordant emotional states and Berger's (1962) discussion of envy and sadism.

**Perspectives of Empathy**

Empathy has been viewed and studied from the perspective of three areas in psychology: Counseling/psychotherapy; developmental psychology; and social psychology. There has been minimal communication or overlap among these areas. Each has its own empathy literature (Gladstein, 1983). As a result, according to Gladstein, each psychological area has its own perspective on empathy and has created its own inventories for measuring it.
Social Psychology

Empathy in social psychology was greatly influenced by the early works of Mead (1934) and Cottrell (1942). Mead contended that the ability of an individual to take another's perspective was learned from parents and others in the environment. Cottrell drew upon Mead's ideas to develop a theory of human social interaction in which he described empathy as the reproduction of another's acts. Cottrell's work influenced Dymond (1949), who subsequently developed the first role-taking empathy measure.

The Rating Test is a cognitive, predictive measure, in which the ability of an individual to predict another's thoughts is assessed. Kerr and Speroff's (1951) Empathy Test was also patterned after a prediction approach. Other role-taking approaches that later developed were Hogan's (1969) Empathy Scale, assessing cognitive empathy, and Emotional Empathic Tendency (Mehrabian & Epstein, 1972), which is a trait, affective role-taking measure of empathy. This inventory assesses whether or not an individual perceives that he/she reacts emotionally to another's emotion.

Much of the focus in social psychology has been on the cognitive role-taking aspects of empathy, with the earlier measures being of questionable validity and reliability. Davis' (1980) Interpersonal Reactivity Index is a
multidimensional measure of empathy developed for the assessment of cognitive and affective empathy.

Affective empathy, or affective contagion, as it is often called in social psychology, refers to an individual's emotional response to another's actual or anticipated condition and requires that the individual react with the same emotion as the person being observed (Rushton, 1980). It does not require cognition. The primary interest with regard to emotional empathy in social psychology has been its effect on prosocial or altruistic behavior.

McDougall (1908) pointed out that even though an individual may experience emotional contagion in observing another, the reaction may or may not lead to helping behavior. Allport (1924) contended that the response to another's unfortunate experience was motivated by a desire to remove one's own unpleasant feeling. Batson, Duncan, Ackerman, Buckley, and Birch (1981) demonstrated that empathic responses may be altruistic or egocentric in nature. Hoffman (1977) concluded that helping behaviors were dependent on the circumstances, such as, expectancies, group dynamics, and egotistic motives. Rushton (1980) suggested the existence of a relationship among the variables empathy, prosocial behavior, and norms. If an individual has internalized norms to help others and
experiences emotional contagion for another person who is distressed, helping behavior will probably result.

Various inventories have been developed to measure emotional contagion. Physiological measures and traditional social psychology experimental approaches have typically been used (Gladstein, 1983).

**Developmental Psychology**

The developmental literature has focused on when age-related changes take place in the cognitive and affective role-taking abilities of children. Cognitive role-taking is defined as an individual's ability to perceive another's thoughts. Affective role-taking is the ability to perceive feelings.

The developmental cognitive empathy literature has been greatly influenced by the work of Piaget. Piaget (1967) did not speak of empathy per se, but spoke of the concept of egocentrism. He contended that a child is incapable of taking another's point of view until the age of 7. At this time, egocentrism diminishes, and by age 11-12, it is replaced by the ability to understand another's point of view. Piaget's ideas became the basis for controversy regarding age-related changes that take place in children's cognitive and affective role-taking abilities.

Role-taking has typically been measured by showing children pictures of incongruous facial expressions and
asking them how the child felt (Burns & Cavey, 1957; Feffer & Gourevitch, 1960; & Borke, 1971). Generally, the literature suggests that the ability to take another's perspective increases with age, although this remains a controversial area (Gladstein, 1983).

The concept of emotional contagion has been less controversial. Emotional contagion, or affective empathy, is defined as it was in the social literature, that is, the individual experiences the same emotion as another. The most frequently used measure of affective empathy was created by Feshbach and Roe (1968). The Affective Situations Test presents children with pictures, slides, or videotapes and asks them to respond with how they are feeling.

Helping behaviors have also been studied in the developmental area, and have produced inconclusive findings (Byrant, 1982; & Hoffman, 1977). Piaget (1967) believed that an infant has the raw materials that will later develop into moral behavior, and that one is capable of altruism within the first year of life. Bryant and Hoffman concluded three things from their review of the developmental literature: 1) young children respond empathically, but may not act appropriately because of cognitive limitations; 2) children and adults seem to have a decrease in empathic
arousal after helping another; and 3) children model helping behaviors.

**Counseling/Psychotherapy**

Empathy has also been defined and researched in the context of the therapeutic relationship in counseling, beginning in the 1940's with Carl Roger's Person-centered therapy. His theory focused on the attitudes of the counselor toward the client. Rogers contended that if the conditions of congruence, positive regard, and empathic understanding were present in the counselor, then changes in the client (a tendency toward self-actualization) would occur. His primary interest has been how and why individuals change in therapy. Rogers believed that these conditions were not only necessary to client growth, but they were sufficient (Rogers & Meador, 1979).

Rogers (1979) has defined congruence, or genuineness, as the moment-to-moment experiencing of the client, in which the counselor is being real in the relationship. Positive regard refers to the genuine acceptance and caring for the client in an unconditional, nonjudgmental way. Rogers defined empathy more in cognitive terms. Empathy is the accurate understanding and immersion of the counselor into the client's world. The communication of this understanding assists the client to understand himself/herself. Further,
the experience of feeling understood allows for personality change to occur (Meador & Rogers, 1984).

Truax (1961) also had an interest in therapeutic empathy, but modified the definition of the concept. This modification made it easier to research, however, the original meaning as conceptualized by Rogers was altered. Like Rogers, Truax viewed empathy in cognitive terms. He believed that it was undesirable for the therapist to feel the same emotions as his/her client. The point where Truax and Rogers differed was in Truax's strong emphasis on the communication of empathy to the client.

Truax and one of his colleagues, Carkhuff (Truax & Carkhuff, 1965), placed a strong emphasis on the observable skill of communication, and less on sensitivity to the client's feelings. Carkhuff (1971) continued this trend and focused on behaviors and the accurate communication of client affect by the therapist. Consequently, the issue of sensitivity to affect received minimal attention (Hackney, 1978), and the definition of therapeutic empathy has remained unclear.

Hackney (1978) examined the counseling empathy literature from 1958 to 1978 and reported his concern that there was a focus on the communication component of empathy. Barrett-Lennard (1981) shared this concern. This focus on communication spawned his theory of an empathy cycle, that
is, empathic resonance, (affective empathy), expressed empathy (the communication component), and received empathy (how this is received).

Keefe (1976, 1979) has had a strong influence in the social work area with his affective-cognitive-communicative model of empathy. In the beginning phase, empathizing, the empathizer perceives the feelings and thoughts of the other individual. This occurs in response to behavioral cues demonstrated by the individual. In the second phase of the process, these perceptions elicit cognitive and affective responses in the empathizer. The individual does no cognitive processing, such as stereotyping, value judgments, or hypothesizing, but, rather experiences the other individual's emotions. In the third phase, the empathizer distinguishes his/her feelings from those perceived to be the other's feelings. Ultimately, the empathizer accurately communicates feedback.

Empathy in the psychoanalytic literature received little attention until the 1960's (Shapiro, 1984). Although Freud (1921) referred to empathy, he did not consider it to be central to psychoanalysis. The concept of empathy has had a long history in psychoanalysis, but its value and implications were appreciated by few (Grotstein, 1984). Sullivan (1953, 1955, & 1956), Winnicott (1958, 1965), & Reik (1949) were exceptions to this rule. Grotstein was
interested in concepts that he called consensual validation and participant observation. Winnicott's interest was with a mother's concern for and preoccupation with her baby. Reik, as defined earlier, spoke of empathy in terms of a process consisting of identification, incorporation, reverberation, and detachment.

It was Kohut (1971, 1977) who recognized that empathy was critical in psychoanalytic theory and technique, as well as in the growth and development of babies. He viewed it as a way of gathering data, understanding clients, and making inferences. The therapist is responsive and interprets the individual's experience, thus communicating an understanding of the person.

An ongoing debate in the psychoanalytic empathy literature has been concern over definition. It has been viewed by some as a "mystical" concept that cannot be scientifically studied. Others have taken a scientific view (Buie, 1984). Empathy has had several meanings that have fallen into opposing clusters. It has been referred to as the analyst's passive, receptive, and nurturant side, as well as the active and intrusive side (Spencer, 1984). In addition, Spencer says that empathy is considered by some analysts to be an important adjunct in therapy. Empathy has also been defined as being the central, defining characteristic of therapy.
Empathy Research in Counseling/Psychotherapy

A great deal of research has been generated as a result of Roger's theory of empathy. Even so, there is little that is known about empathy and its role in counseling (Gladstein et al., 1987). Much of the early research regarding empathy and counseling outcomes was based on Roger's theory, using the Accurate Empathy Scale. The initial research was very promising. There is some evidence to support the importance of Roger's conditions. However, research conducted later by persons not directly involved with the theory was less impressive and inconclusive.

Halkides (1958), Truax and Carkhuff (1967), and Truax and Mitchell (1971) demonstrated that the facilitative conditions positively affected the outcome of therapy. In fact, several investigations by Truax in the early and mid 1960s demonstrated a relationship between therapist empathy and outcome (Goldstein & Michaels, 1985). Krumboltz (1966) agreed that empathy was important in therapy, however, it was not a sufficient condition for client growth. Comparisons done using psychodynamic, behavioristic, and humanistic treatments showed therapist empathy to have impact across therapies (Fischer, Pavez, Kikert, Hubbard, & Gyrsen, 1975; & Treaemeo-Plaetz, 1980). There is also support for the importance of empathy in time-limited group
psychotherapy (Truax, Wargo, & Silber, 1966) and rational restructuring (Smith, 1979).

Other researchers were more skeptical about these results. Bergin (1971), Meltzoff and Kornreich (1970), Luborsky et al. (1971) and Lambert, et al. (1978), had conceptual and methodological concerns, as well as concerns about the reliability and validity of the empathy measures. Sloane et al. (1975) looked at analytical and behavioral therapies and did not find that the facilitative conditions predicted outcome.

In his 1970 review of the literature, Gladstein found six empirical studies dealing with empathy outcomes. The findings were mixed. Some studies demonstrated positive results with empathy and outcome, others showed no correlation between the two.

In a 1977 review of literature, Gladstein referred to seven empirically based studies. One study demonstrated positive effects of empathy (Altman, 1973), and one showed negative results (Shelton, 1969). The five remaining studies (Anthony, 1971; Banks, 1972; Irwin, 1973; Athay, 1973; & Cabush & Edwards, 1975), reported both positive effects and no effects due to empathy. These results were apparently dependent on the type of empathy being measured, as well as the outcome being examined (Gladstein, 1977).
Barrett-Lennard (1981) referred to research in which the clients' perceptions of empathy positively affected counseling outcomes. Bordin (1979), instead of focusing on outcome, examined the effect of empathy on the working alliance. He found the effect to be positive and noted that behavior therapy had less impact.

Global relationships between therapist empathy and therapeutic outcome have not been shown. A more accurate conclusion has been posited by Mitchell et al. (1977):

The recent evidence, although equivocal, does seem to suggest that empathy, warmth and genuineness are related in some way to client change, but that their potency and generalizability are not as great as once thought (p.481).

Understanding the Confusion

The reasons for these mixed research findings regarding the significance of empathy in a therapeutic context may be explained several ways and demonstrates the complexity of this issue. Empathy has been defined in different ways (Gladstein, 1983; & Gladstein, et al., 1987). Gladstein and his associates cite 18 different kinds of empathy. Some theorists and researchers have focused on the cognitive aspects, some have focused on the affective aspects, and still others have combined the two (Gladstein, 1977). More specifically, empathy has been referred to as raw identification (unconscious emotional connections), resonation (the empathizer responding emotionally to the
individual), and role-taking (cognitive understanding). Some theorists have defined empathy in terms of types (Davis, 1980), while others have emphasized the process or phases of empathy (Barrett-Lennard, 1981).

The three major fields of study of empathy, counseling/psychotherapy, social and developmental psychology have produced different definitions of this construct, as well as empathy measures to examine the differing perspectives (Gladstein, 1983; Gladstein et al., 1987). Gladstein points out that there have been objective, subjective, and predictive measures which tap into different aspects of the same construct, or may not be measuring empathy at all.

Finally, different studies have used different outcome or process measures. Some have examined counseling, while others have studied empathy with regard to psychotherapy. It is no wonder that empathy outcome studies have shown different results.

**The Assessment of Empathy**

Numerous measures of empathy have been developed, most having low order correlations with each other, again demonstrating the confusion and complexity that exists (Goldstein & Michaels, 1985). Empathy has been assessed primarily by the use of three types of inventories.
(Gladstein, 1977). Subjective inventories require the counselor and client to respond regarding their perception of the counseling session. The Truax Relationship Inventory (Truax & Carkhuff, 1967) and the Barrett-Lennard Relationship Inventory (Barrett-Lennard, 1962) are frequently used subjective inventories.

Objective measures obtain an external judgment of the session, or the therapist takes a standardized inventory. Examples of this type of instrument are Truax's Accurate Empathy Scale (1972), Carkhuff's Empathic Understanding Scale (1969), and the Affective Sensitivity Scale (Kagan & Krathwohl, 1967).

Predictive inventories are quite different from the subjective or objective measures. One type assesses an individual's ability to predict how another might react under certain conditions. Predictive Empathy (Katz, 1962) is an example of this type of inventory. In the second method, the subject answers questions regarding himself/herself. These inventories predict how a highly empathic individual will react under certain circumstances. Hogan's Empathy Scale (Hogan, 1969) and Davis' Interpersonal Reactivity Index (Davis, 1980), are examples of predictive inventories.
Multidimensional Conceptualizations of Empathy

In recent years there has been renewed interest in the concept of empathy. The unitary view that empathy is either cognitive or affective is being rejected for a more complex definition including multidimensional characteristics which interact with each other (Greenberg & Goldman, 1988; Davis, 1980; Feshbach, 1980; & Hoffman, 1977). Affective and cognitive empathy appear to have little relationship to each other; they are separate domains (Ham, 1987).

Keefe (1976, 1979) uses a comprehensive model of empathy which includes affective, cognitive and communication components. He speaks of empathy in terms of phases. In the first phase of the process, the observer is aware of the feelings and thoughts of another. This occurs as a result of behavioral cues given off by another. In the next step, the observer reacts both cognitively and affectively as a result of the other's feelings and thoughts. The observer reacts to the individual's affect, experiencing it temporarily. The third phase involves detachment (Reik, 1949) and decoding (Danish & Kagan, 1971). The observer attempts to determine which feelings are his/her own and which belong to the other person. Finally, the observer accurately communicates this information back.

There are two major multidimensional developmental models of empathy, one by Martin Hoffman, the other by Norma
Feshbach. Hoffman (1982) holds the view that it is not necessary for the observer to experience the identical feeling of another in order for empathy to occur. In addition, although he believes cognitive processes to be important, he feels that the affective component is the core of what he defines as empathy. He also focuses on empathic distress and its consequence, altruistic behavior.

Hoffman speaks of six modes of empathic arousal that generally follow a developmental course. In the "reactive newborn cry" mode, the newborn cries in response to hearing another cry. The response may occur because the child thinks the cry to be his/her own, or the child may be remembering past feelings of distress and is reacting.

Later in the infant's development, the second mode, classical conditioning, develops. This occurs when the child experiences distress at the same time he/she observes the distress of another. Later, similar distress cues in others produce an emotional reaction in the child. In the third mode, the child reacts to another's distress as a result of his/her own painful memories. However, the child's reaction need not occur simultaneously with the other person.

In the fourth mode of arousal, motor mimicry, the child imitates behavioral cues of the other, which assists him/her in experiencing similar feelings. This process of motor
mimicry may occur in the first few months of a child's life (Barrera & Maurer, 1981). In the fifth mode, symbolic association, the child has developed to the point of understanding symbolic cues, so that the description of an event will cause an empathic response.

The final mode of empathic arousal Hoffman (1982) called role-taking. This requires cognitive maturation. The individual puts himself/herself into another's place, causing an association to occur of past events and feelings. The same feelings are then elicited in the person. Hoffman does not consider this cognitive component to be a separate form of empathy, rather, it is a means to the affective response.

Hoffman's (1982) first mode of empathic response occurs only in infancy, and the last five modes are demonstrated by adults, as well as children. The role-taking ability is only demonstrated by adults. Once the modes are developed, which mode or combination of modes will be used, is determined by the situation and existing stimuli.

In her multidimensional developmental model, Feshbach (1980) speaks of empathy as having cognitive and affective components, in which another person's experience is vicariously shared to some degree and in some way. The psychological reality of another is experienced internally by the observer, and can be conceptualized into three
components. In the first component, a child is able to discriminate the affective states of another, which requires cognitive skill. This differs from Hoffman's (1982) point of view that the emotional response is already present at birth, or soon after, and the cognitive component mediates this.

Feshbach's (1980) second component is also cognitive in nature, and, requires a more advanced level of cognition in the developing child's ability to take the perspective of another person. The child is capable of looking at and understanding another's point of view, even if it differs from his/her own. Feshbach defines this separate form of empathy as role-taking. Again, she differs from Hoffman, who views role-taking as one possible mode to an empathic response.

She calls the third component, which is the affective aspect, emotional responsiveness. The emotion of another is actually experienced and shared (Feshbach, 1980). In order for constructive empathy to occur, however, there must be a separation between self and other. Otherwise, she says, there may be an intense empathic response, due to the blurring of those boundaries.

Although Feshbach (1980) and Hoffman (1982) conceptualized empathy developmentally, and as being primarily affective, there are several differences in their
views. Feshbach has focused on a range of emotional responses, rate of their acquisition, and individual differences. Hoffman, on the other hand, has been more interested in the effect of the empathic response on altruistic behavior. He has focused primarily on one emotional response that he calls sympathetic distress, which results from lack of separation between self and other. He believes that sympathetic distress causes altruistic behavior. In addition, these authors disagree on the issue of whether or not identical emotional responses are necessary for empathy to occur. Unlike Hoffman, Feshbach believes the two must be identical.

Barrett - Lennard (1981), stimulated by Roger's ideas, talks about empathy multidimensionally in what he refers to as an empathy cycle. The first type of empathy in this cycle is empathic resonance, and refers to the emotional response of the empathizer to the other individual. In the second type, expressed empathy, there is the communication of the emotional response. The received empathy stage refers to how the individual receives the response from the empathizer.

Davis (1979) has looked at empathy multidimensionally in terms of its four typologies. He broadly defines empathy as reactions of the observer resulting from the experiences of another. Empathy, according to Davis, consists of many
components, four of which he believes to be very important (two cognitive and two affective). Although these components are related with regard to responsivity to others, he views them to be distinct and independent types.

Perspective-taking empathy is the tendency to cognitively take the psychological viewpoint of another. The other form of cognitive empathy, fantasy, is a condition in which a person imagines himself/herself into the feelings and behaviors of a fictitious person.

Empathic concern is an affective form of empathy in which an observer feels concern for the experiences of another. Davis describes these feelings as being "other oriented," in which there is a differentiation between self and other. In contrast, personal distress empathy, the other form of affective empathy, results from "self-oriented" feelings that are experienced as anxiety and unease, due to unfortunate experiences of another.

Hoffman (1977) explains the existence of Davis' two affective components in developmental terms. That is, a child normally will develop from having a self-oriented to an other-oriented reaction, as a result of the development of perspective-taking. If this developmental process does not occur, the individual will not differentiate himself/herself from others and will experience personal distress empathy, according to Hoffman.
To further clarify the four empathy types, perspective-taking has been found to correlate statistically with better social functioning and self-esteem. It also correlates with sensitivity to others that is unselfish, and shows no significant relationship to intelligence. Fantasy scores, on the other hand, do not correlate with self-esteem or social functioning. Individuals scoring high on fantasy empathy demonstrate a tendency toward better verbal facility and vocabulary. Davis (1979) discovered slight positive correlations between fantasy empathy and sensitivity toward others and emotional reactivity.

In examining affective empathy (Davis, 1979), no significant relationships were found between empathic concern and interpersonal functioning. A negative correlation was evident with boastfulness and egotism, while a positive relationship was demonstrated with shyness and anxiety. No significant relationships were found with self-esteem or intelligence, and empathic concern was related to emotionality and non-selfish concern for others. Finally, there were substantial relationships between personal distress empathy and lower self-esteem, shyness and social anxiety, and poor interpersonal functioning in general. This form of empathy is also related to vulnerability, uncertainty, and fearfulness. It was not found to correlate with intelligence.
In terms of intercorrelations of the four empathy types (Davis, 1979), perspective-taking is positively related to empathic concern and negatively related to personal distress. Individuals who show high scores on empathic concern and personal distress have consistently reacted emotionally to others' distress and have shown helping behavior toward them. High perspective-taking individuals, conversely, do not demonstrate a relationship with these two areas, which is additional support for a multidimensional theory of empathy. Finally, significant correlations with the four Davis empathy types and general intelligence were not shown. Fantasy empathy was correlated with verbal intelligence (Davis, 1979).

Although the five models presented have the commonality of multidimensionality that includes cognitive and affective components, there are several theoretical differences. Hoffman (1982) and Feshbach's (1980) models emphasize the affective component of empathy as the core of the issue, whereas Keefe (1976, 1979) believes the cognitive component to be central. Keefe contends that a highly developed level of cognition is required to separate the feelings the observer shares with the other person from those which are his/hers alone.

Keefe's (1976) and Barrett-Lennard's (1981) models differ from the other three in their inclusion of the
communication of accurate understanding by the observer. Keefe further believes that self-other individuation is necessary for empathy to occur. Feshbach (1980) and Davis (1979) address the lack of individuation as producing a distressful empathic response. Hoffman goes on to say that this form of empathy, sympathetic distress, is important because it is the etiology of altruistic behavior. Finally, Keefe's and Barrett-Lennard's theories differ from Hoffman, Feshbach, and Davis in their presentation of a sequential process with the occurrence of each component of empathy (Goldstein & Michaels, 1985).

The Cognitive Component of Empathy

Cognitive empathy has been viewed in terms of decentration and perspective-taking ability. Other abilities that are not perspective-taking in nature are also receiving attention.

Decentration Theory

Piagetian theory has been important in the empathy literature because of his notions of egocentrism and centration. According to Piaget (1967) and cognitive developmental theory, egocentrism is a child's inability to differentiate between his/her own thoughts, feelings, and other functions, and those of others. Looft (1972) describes egocentrism as one being embedded in his/her own
Piaget defined centration as the act of being focused on one viewpoint or dimension.

Egocentrism and centration, according to Piaget (1967), are normal conditions of childhood, but should diminish significantly by age 7-12. This results from socialization with other people. The child begins to shift attention away from self to focus on other events. In doing so, he/she experiences dissonant information from the environment and must reexamine his/her beliefs as compared with the beliefs of others. In the normal developmental process, the child develops from a stage of being incapable of differentiating self from other, through a series of stages of better understanding the separateness of his/her own experiences and others. The adolescent continues this process of decentration. It is not until adulthood that the individual acquires the ability to look at another in terms of his/her reality, rather than self-reality (Shantz, 1983).

Piaget (1967) concluded that social sensitivity toward others, or empathy, is a developmental process, and that nonegocentric thought is necessary for empathy to develop. Several authors have supported Piaget's contention that cognitive empathy develops with age (Feshbach & Roe, 1968; Rothenburg, 1970; & Flapan, 1968). There is also support for Piaget's hypothesis that children initially view the world in an egocentric way, later developing perspective-
taking (Looft, 1972; Feffer & Goureевич, 1960; and Shantz, 1983).

A different perspective from the theories of non-egocentrism has been the interest of Hughes, Tingle, & Sarvin (1981) and Youniss (1975). They suggest that children naturally introspect about their own thoughts and feelings in trying to better understand others. Although this has been viewed as egocentric, it does seem to result in heightened understanding and empathic behavior, according to these authors. Whether or not empathy is related to centration and egocentrism, and what that relationship may be, remains controversial. It is generally agreed upon that perspective-taking is important to the understanding of cognitive empathy.

**Perspective-taking Empathy**

There are two major perspective-taking models. Flavell's model (Flavell, Botkin, Fry, Wright, & Jarvis, 1968) is a developmental and information processing model consisting of five steps an individual progresses through each time he/she takes the perspective of another.

Existence is the first stage and relates to Piaget's theory of the awareness that others may have different perspectives than our own. The second stage is need and refers to the understanding that taking another's perspective may be useful in a given situation. Prediction
is the process of analyzing what might be needed. Flavell's fourth stage is maintenance and refers to the ability to maintain the cognitions from the previous stage, which are in competition with the individual's own viewpoint. The final stage, application, involves using the understanding one has gained to accomplish a determined goal.

The other perspective-taking model has been proposed by Selman (Selman, 1980; & Selman & Bryune, 1974) and is a developmental explanation of this phenomenon. Level 0 occurs when a child is 3 to 7 years old. This level is referred to as egocentric or undifferentiated perspectives. During this time, a child knows of the existence of perspectives other than his/her own, but is not aware of what they are and cannot see relationships between them.

At level one the child becomes aware that his/her perspective may be the same or may differ from another, and is somewhat determined by the context of a situation. Children begin to care about others' perspectives, and they understand the concept of the subjectivity of people. Level two occurs at any point between 6 and 12 years old and is the child's recognition that another child may attempt to take his/her perspective, just as he/she does.

Level 3 develops from age 9 to 15 when mutual perspectives occur and the child is capable of recursive thinking. In addition, the child can view a situation in a
rather detached way. Selman labels this level third-person or mutual perspectives.

The fourth level, society or in-depth perspective, generally also occurs between the ages of 9 and 15. At this level the child has developed an understanding that different cultures or subgroups exist and may have their own set of values and views. Not only is the child aware of this, but he/she can now take the perspective of whole groups of people.

Non Perspective-taking Abilities

Although Shantz (1983) and Goldstein and Michaels (1985) view perspective-taking as being important in the understanding of cognitive empathy, they agree that it does not give a complete picture of cognitive empathy's etiology. Karinol (1982) takes a similar position. Like Hoffman, she is interested in the etiology of prosocial and altruistic behavior. She describes an information processing model that increases one's ability to understand another's emotional state. In this process, it is important initially that the child be aware of another's affect and need for help. This need awareness is not a result of perspective-taking. Rather, she believes that the child already knows what the affective or cognitive experience is, based on the
retrieval of past experience from exposure to a similar situation.

Karinol (1982) hypothesizes that this awareness of another's needs, like perspective-taking, is not a necessity in the production of empathy and altruistic behaviors. She speaks also of a concept called self-scheme. Markus (1977) has defined this term to be a "cognitive generalization about the self, derived from past experience, that organizes and guides the processing of self-related information" (p. 64). When a situation arises that requires one's assistance, past experiences and behaviors are activated (activated self-scheme) and the individual acts in a way that is consistent with past behavior.

Development of Cognitive Empathy

A common debate in the area of cognitive empathy has been a developmental one. At what age do children develop the ability to empathize? Helen Borke (1971) conducted a study in which her findings challenged Piaget's conclusion that children are egocentric and unable to take the perspective of others until approximately age 7. Borke's study presented stories and pictures that were developed to arouse fear, anger, happiness, or sadness, in children as young as 3 years old. The children were asked to respond to what the main character in a picture was feeling. She found
that 3 year old children were aware of other people's feelings.

Chandler and Greenspan (1972) challenged Borke's conclusion that preschool children are capable of perspective-taking. They used a similar format with children ages 6 to 12. They agreed that these children were capable of identifying the emotion of the main character, however, the 6 year olds could not separate their own perspectives from that of an uninformed bystander in their study. Chandler and Greenspan argued that Borke's study did not differentiate between egocentrism and non-egocentrism, rather, it measured projection and stereotyped knowledge.

In 1972, Borke wrote a rebuttal to Chandler and Greenspan. She agreed that young children use projection and stereotyped knowledge in their responses, however, she viewed that as an attempt by children to behave empathically. Projection and stereotyped knowledge are examples of perspective-taking in its early form.

Hughes, Tingle, and Sarvin (1981) conducted a study with children, using interviews to collect their data. These authors were interested in the child's ability to understand the emotion of the children presented in a story, as well as their own reaction to the story child. Their findings were similar to Borke's. Children ages 5 to 8 years old were aware of the affect of others. More
specifically, they found that younger children depended more on situational cues and causal events. The older subjects were more focused on the story character and psychological reasons for their affect. Similarly, the older children in the study better understood their own reaction to the characters and the reason for their feelings than did the younger subjects. The younger children's responses were more egocentric in nature. The older children were more prone to put themselves in the place of the story character, indicating the ability to take the perspective of another. These children better understood the character's feelings if they first focused on what their own feelings were. Piaget would call this egocentrism, however, this behavior appeared to enhance and assist empathy. Youniss (1975) also sees value in children putting themselves in another's place, saying that this type of self-reflection aids the child in understanding the other person.

Gove and Keating (1979) were interested in early affective perspective-taking skills. They studied children from two age groups, one averaging age 3 years and 10 months and the other group averaging 5 years and 2 months. The children were presented two stories. In the first story the characters' emotional reactions differed, but the children were given situational cues that helped explain this difference. In the second story, the children were shown
opposing emotions, however, they had to depend on the subjective experience of the characters, as well as situational cues to explain the discrepancy in emotions.

Gove and Keating (1979) found that the first story presented was an easier task for the children than when they had to focus on the psychological cues of the story characters. In addition, they found that it was necessary for children to master situational cues before they were capable of understanding psychological ones. These authors proposed that although perspective-taking occurs in early childhood, it is not as sophisticated as the psychological perspective-taking that much of the research literature has referred to.

The Affective Component of Empathy

Affective empathy, the emotional component of empathy, has been a difficult concept to study, in part due to the subjectivity of many of the measurements. There is a paucity of research in this area, so that the developmental aspects are not well understood (Goldstein & Michaels, 1985).

Development of Affective Empathy

Geishberg (1982) talks about the development of affective empathy as early as infancy, in which he says there are already emotional linkages occurring between mother and baby. According to Geishberg, the child's
patterns of behavior and emotion may be determined by empathic communication with mother. Aronfreed (1968) also speaks of a conditioned response of the child in relationship to the mother. Children learn that when their mothers are distressed, they also react with distress, due to their unmet needs, for example. Consequently, children learn to react to the distress cues of others, and eventually experience distress even when there will be no negative consequences for themselves. Aronfreed suggests that altruistic behavior results out of these feelings of distress. The child, wanting to reduce his/her discomfort, assists the person. The altruistic act is reinforced when the other's distress is reduced, because the child's negative feelings are also reduced.

As was earlier mentioned, Hoffman (1982) hypothesizes that a distress response results in concern and altruistic behavior. However, the altruism results out of this feeling of concern, says Hoffman, not the desire to reduce one's own discomfort. Feshbach (1980) and Davis (1979) also speak of this type of affective empathy that causes personal distress. Developmentally, Hoffman explains the existence of distress empathy as a stage when self-other orientation has not yet occurred. Consequently, individuals at this stage experience another's distress as their own.
Feshbach and Roe (1968) have done a great deal of research with children using the Affective Stimulation Test for Empathy, known as the FASTE. In this measurement, a number of slides are used to form a vignette. These stories demonstrate the emotions of happiness, sadness, fear and anger. Two vignettes of each emotion are presented to children. The age of the children in the vignette is matched with the children taking this measure, and children are asked to respond with how they feel. Empathy scores are attained across all four areas and are based on the match of emotion between the child and the vignette.

The results of the FASTE have shown that children's ability to empathize increases between the ages of 4 and 8 and stabilizes between ages 8 and 10 (Fay, 1970; & Kuckenbecker, Feshbach, & Pletcher, 1974). The stabilization of empathy scores may be an artifact of the measurement, according to Feshbach, because the test was designed for younger children.

The FASTE has been criticized for being a verbal self-report measure, for not controlling the sex of the examiner and the child, and for measuring concepts other than affective empathy (Goldstein & Michaels, 1985). The Feshbach and Powell Audiovisual Test for Empathy (Feshbach, 1982) was developed to correct these problems. Children are not only asked what they feel, but to what degree, and the
emotion of pride is added. This measure of affective empathy, like the FASTE, was designed for younger children up to age 9. It has been useful in the understanding of sex differences in affective empathy, results that are presented in a later section.

There is a paper and pencil measure that assesses affective empathy in adolescents, as well as children. This measurement was developed by Bryant (1982) and was designed from the scale by Mehrabian and Epstein (1972). The results of a study using this measure indicated that adolescent boys and girls had higher empathy scores than first and fourth graders. The first and fourth grade children's empathy scores did not differ. In general, the girls were found to score higher on affective empathy than did boys.

Eisenberg-Berg and Mussen (1978) studied ninth, eleventh and twelfth grade children using a paper and pencil measure. The grade level had no effect on empathy scores. Instead, empathy was found to be related to the level of prosocial moral reasoning in both sexes, and to helping in boys. In general, the results of paper and pencil measures have shown higher affective empathy levels in adolescents, as compared to younger children (Goldstein & Michaels, 1985).

Facial and gestural measures are recently being used as a method of measuring affective empathy. A great deal of
research is being performed in this area and coding schemes are being developed in order to improve the measurement of facial expressions (Lamb & Campos, 1982). The development of this more objective measure may assist researchers in gaining a better understanding of the development of affective empathy. So far, these measures appear to predict altruistic behavior in children (Goldstein & Michaels, 1985). Lennon, Eisenburg, and Carroll (1983) used facial and gestural measures of empathy and found that these scores increased with age in preschool children.

**Gender Differences**

A very complex and controversial area in affective empathy has been whether or not there are differences according to sex, and, if so, why these differences exist. There appear to be several antecedents to the development of empathic behavior, and they differ according to sex. First, if fathers emphasize competition in their sons, they are more likely to be lacking in empathy. Low levels of empathy in girls, on the other hand, correlate with rejection, punitiveness, overcontrol and conflict with mothers. If a positive, nonrestrictive relationship exists between mother and daughter, in which the mother is tolerant and permissive, empathy levels are higher (Feshbach, 1978).

Other sex differences have been demonstrated. An overall consistent pattern has revealed that girls were more
highly empathic than boys (Feshbach & Feshbach, 1969; Feshbach & Roe, 1968; Kohut, 1971; Feshbach, 1978; & Davis, 1980). With the recent advent of the Feshbach and Powell Audiovisual Test for Empathy (Feshbach, 1982), more specific results have been noted. The sex differences in empathy still existed, however, these differences were most prevalent when looking at measures of happiness and pride.

In additional findings, empathy in boys correlated with their cognitive abilities and with low aggression. Empathy in girls correlated with good self-concept and prosocial behavior. Antisocial behavior in girls correlated negatively with empathy.

When the intensity of emotion was taken into account, empathy in girls was again correlated with positive self-concept, prosocial behavior, and social understanding. A negative relationship was shown between empathy, and aggression and antisocial behavior. The results with boys were more complex. The intensity of their feelings, as well as the interaction of types of emotions, influenced empathy. If a male subject experienced strong negative emotion when viewing the film of a child who was experiencing similar feelings, he showed prosocial behavior, less aggressiveness, and more sensitivity to others' motives. If, on the other hand, a male subject experienced euphoric feelings when viewing a child who was feeling happiness or pride, negative
behaviors resulted, such as, fewer helping behaviors and more aggressive and antisocial behaviors. In addition, they demonstrated poorer self-concepts. Indeed, even though boys experience empathy for another person at this age, they appear to be unable to react and behave appropriately. The exact reasons for this, and how this changes with development, are not known at this time (Feshbach, 1982).

Even though it is generally agreed upon in the empathy literature that women and girls demonstrate higher levels of empathy than men and boys, it is important to make a distinction between cognitive and affective empathy. Cognitively, a different picture arises. Davis (1980) noted that women scored higher on his four empathy types than men, with the smallest difference being in the cognitive perspective-taking type. This finding has been consistent with other researchers (e.g., Dymond, 1949, 1950; & Mehrabian & Epstein, 1972). In Hoffman's (1977a) review of the literature, he concluded that there was essentially no difference in cognitive empathy between men and women.

Concluding Remarks

Substantially less is understood about the developmental progression of affective empathy in comparison to cognitive empathy. This is due to the subjectivity of many of the measures, as well as the fact that different
affective empathy measures appear to be measuring different constructs (Hoffman, 1977b). At this point in the knowledge of affective empathy, self-report measures indicate an increase in empathy during the preschool years to the age of eight. Using paper and pencil measures, adolescents appear to have greater empathy than do younger children. Sex differences have consistently appeared in the literature (Goldstein & Michaels, 1985; Davis, 1983). Obviously, more investigation is needed in this area in order to add to the paucity of research, particularly with regard to preadolescent and adolescent children.

The Relationship of Cognitive and Affective Empathy

As discussed previously, much of the focus, until recently, was on the question of whether empathy is a cognitive or affective process. Consequently, much of the early research and the measurements developed have not viewed empathy multidimensionally, but have focused on one type or the other. Presently, little is understood about the relationship of these empathy types.

Feshbach (1978) hypothesized that cognitive empathy develops prior to affective empathy, and may even be necessary for the development of affective empathy. Katz (1963) suggested a different relationship between the two empathy types. The observer experiences the affect of
another and then attempts to understand the emotions through the use of cognitive empathy. Still, another approach to this question was posited by Hoffman's model (1982) which suggests that the core of empathy is affective. Affective empathy is present in infancy and is mediated by the developing cognitive processes. This is an area obviously requiring and warranting more research, as do the measures that would assist in determining the relationships that do exist.

Empathy and Aggression

Feshbach and Feshbach (1972) have had an interest in empathy and its relationship to aggression. These researchers theorized that negative correlations exist between both cognitive and affective empathy and aggression. If, for example, a person takes the perspective of another and increases his/her understanding of that person and the conflict, aggression will decrease, according to these authors.

In terms of affective empathy, it is hypothesized that if the aggressor is empathic, seeing the distress of the other person will elicit a similar response in the aggressor, thus inhibiting his/her aggression. These findings have been supported by Feshbach & Feshbach (1969), Huckaby (1971), and Mehrabian & Epstein (1972). A relationship between aggression and empathy appears to
exist, but more research is needed regarding the exact nature of the relationship (Feshbach, 1975).

**Empathy As a Trait**

It has been suggested that in all of the literature describing and discussing empathy, it has not been clarified whether empathy is a trait that is innate or learned, or a behavior that is affected by the situation (Ham, 1987). Empathy has been viewed as the counselor's ability and skill, an effort on the part of the counselor to be sensitive, and the counselor's performance during a particular session (Barrett-Lennard, 1981; Bender & Hastorf, 1953; & Kurtz & Grummon, 1972). The purpose of this section is to give support to the viewpoint that empathy is a trait that affects the therapeutic process and the interaction between the counselor and client.

The developmental psychology literature has viewed empathy as a perspective-taking skill that is acquired in the individual's cognitive development (Flavell, Botkin, Fry, Wright, & Jarvis, 1968). Affective empathy, too, is believed by developmental psychologists to begin developing as a trait as early as infancy (Geishberg, 1982), and to continue developing into childhood (Aronfreed, 1968).

Goldstein & Michaels (1985) concur with the viewpoint that the ability to be empathic is a trait that develops in
childhood and adolescence, and is normally distributed in the population. They go further to say that it is quite unlikely that people who have not developed normal empathic abilities during childhood and adolescence will be able to later develop either the minimal empathic skills necessary for normal adult social relations or the advanced empathy skills needed by therapists, educators, and successful parents (Goldstein & Michaels, 1985, p. 61).

Trends in Empathy Research

Goldstein & Michaels (1985) have noted that the 1960's was a time during which global outcome research was done in psychotherapy. In global research, one treatment is compared to another, for example, for its superiority. The late 1970's and 1980's have brought a more prescriptive approach to research. Specific questions are being asked and the contribution to outcome of therapist, client, and therapy variables are examined, either singularly or in combination.

The questions specific to empathy research that are being posed are as follows: Is there a particular type of client that makes high therapist empathy more likely; are there clients for which therapist empathy is helpful and those for which it is neutral or even harmful; is therapist empathy constant across clients, or does it vary according to clients or some other variable; are there other characteristics in therapists that are associated with
empathy, or can predict it; is there a relationship between therapist empathy and the type of therapy being used? These research questions are examining a single counselor, patient, or treatment variable (unidifferential) in relationship to outcome.

Goldstein & Michaels (1985) suggest that bidifferential or tridifferential questions will be used when studying the counselor/client relationship. Research questions might be as follows: Are there counselor and client qualities that when matched will result in enhanced therapist empathy; is counselor-client similarity important in enhancing counselor empathy?

Several investigations have been conducted that have identified some of these variables. For example, several studies have shown a relationship between the level of counselor empathy and trait-like counselor qualities. A positive relationship was demonstrated between the counselor's level of empathy and his/her cognitive flexibility (Brewer, 1974; & Passons & Olsen, 1969). Positive relationships were also demonstrated with the counselor's conceptual level (Kimberlin & Friesen, 1977), perceptual sensitivity (Brewer, 1974), field dependence (Huth, 1979), tolerance of ambiguity (Jones, 1974), and dominance (Bergin & Solomon, 1968). The counselor's level of empathy was negatively correlated with counselor

Several demographic criteria demonstrated a positive relationship to counselor empathy. Example criteria are: the counselor having experienced the same problem as the client (Nehr & Dickens, 1975); the counselor being a professional verses paraprofessional (Brannon, 1976); being experienced as a counselor (Mullen & Abeles, 1971); and the number of hours of therapy the counselor has had (Peebles, 1980).

Client variables have shown a relationship to counselor empathy. Alexik & Carkhuff (1967), Friel, Kratochvil, & Carkhuff (1968), Houts, MacIntosh, & Moos (1969), reported that clients differentially "pull" empathic responses from their counselors. Some of the client variables that affected this were friendliness (Rappaport, 1975), hostility (Blakeley, 1973), degree of disturbance (Dubnicki, 1977), and demographic characteristics such as client sex (Yergensen, 1978), socioeconomic status (Jones, 1975), and physical disability (McKay, 1979).

**Summary**

The preceding section on empathy has given a historical perspective of this concept, a review of empathy from three
psychological areas, with a focus on counseling and psychotherapy, reasons for the confusion regarding the impact of empathy, and a presentation of multidimensional conceptualizations of empathy. The next section will contain an examination of the aspects of the counseling and psychotherapy relationship, with an emphasis on the working alliance aspect, and its significance across therapies.
The Working Alliance

This section contains a discussion of the three aspects of the counseling/psychotherapy relationship and the role that the working alliance plays in this. The history of the working alliance, recent conceptualizations, contributions to the working alliance, its assessment, influences of gender and race, and shortcomings in research are also presented in this section.

Aspects of the Relationship

Most practitioners would agree that the relationship between the therapist and the client is important to the therapeutic outcome (Highlen & Hill, 1984). As shown earlier in this chapter, there has been a great deal of research conducted in the area of the counseling relationship, spawned by Carl Roger's (1957) interest in the effects of the facilitative conditions. There has been, however, minimal attention given to empirically defining the counseling/psychotherapy relationship or analyzing the different components (Gelso & Carter, 1985). Gelso and Carter suggest that the "relationship is the feelings and attitudes that counseling participants have toward one another, and the manner in which these are expressed" (p. 159). This definition of relationship is separate from the therapist's theoretical perspective. The therapist's techniques themselves do not define the relationship.
Interest in the components of the therapy relationship has been pursued primarily by the psychoanalysts with Freud's (1912) early discussion of dividing the transference relationship into transference proper and the "friendly" and "affectionate" feelings essential to a positive outcome. Several theoreticians recognized that there existed other components to the relationship in addition to the neurotic transference proposed by Freud (Sterba, 1929; Zetzel, 1956; Liewald, 1960; & Stone, 1961). It was Greenson (1967) who actually divided the relationship into three parts, which he called the transference relationship; the real relationship; and the working alliance.

The Transference Relationship

The transference relationship, or the "unreal" relationship in counseling and psychotherapy, has its roots in psychoanalytic theory, although transference and countertransference are universal to all relationships (Freud, 1959). The therapeutic situation intensifies this natural reaction. Transference reactions occur across the various types of therapies, and regardless of the length of treatment. These reactions can occur with the first contact with the counselor (Gelso & Carter, 1985) and may even occur before the first session in anticipation of the helping process (Fromm-Reichmann, 1950).
Transference, broadly defined, is "a repetition of past conflicts (usually, but not always, beginning in early childhood) with significant others such that feelings, behaviors, and attitudes belonging rightfully in those early relationships are displaced; in therapy, the displacement is onto the therapist" (Gelso & Carter, 1985, p. 170). This relationship is "unreal" in the sense that it is an error or misinterpretation by the client of the therapist. This misinterpretation may be positive or negative (Gelso & Carter).

Neoanalytic theorists (Sullivan, 1954; & Fromm-Reichman, 1950) endorsed a broadened view of the meaning of transference, explaining that it is a manifestation of early important relationships with mother, father, and siblings. In childhood these reactions are appropriate, adaptive, and helpful in coping with painful situations. Problems occur when these reactions continue into adulthood as distortions. Although the client is consciously aware of these perceptions/feelings toward the counselor, the fact that this is a misinterpretation involving the past is an unconscious process (Gelso & Carter, 1985).

The therapeutic relationship, of course, involves the interaction of the client and the counselor, so that countertransference may also exist. Countertransference is the counselor's transference onto the client (Gelso &
Carter, 1985). This response is prompted by events in counseling sessions, and, as with the client, is based on important relationships of the past and unresolved conflicts. These responses are related to the needs of the counselor and not those of the client (Langs, 1974). The current thinking regarding countertransference is that it can be useful in understanding and helping the client (Gelso & Carter, 1985).

Analytic theorists have focused much more on transference and countertransference than other therapies and perspectives (Gelso & Carter, 1985). Even so, transference and countertransference issues exist in all types of counseling relationships. The primary difference here is that the psychoanalytic therapist usually fosters and works through transferences as a part of therapy, or is at least acutely aware of this phenomenon and how it is affecting treatment. While transference is not as central to other therapies, it does exist, and may be confronted or merely accepted (Gelso & Carter, 1985).

The Real Relationship

Unlike the working alliance and transference, which have been more closely associated with psychoanalytic theory, the notion of the real relationship has its beginning in the Humanistic therapies (Gelso & Carter, 1985). Humanistic theory has equated the real relationship
with the counselor's openness and genuineness about his/her feelings as they relate to the relationship, as in the person-centered approach (Meador & Rogers, 1984). Gestalt and learning approaches equate these to a lesser extent (Gelso & Carter). These theorists suggest that this view of the real relationship is incomplete. In the counseling relationship there are feelings, perceptions, attitudes, and reactions that exist between the counselor and client. The client's reciprocal contribution must be considered. In addition, it has been suggested that the humanistic view of the real relationship is incomplete because it does not include realistic perceptions and reactions (Greenson, 1967, 1971). This implies that the relationship is undistorted and does not contain the transference portion that may exist.

Again, as with transference, the real relationship exists in all therapies, even though it has been deemphasized in psychoanalytic theory, and to a lesser extent in learning theories (Gelso & Carter, 1985). As these authors have defined this aspect of the relationship, there is, as yet, little research.

**Historical Conceptualizations**

The concept of the working alliance has its origin in psychoanalytic theory, although it can be generalized to
exist in all psychotherapies. According to Bordin (1979),
the working alliance stems from two foundations of
psychoanalytic theory. First, Sterba (1934) talked of the
alliance between the rational ego of the client and the
therapist, and Menninger (1958) spoke of the importance in
therapy of the therapeutic contract. The second foundation
is represented by Zetzel (1956) and Greenson (1967).
Zetzel's early work in this area influenced Greenson. She
explained the need for the client and therapist to be
partners in the therapy process and spoke of the working
alliance as the stable, realistic, and cooperative component
of the relationship. Bordin (1979) combined these two
viewpoints to define the working alliance as an agreement on
goals, an assignment of tasks, and the development of bonds.
Many other authors have alluded to what is now called the
working alliance.

Freud (1940) spoke of aspects of the therapeutic
relationship in addition to the transference that developed.
He referred to aspects that were friendly and helped in the
success of therapy. He felt that the first aim of therapy
was this positive attachment and bonding together of the
patient and therapist, in order to avoid early resistances.
The realization of the importance of this relationship and
working together was proposed and pioneered by Rogers
(1957), who said that warmth, genuineness, and understanding
were necessary and sufficient for positive change to occur in therapy. He did not focus on the transference aspect of the relationship, believing that the cure was in the positive relationship. Loewald (1960) had ideas similar to the working alliance in his discussion of patients and therapists working together and a "mature transference" being necessary for successful therapy. Frank (1961) and Hoehn-Saric et al. (1964) were interested in the effects of mutuality of goals and tasks in therapy.

Stone (1961) was one of the first authors to write in more depth about what he called the therapeutic alliance. He described this aspect of the relationship as a mature transference which originated from the client's need to be understood, taught, and guided. In addition, there needed to exist friendly adult feelings, identification, the need for help, confidence in the therapist, and a wish to be nurtured, which Stone felt were the driving forces in therapy. Sandler et al. (1973) explained the importance of basic trust, self-observation, frustration tolerance, and identification with the goals in therapy. The importance of determining the client's ability to develop the alliance with the therapist was also stressed. Langs (1973, 1974, 1976) recognized the working alliance portion of analysis, believing it to be a measure of the stability of therapy. Finally, Menninger and Holzman (1973), Dewald (1964),
Tarachow (1963), Weiner (1975), and Wolberg (1967) all contended that there must be an agreed upon contract or alliance between the client and therapist before beginning the work of therapy.

Recent Conceptualizations

The concept of the working alliance has a long history. Authors have been alluding to this aspect of the therapeutic relationship since 1934. Unlike the transference aspect of the therapist-client relationship, there has been little research devoted to the working alliance, and its importance has been minimized, until recently. Many of the aforementioned authors departed from the traditional view of psychoanalysis, believing that there was something more to the relationship than the neurotic transference.

Greenson (1967) was the first to actually divide the therapist-client relationship into components and define them, the working alliance being one of those components. Greenson defined the working alliance as the rational rapport and the reasonable and purposeful feelings that the patient experiences toward the analyst. It is the working alliance that makes it possible for the patient to work in therapy, and it occurs because of the individual's desire to cooperate, look at the interpretations of the therapist, follow instructions, and improve, according to Greenson.
The conceptualization of the working alliance does not suggest that the therapist is the key element in therapy, nor that the client plays the primary role. This construct captures the interactive components of both (Horvath & Greenberg, 1986). Horwitz (1974) describes the working alliance as the framework for treatment. He explains that,

both patient and psychotherapist consistently know, believe or feel... at some level of consciousness... that their primary goal in working together is to help the patient. The cognitive-affective attitudes which constitute this belief create the therapeutic or working alliance. Various vicissitudes of their relationship or personalities (transference and countertransference) may temporarily or permanently obscure, interfere with, or dissolve the alliance (Horwitz, 1974, pp. 157-158).

Gelso and Carter (1985) speak of the working alliance as being the client's reasonable side aligning with the therapist's working side, allowing for negative feelings toward the therapist, without disruption of therapy. Instead, the client will be able to look at and understand these feelings and experience a sense of joining together in the work of therapy. What makes this possible from the therapist's side is professional concern and compassion, as well as assisting the client in facing problems.

Roger's client-centered conditions of empathy, genuineness, and respect are probably important in the development of the alliance, according to Gelso and Carter (1985), and likely have their impact because of the working alliance they create. The therapist must also depend on
his/her reasonable side in order to deal with feelings toward clients and must react with understanding, consistency, and constancy. In order to form a working alliance with the therapist, the client needs to be able to trust and form attachments to people. In addition, the client and therapist need to hold similar enough views that the goals and tasks of therapy make sense, and are understood and appreciated by the client (Gelso & Carter, 1985). Clients, as well as therapists, will show variance in their ability to form and maintain working alliances. It has not been determined at this point, exactly what characteristics of clients and therapists enhance the formation of this alliance (Gelso & Carter, 1985). However, Gelso and Carter suspect that the client-centered conditions are central to this issue, from the therapist's side of the relationship.

Probably the most useful conceptualization of the working alliance has been proposed and developed by Bordin (1979, 1976). Bordin fused together the existing foundations of the working alliance, to develop a formal model consisting of three components. The components are goals, tasks, and bonds. Goals are changes in the client's ways of thinking, feeling, and acting that are sought by the client and facilitated by the therapist. It is important that the client and therapist agree upon the goals of
therapy and that the client feels they are relevant to his/her situation. The client should also identify with the therapy process being used. The therapist, on the other hand, should see evidence that the goals are shared and accepted by the client (Bordin, 1979, 1976).

There should be a sense of mutuality regarding the tasks of the therapist and client. Tasks are designed to set the goals in motion and need to be seen as reasonable, within the capacity of the individual, and of relevance with regard to the goals. This collaborative effort involves an agreed upon contract (Bordin, 1979, 1976).

Bordin's (1979, 1976) third component of the working alliance is bonds. Both the therapist and client need to have the sense of a bond existing between them, such that there is a feeling of mutual trust, liking, understanding and caring. The bonding aspect of therapy probably develops more slowly than the other two components, according to Bordin. Early agreement on appropriate goals and tasks is needed for therapy to proceed effectively. The bonding aspects will lack depth and intensity early in therapy, however, an initial bonding will begin very early in effective therapy (Gelso & Carter, 1985).
Contributions to the Working Alliance

Bordin's (1976) formulation of the working alliance includes the willingness and ability of the therapist and client to establish relationships and to carry out the tasks of therapy. The therapist's contribution is largely in personal qualities and professional expertise. Most major schools of therapy agree that the personal qualities that make a good therapist are sensitivity, tolerance, warmth, and being logical, straightforward and committed to the integrity and dignity of individuals (Hartley, 1985). Hartley further suggests that there is a focus on the tasks and goals of therapy, but also flexibility.

Luborsky and Auerbach (1985) and Hartley (1985) discuss therapist personal qualities with regard to measures of empathy and other therapist facilitative conditions, such as warmth and genuineness. These qualities have been the subject of numerous research studies, and as discussed earlier, the results are equivocal. Although it is widely accepted that the personality of the therapist is important to therapeutic effectiveness, there is little research to support this belief (Hartley, 1985; & Luborsky & Auerbach, 1985).

Attempts to investigate therapist expertise and its relationship to the therapy relationship have been largely unsuccessful. Neither amount of training nor professional
discipline has shown a consistent relationship to the process of therapy or its outcome (Hartley, 1985). Sachs (1983) found evidence that errors in technique significantly affected outcome. Luborsky and Auerbach (1985) contend that research supports the predictive value of therapist technique. Several recent studies of the working alliance have indicated, however, that overall therapist variables are weak predictors of outcome, compared to client variables (Marziali, et al., 1981; Hartley & Strupp, 1982; Luborsky et al. 1983; & O'Malley et al, 1983).

Three client variables have been examined in studies involving the therapeutic relationship: likeability; problem solving attitude; and capacity for experiencing. If the therapist judges the client to be likeable, there is some evidence that this produces a favorable outcome (Stoler, 1963, 1966; & Strupp et al., 1963). Bowden et al. (1972) and Gottschalk et al. (1967) did not find this to be so. A problem solving attitude on the part of the client has been significantly predictive of favorable outcome (Fiske, et al., 1964; Kirtner & Cartwright, 1958; & Gomes-Schwartz, 1978). Clients who demonstrate the ability for experiencing tend to have better therapy outcomes (Gendlin et al., 1960; Gendlin et al., 1968; Kirtner et al., 1961; Tomlinson, 1967; Tomlinson & Hart, 1962; & Walker et al., 1960).
Hartley (1985) has also suggested that one of the most significant determinants of a client's readiness to develop a working alliance lies in the individual's previous experiences with important persons. Luborsky and Auerbach (1985) note the issue of a good match between client and therapist, since positive correlations have been shown in similarity of age, occupation and marital status.

Finally, relationship qualities have been shown to be more significant with regard to client benefit than either therapist or client factors. Eight qualities that have been investigated and demonstrate positive correlations are: (1) the positive evaluation of others (Rosenman, 1955); (2) a positive relationship on the Barrett - Lennard Relationship Inventory (Barrett - Lennard, 1962); (3) feeling understood by the therapist (Feitel, 1968); (4) the therapist's positive regard and understanding as rated by the patient (Feitel, 1968); (5) mutual understanding, rated by the client (Saltzman, et al., 1976); (6) favorable feelings toward the therapist (Saltzman et al., 1976); (7) involvement in the therapy, rated by a clinical observer (Gomez-Schwartz, 1978); and (8) and the client's experience of the working alliance with the therapist (Morgan et al., 1982; Luborsky et al., 1983; Luborsky et al., in press; Marziali et al., 1981; Hartley & Strupp, 1982). Positive
relationship qualities appear to be highly significant to the therapeutic relationship.

**Significance of Working Alliance**

There was a proliferation of different types of psychotherapies in the sixties and seventies (Bordin, 1979). With these developing psychotherapies came outcome research to determine their differential effectiveness. Outcome research was also spawned by Eysenck's (1952) contention that psychotherapy was minimally effective, if effective at all. Research conducted by Meltzoff and Kornreich (1970), Horwitz (1974), Luborsky, Singer, and Luborsky (1975), Smith, Glass, and Miller (1980), and Shapiro & Shapiro (1982) has demonstrated that psychotherapy does have a positive impact and that the various forms of treatment do not significantly differ in their effectiveness.

Other major outcome studies (Auerbach, Luborsky, & Johnson, 1972; DiLoreta, 1971; Fiske, Cartwright, & Kirtner, 1964; Mitchell, Truax, Bozarth, & Krauft, 1973; & Sloane, Staples, Cristol, Yorkston, & Whipple, 1975) have reported that approximately 10% of the variance in the outcome of counseling/psychotherapy can be attributed to client and therapist variables and technique. These findings have led to a recent trend toward convergence of basic issues and dominant theories of counseling (Bordin, 1979; & Highlen &
Hill, 1984). One of the areas of convergence has been in
the concept of the working alliance.

There has been previous interest in generic variables
with regard to psychotherapy, that was based on two major
theoretical views (Horvath & Greenberg, 1986). In Roger's
client-centered approach (Rogers, 1957b; Rogers & Dymond,
1954; Truax, 1962; & Truax & Carkhuff, 1967) therapist
offered facilitative conditions were believed to be
necessary and sufficient in order for therapeutic progress
to occur. Early research, particularly in the realm of
communicated therapist empathy as a generic variable, was
promising. Subsequent research did not demonstrate as
strong of a link between empathy and therapy outcome (Bergin
& Lambert, 1978). Horvath and Greenberg suggest that this
model is inherently incomplete because of the focus on
therapist offered conditions, to the exclusion of the
client's contribution.

The Social Influence theorists contended that the
generic mechanism affecting process and outcome in
psychotherapy was cognitive dissonance (Cartwright, 1965).
This theoretical model posits that there is a discrepancy in
the client's and therapist's views of the rationale for the
client's feelings and behaviors. The conflict is resolved
if the therapist has the power to influence the client with
attractiveness, trustworthiness, and expertness. Again, the
therapist is thought to be the influential person in this process.

The working alliance conceptualization does not suggest that the therapist is the key element of influence in the process of therapy. Client factors are not thought to be of primary importance either. Rather, client and therapist variables are thought to be an integral part and to interact in the process (Horvath & Greenberg, 1986; & Stiles, Shapiro, & Elliot, 1986). Like the other two theoretical views, the working alliance is believed to be generic, encompassing all of the psychotherapies and approaches to change (Bordin, 1980; & Frank, 1973, 1974a, 1974b). It is not the type of therapy that affects how successful the process/outcome will be, but the strength of the working alliance. It may be the most important factor in determining therapeutic process and outcome (Gaston, Marmor, Thompson, & Gallagher, 1988; Bordin, 1985, 1979, 1976, 1974; Horvath, 1981; Luborsky, 1984; Luborsky et al., 1980; Luborsky, 1976; Horwitz, 1974; Gomez-Schwartz, 1978; & Marmor et al., in press).

Horwitz (1974) reviewed the data of the Menninger Clinic study, which looked at 21 patients treated with psychoanalysis, and 21 treated with psychoanalytically-oriented psychotherapies. Not only did he not find marked differences in the outcome of these therapy types, but he
found the working alliance to be the prerequisite and main vehicle for therapeutic change in both groups of subjects. Horvath (1981) found that the strength of the working alliance predicted outcome in a heterogeneous sample of subjects from cognitive and behavioral, client-centered, and gestalt and humanistic therapies. Luborsky et al. (1980) looked at significant predictors of outcome in The Penn Psychotherapy Project and found the only potent predictor to be the working alliance. The working alliance plays a significant role in the establishment of the therapeutic process, and is crucial to outcome (Luborsky, 1984), even in short-term therapies (Bauer & Kobos, 1984).

The importance of establishing the working alliance across therapies has been explained by many authors. Langs (1973, 1974, & 1976) contended that the working alliance is a measure of the stability of therapy. Without it, clients often terminate prematurely or do not accomplish the goals of therapy. He advocates monitoring the alliance for signs of disruption. Greenson (1965, 1967) believed that the working alliance is vital to the success of therapy, making it possible for the client and therapist to work together. A disrupted alliance is responsible for premature terminations, as well as failures in therapy. Chessick (1969) suggests that no changes will occur in therapy if
this cooperative atmosphere does not exist, using any kind of therapy approach.

Research supports the importance of the early establishment (3rd to 5th session) of the working alliance in order for treatment to be successful (Horvath & Greenberg, 1986; Hartley & Strupp, 1982; Luborsky et al., 1983; & Morgan et al. 1982). Early sessions with the client are important because they appear to be a predictor of outcome. The working alliance does not appear to change significantly beyond that point (Horvath & Greenberg, 1986).

Bordin (1983) also discussed the importance of the early working alliance. Although the established alliance is not at its maximum, it is necessary that it be strong enough to endure the hardships of therapy. The importance of the working alliance throughout the process of therapy may wax and wane. However, in the early stages of the process, it is crucial that the alliance be in the foreground, so that the difficult tasks of therapy can be faced (Gelso & Carter, 1985).

Beyond the initial stage of therapy, the bonding aspects of the alliance that have formed will need to continue to deepen and develop, in order for the client to continue to progress. Bonding results from the continued clarification of shared goals and the tasks which are instrumental in accomplishing those goals (Bordin, 1983).
The work accomplished in this phase has a strengthening effect on the working alliance. Although Bordin says that the general trend in this stage of therapy needs to be one of a strengthening alliance, there will be an undulating and upward trend (Bordin, 1985). These weakenings in carrying out tasks result from the psychological problems that brought the client to therapy to begin with, and become a way of examining the client's problems. The therapist needs to be sensitive to these weakenings in the alliance, so that they can be effectively repaired (Bordin, 1985).

**Working Alliance Scales**

Most of the measurement systems that have recently been developed to assess the working alliance are devised to be applicable across a broad range of therapies. Interestingly, the conceptual framework of all of the systems are derived from the work of Greenson (1967), as well as other psychoanalytic theorists (Hartley, 1985).

The Penn Helping Alliance Methods (Luborsky, 1976; Morgan et al., 1982; & Luborsky et al., 1983) assesses the working alliance from an observer's perspective, using patient and therapist items. Two levels of the alliance are examined; accepting help and mutual collaboration. The Vanderbilt Psychotherapy Process Scale (Gomez-Schwartz, 1978; Moras & Strupp, 1982; & O'Malley et al., 1983) uses the observer's perspective, with client, therapist, and
interactional items. There is an eclectic orientation in which therapist offered relationship, client involvement, and exploration are considered. The Vanderbilt Therapeutic Alliance Scale (Hartley & Strupp, 1982) uses the observer's perspective, although client and therapist versions also exist. There are client, therapist, and interaction items that are more psychodynamic in orientation. Interpersonal bonds and task related dimensions are measured.

The Therapeutic Alliance Rating System (Marziali et al., 1981; Horwitz, et al., 1984; & Marmar et al., in press.), another inventory based on the observer's perspective (client and therapist scales also exist), focuses on affective and attitudinal aspects. This system examines client and therapist positive and negative contributions to the alliance. The Menninger Therapeutic Alliance Scale (Allen et al., 1984) is completed by an observer (or can be completed by the therapist) and assesses the client's active collaboration with the therapist, as well as client attitudinal variables. This system is oriented toward psychoanalytic theory.

Finally, the Working Alliance Inventory (Horvath and Greenberg, 1986) is a client and therapist self report inventory that is based on the concepts of bonds, tasks, and goals (Bordin, 1976). This instrument was designed to apply to a wide variety of therapy approaches.
All of these scales have moderate to good levels of internal consistency and reliability (Hartley, 1985). Some advantages of using the Working Alliance Inventory are as follows: clinically trained judges are not needed for observation; the choice for units of measurement, such as length of time, when in the session, and which sessions, has not been well examined empirically; the Working Alliance Inventory is less cumbersome; it allows for a variety of approaches; and it allows for the affective and cognitive components of the process to be evaluated. Third party raters can only see behavioral information (Horvath & Greenberg, 1986).

The Influence of Gender and Race

Currently, there is little research data available regarding the influence of gender and race on the working alliance, so that it is difficult to know the impact of these variables at this time. Some of the early studies are presented in this section. Since it has been well documented that important sex differences exist in many psychological variables (Maccoby & Jacklin, 1974), it is reasonable to think that these differences extend into the therapeutic realm (Blumenthal, S.J., Jones, E.E., & Krupnick, J.L., 1985).
Jones and Zoppel (1982) reported that male and female clients perceived women therapists to create more effective working alliances. Mogul (1982) reviewed psychoanalytic positions regarding sex of the therapist, and there was no consensus about the effects of gender on the working relationship. There is some research evidence suggesting that female client-therapist dyads may be more helpful in short-term therapy (Zetzel, 1970; & Goz, 1973). There is research data to suggest that women are more likely than men to possess greater sensitivity, nurturance, and patience (Blain, 1968; Notman, 1965; & Roeske, 1973); that there are significant differences between men and women's world views (Kaplan, 1984; Miller, 1976; & Gilligan, 1982); and that men and women develop different psychologically and have different modes of communication (Kaplan, 1984); all implying differential therapeutic behaviors for male and female therapists. Blumenthal, Jones, and Krypnick (1985) hypothesized that most individuals experience similar outcomes regardless of therapist sex, and that gender match alone does not override therapist techniques in producing therapeutic effects.

Psychotherapy research literature in the area of the therapist's race and the impact of racial matching of therapist and client is very limited. The research that is available has focused on the black client and/or therapist
(Parloff, et al., 1978). Epidemiological studies have shown that black clients use psychiatric services less, tend to receive more severe diagnoses, and are given different treatments than are white clients (Jackson et al., 1974; & Mayo, 1974). A consistent finding across research studies has been that black clients leave treatment earlier than do white clients (Blumenthal, Jones, & Krupnick, 1985). There is evidence that social bias influences the therapy process for black clients (Parloff et al., 1978), however, there are mixed results concerning the positive effects of matching black clients with black therapists (Blumenthal, Jones, and Krupnick, 1985). Generalizations are impossible to make regarding these racial issues, given the paucity of research.

**Shortcomings In Working Alliance Research**

- Several types of studies are needed with regard to the working alliance, in part, because it is an old concept that has only recently gained renewed interest (Gelso & Carter, 1985). As already mentioned, more information is needed in the areas of gender and racial influences on the therapeutic process. Research studies to evaluate therapist capacities for establishing a working alliance are inadequate. More research is necessary regarding the difference in therapists' success with clients and the source of their
power to influence. Information on the benefits for different methods of training individuals in establishing working alliances is needed (Luborsky & Auerbach, 1985).

More knowledge is needed regarding selection criteria for clients who are likely to form working alliances with their therapists in brief psychotherapy. Finally, information regarding client characteristics that lead to initially poor alliances could assist therapists in being more effective with their clients (Gaston, Marmar, Thompson, & Gallagher, 1988).
Philosophers as far back as Aristotle have suggested that pain is an emotion to be looked at in relationship to the mind, rather than the physical body (Holzman & Turk, 1986). The Stoic philosophers suggested that since pain was a phenomenon of the mind, it should be dealt with through logic and rational repudiation. Religious leaders of that time also believed that the experience of pain was outside of the physical realm. Physicians, on the other hand, viewed pain from a physical standpoint, believing that pain was a sensory phenomenon with an organic cause (Holzman & Turk).

The second half of the 19th century brought about research in sensory psychophysics and physiology. Advances in that area resulted in the treatment of pain through analgesic medication and surgical procedures. Those treatments were based upon the belief that pain is a sensory phenomenon resulting from tissue pathology. That approach to pain has prevailed until recently. Even now, pain continues to remain somewhat of a mystery, with no treatment consistently and permanently reducing or alleviating it (Holzman & Turk, 1986).
Cost of Chronic Pain

Chronic pain is a major health problem in the United States and one of its most expensive burdens. Persons with chronic pain are an individual and societal problem. There is an impact on the families, lost time from employment, medical expenses, litigation, and disability compensation. It is estimated that in 1974 50-75 million Americans were suffering from the effects of chronic pain, with costs exceeding $50 billion per year (Holzman & Turk, 1986). There are more than 1,000 pain clinics in the United States for dealing with chronic pain (Crue, 1988).

Workers Compensation gives money benefits, medical care, and rehabilitation services to individuals who are injured as a result of employment. The 1982 expenditures for these services was $7.3 billion (Fields, 1987). Crue (1988) noted that if data was compiled from all 50 states of work hours lost, the costs of medical care, settlements of on-the-job injury cases, and the expense of litigation, an estimated $60 to $90 billion dollars is spent a year on individuals with chronic pain. They continuously and inappropriately seek medical attention and are a massive drain on the expensive medical resources of this country (Wickramasekera, 1989).
Multidisciplinary Approach to Chronic Pain

It has become increasingly more evident what a major health problem chronic pain is and how inadequate conventional treatment has been in dealing with it. A strictly medical approach has not been successful in dealing with individuals who have this complicated problem. A new approach was needed, using multidisciplinary treatment (Aronoff, Crue, & Seres, 1988).

The recent marked increase in pain research has brought about significant change in the understanding of chronic pain syndromes. Due to the physical, emotional, and sociological aspects of chronic pain, it has been recognized that more comprehensive treatment is needed.

The 1970's saw the early proliferation of pain treatment facilities that used several disciplines to rehabilitate individuals with chronic pain. These treatment facilities operate using the same assumptions: chronic pain involves psychological and social factors, as well as physiological ones; this pain syndrome is the focus of treatment; clients are helped by taking an active role in their pain management; alleviation of pain may not be possible, however, pain complaints and behaviors do not have to be the focal point of the individual's life. Each discipline shares this conceptualization of pain. Group and/or individual counseling, psychological evaluations and
testing to clarify the diagnosis and prognosis, a focus on the secondary gain aspect of pain, a physical therapy program, systematic relaxation training and biofeedback training, narcotic medication reduction, and a focus on quality of life, rather than a cure, are all components of most multidisciplinary chronic pain programs (Aronoff & Wagner, 1988), and should be applied to vocational disability management as well (Aronoff, 1988).

**Acute Pain Verses Chronic Pain**

Genest, Meichenbaum, & Turk (1983) have suggested a model of the stages an individual progresses through when inflicted with an illness. This model is helpful in understanding the development of chronic pain. The first four stages are symptom perception, medical contact, acute illness, convalescence and rehabilitation. The last stage of this process for some individuals is chronic illness and/or disability. These authors suggest that the responses at one stage will influence the other stages, and that it is possible to cycle backwards.

Sternbach (1974) has defined the acute pain stage as pain of recent onset or short duration. In acute pain there are autonomic changes that are proportional to the perceived intensity of the stimulus, he says. Following acute pain, there is a "fight or flight" response of the body. The individual typically experiences anxiety as a result of the
intensity of the pain and/or its significance. Anti-anxiety measures, such as medication or reassurance usually produce a reduction in pain.

The stage of chronic pain occurs several months after the initial injury in which there is a habituation of the autonomic response causing sleep problems, change in appetite, decreased libido, irritability, withdrawal from social interests, weakening in relationships, and increased somatic preoccupation (Sternbach, 1974). Chronic pain is defined as the condition in which the original tissue damage has healed, but the individual's pain persists. This implies the existence of psychological factors mediating the pain experience (Philips, 1988).

Fordyce explains the difference between acute and chronic pain:

Physical findings serve as a valid criteria by which to account for pain behaviors mainly during the early days and weeks in the history of the pain problem. As time passes and pain behaviors persist, the relationship between physical findings and pain behaviors often diminishes to the point of obscurity (Fordyce, 1980, Introduction).

**Conceptualizations of Pain**

Sensory physiologists and psychophysicists contend that pain is solely a function of sensory input. The experience of pain will vary as a direct result of the quality and intensity of the sensory stimulus. Cognitive and affective
factors are in reaction to the pain. The amount of pain is considered to be directly proportional to the amount of tissue damage (Philips, 1988; & Genest, Meichenbaum, & Turk, 1983). This theoretical perspective is based upon the direct-transmission line model. This model postulates that a physical stimulus is transmitted from pain receptors along peripheral nerve fibers to the spinal cord, and then to the brain where the stimulus is experienced as pain (Genest, Meichenbaum, & Turk, 1983). Using this model, pain can be reduced or eliminated if the pain stimulus is removed, or the pain pathway is blocked, with medication or surgical procedures (Genest, Meichenbaum, & Turk, 1983).

Barber and Adrian (1982) speak also of the neurophysiological view of pain and the medical model for solving the problem. The problem and solution are viewed in terms of tissue damage, and the transmission, receiving, and responding of the central nervous system. If tissue damage is not found, then an opposite position is taken. The pain experience is thought to be entirely psychological, that is, a mental or personality aberration. Both of these theories are closed system approaches (Barber & Adrian, 1982).

It has been noted that approximately 50% of chronic pain patients get relief from purely somatic treatment (Toomey, Ghia, Mao, & Gregg, 1977), strongly suggesting the influence of factors other than physical ones.
recently it has been recognized that there are complex interactions among pharmacological, physiological, and psychological factors in pain perception (Bonica, 1974; Melzack, 1980; & Snyder, 1977). Consequently, new theories have emerged regarding the reasons for persisting pain of long duration.

Fordyce (1982) suggests two reasons for discarding the closed system approaches to pain. First, he says that observations and research have demonstrated that the nature, intensity, persistence, and scope of pain varies in individuals with equivalent peripheral tissue damage. The sensory impulse from the damaged tissue enters subcortical and cortical levels, allowing for a wide variety of crossconnections with other mental processes. This has an influence on subsequent events. Second, Fordyce explains that individual differences can be accounted for in the capability of the individual to produce his/her own analgesia, such as endorphins and enkephalins.

Barber and Adrian (1982) take into account both psychological and physical factors in their explanations of pain. They describe pain as a psychophysiological experience with three stages. In nociception, there is the perception of a noxious stimuli. Subsequent to this, the sensations are interpreted as painful. In the last stage, the pain is evaluated as creating suffering. Psychological
factors of a perceptual, cognitive, emotional, and behavioral nature may cause aggravation or alleviation of the pain experience.

Fordyce (1976) speaks of pain as a complex network of phenomenon about which there is a broad range of perspectives. Fordyce contends that there is a loose linkage between the noxious stimulation of the peripheral and central nervous system and sensations presumed to emanate from this stimulation, even when viewed in neurophysiological terms. Previous experiences, as well as present events will affect the individual's perception of and response to pain.

Engel (1977) has proposed a biopsychosocial perspective on pain. Pain involves the interaction of nociceptive sensory stimulation, psychological factors that are cognitive, affective, and behavioral, and socioenvironmental factors, such as reinforcement, ethnocultural beliefs, and societal norms. Pain, he explains, is not somatic or psychogenic. It is an interaction of factors that causes the subjective experience of pain and response to treatment.

The Gate Control Model (Melzack & Casey, 1968; Melzack & Wall, 1965; & Wall, 1978) was developed to explain individual differences in the experience of pain. This model explains the complexity of pain perception and response as an interaction of sensory-discriminative,
motivational-affective, and cognitive-evaluative components. These authors contend that there is a neural mechanism in the spinal cord that functions like a gate. This gate can facilitate or inhibit the flow of nerve impulses from peripheral nerves to the central nervous system. When information going through the gate exceeds a critical level, the sensation of pain is experienced and responded to.

The Gate Control Model suggests that somatic input is subjected to the influences of cognition, affect, and behavioral factors before it evokes pain perception. Melzack, Wall, and Casey suggest that a central control mechanism accounts for alterations in pain perception and response, produced by psychological factors. Psychological factors mediate the pain and can alter the individual's appraisal of threat and ability to control the pain sensations, and emotional arousal. Melzak and Wall (1965) contend that pain is not a function of any one system. Rather, every portion of the entire nervous system contributes to the pain, making it an individual experience.

Individuals with Chronic Pain

It has been noted that individuals with chronic (psychogenic) pain experience pain the same as individuals with organically based (somatogenic) pain (Merskey & Spear, 1967). Szasz (1957) suggested that pain not be classified
as psychogenic or somatogenic, but rather, as having psychological or physical causes. Chronic pain, therefore, is pain that is better understood and described in psychological, rather than physical language. This, says Woodforde and Merskey (1972), does not imply that the individual is imagining the pain, or that the pain is not real.

Numerous studies have been conducted in trying to better understand the individual with chronic pain. Interestingly, these studies have produced consistent findings regarding descriptive characteristics, as will be shown.

Pilling et al. (1967) examined 562 patients, comparing individuals with chronic pain to a psychosomatic group that had physical symptoms other than pain. Depression was found less frequently and hypochondrias, or a complete preoccupation with their condition, was found more frequently in the pain patients, than in their counterpart. These authors concluded that pain was substituted for feelings of anxiety and depression. The experience of pain may be less distressing than those feelings. Similar findings were reported by Castelnuovo-Tedesco & Krout (1970). Merskey (1965a, 1965b) reported that neurotic conditions and hysteria were prevalent in chronic pain patients. Blumer (1975) and Sternbach (1974) discovered
that elevations on scales 1, 2, and 3 of the Minnesota Multiphasic Personality Inventory are often evident in chronic pain prone patients. Pilling et al. (1967), Sternbach (1974), and Blumer (1975) found a subgroup with elevated 1 and 3 scales, with the relative absence of depression.

Fordyce (1976) has determined that chronic pain patients often have depression, psychic distress, hypochondriasis, and hysteria. Pervasive depression was reported by Sternbach, Murphy, Akeson, and Wolfe (1973). Merskey and Spear (1967) reported that these individuals were neurotically depressed and hypochondriacal. In general, the studies that exist in the literature describing individuals with chronic pain demonstrate consistent findings. These individuals tend to be neurotic and depressed, and the pain is often a substitute for negative feelings (Sternbach, 1974).

Other research has focused on and has helped to explain the chronic disability syndrome (Strang, 1985). This syndrome describes persons who are capable of working, but do not. They are not motivated to recover and feel negatively about returning to work. Strang explains that this syndrome develops out of an inability to cope with disappointments. In response to an injury, the individual identifies himself/herself as being disabled, a response
that can be a solution to many personal problems. Ellard (1970) has called this reaction attitudinal pathosis.

Similarly, other authors have discussed the development of chronic disability as an acceptable way of meeting underlying psychological needs, such as dependency, depression, anxiety, job or family problems, and feelings of inadequacy (Hirschfield & Behan, 1963; Ludwig, 1981; Brena & Chapman, 1984; & Weinstein, 1978). Weinstein noted that certain characteristics made individuals more prone to be involved in a disabling injury. These characteristics are low self-esteem in a dependent person, inability to deal with stress, a demanding job, and tension at home. The injury becomes a way out that is socially acceptable.

Engel (1959), in his classic paper, has suggested a psychodynamic approach to pain in describing characteristics of pain prone patients. He found these individuals to be suffering from excessive guilt. The pain serves to punish them and relieves the guilt. Their health is at its best when they are in pain emotionally. Engel proposes that these persons had past family situations in which aggression and pain were prevalent, setting up a pattern of suffering in childhood. This suffering role continues into adulthood, where the individual punishes himself/herself for successes and/or unacceptable impulses.
Merskey and Spear (1967) have presented a similar view of a childhood marked with suffering. Suffering becomes associated with attention, which is a substitute for normal affection. Pain episodes in these persons are triggered by loss, success, and unacceptable feelings. Kreitman et al. (1965) discovered that somatic symptoms were used as a defense against intolerable affect, a pattern learned in childhood. In addition, there is a tendency for pain to mask depression (Sternbach, 1974; Baker & Merskey, 1967; & Pilling et al., 1967).

It is generally agreed upon that individuals with chronic pain are somatizers, that is, people who transfer psychological conflicts into somatic complaints. Treating these individuals in therapy is thought to be difficult because of the tremendous difficulty in establishing a working alliance (Wickramasekera, 1989; Greenson, 1967; & Zetzel, 1956).

**Effects of Chronic Pain**

Several authors have described chronic pain patients with regard to the predictable effects of this condition. Philips (1988) explains that there is a growing feeling of helplessness, depression, fear in facing the implications, reduction in capacities, and frustration and anger because medicine was not able to help. Behavioral avoidance develops, along with increasing isolation and disruption of
relationships. Genest, Meichenbaum, and Turk (1983) discuss the loss of key roles, disruption of plans for the future, the assault to self-image and self-esteem, and resentment. Barber and Adrian (1982) add feelings of hopelessness, preoccupation with the pain, and dependency on medication and health care providers. Fields (1987) mentions sleep and sexual disturbances, fatigue, and increasing dependency to be common reactions of chronic pain patients. Finer calls the effects of chronic pain "an egocentric, hypochondriacal, agitated depression" (Finer, 1974, p. 578).

Sternback (1974) discusses the fact that chronic pain, in a sense, is meaningless. It cannot be avoided or treated, and because there is no time limit on the pain and there is endless suffering, feelings of hopelessness and despair develop. These individuals typically suffer from insomnia, so that they feel worn down, exhausted, and irritable. They become more preoccupied with the pain and withdrawn. They request pain relief from a physician. Dependence occurs with many of these individuals because they must take more and more medication to get relief. Because they have not been helped, they may see several physicians in an attempt to find an answer to their pain. Because these individuals are so physically preoccupied, they begin to notice other bodily feelings that were not
noticed before, and these feelings become magnified (Sternbach).

Sternbach (1974) explains that this is the typical progression for individuals with chronic pain. It is the rare individual, he says, who does not fall into this pattern, and instead, stays busy and active and copes with the pain.

**BRIEF THERAPY**

**Historical Perspectives**

Therapy before Freud's time was short-term, but became longer for a variety of reasons. Analytic thinking became more complex, as did the problems that analysts dealt with, and the goals of treatment became more ambitious. Consequently, the treatment time that was needed became longer (Roazen, 1971). Interestingly many analysts of the time were concerned about this trend toward extended treatment time, however, because Freud endorsed this way of thinking and was powerful in the analytic movement, there was adherence to his position (Budman & Gurman, 1988). Brevity of treatment and more efficient analysis surfaced again after Freud's death in 1939 (Ferenczi & Rank, 1925).

In the 1940s, with thousands of war veterans returning in need of mental health services, brief therapy became a necessity. An actual movement toward more short-term therapy
became evident in the 1960s. The Community Mental Health Centers Act made mental health services available to everyone. The demand of clients and the shortages of staff, made it necessary to treat individuals more quickly and efficiently (Budman & Gurman, 1988). Simultaneously, short-term treatment models were being developed using different theoretical perspectives (Malan, 1963; Mann, 1973; & Haley, 1973).

The 1970s and 1980s have continued to favor short-term therapies due to spiraling costs and the limitations set by insurers of health care. In addition, people seem to be more interested in faster, less costly, more efficient treatment (Budman & Gurman, 1988).

**Understanding Brief Therapy**

One of the important issues when dealing with people in time-limited therapy is that there needs to be a limited focus in order to accomplish anything (Peake, Borduin, Archer, 1988; Budman & Gurman, 1988; & Budman, 1981). It is critical for the counselor to understand the central task. The counselor must take an active stance. Goals must be modest and realistic and interventions planned (Budman & Gurman, 1983; Butcher & Koss, 1978; & Small, 1979). There is an attitude of not having to do it all immediately (Budman & Gurman, 1988). Budman and Gurman suggest that counselors
centralize one or a set of problems, rather than tackling the task of personality reconstruction.

There is a greater need for counselor activity in brief therapy. The counselor must structure the sessions, ask leading questions, make homework assignments, and make suggestions (Budman & Gurman, 1988). Therapeutic flexibility is necessary, as well as a problem-centered orientation. The interventions should be tailored to the needs of the client (Budman & Gurman).

Rather than understanding brief therapy in terms of number of visits or lapsed time, it is more useful to define it conceptually. Budman and Gurman (1988) have suggested that brief therapy is a state of mind of both the counselor and client, and involves a set of limitations on the delivery of services. The counselor and client must accept a set of values regarding what can and cannot be accomplished with brief contact. Budman and Gurman have posited a list of value ideals for the short-term counselor and the long-term counselor. There are eight major divergences in their values. The long-term counselor behaves as follows:

- seeks change in the basic character; believes that significant psychological change is unlikely in everyday life; sees presenting problems as reflecting more basic pathology; wants to be there as the client makes significant changes; sees therapy as having a timeless quality and is patient and willing to wait for change; unconsciously recognizes the fiscal convenience of maintaining long-term clients; views psychotherapy as almost always benign and useful; and sees the
client being in therapy as the most important part of client's life (Budman & Gurman, 1988, p.11).

The short-term counselor, on the other hand, demonstrates a different set of values:

prefers pragmatism, parsimony, and the least radical intervention, and does not believe in the notion of a cure; maintains an adult developmental perspective from which significant psychological change is viewed as inevitable; emphasizes the client's strengths and resources; presenting problems are taken seriously, although not necessarily at face value; accepts that many changes will occur after therapy and will not be observable to the therapist; does not accept the timelessness of some models of therapy; fiscal issues are often muted, either by the nature of the therapist's practice or by the organizational structure for reimbursement; views psychotherapy as being sometimes useful and sometimes harmful; and sees being in the world as more important than being in therapy (Budman & Gurman, 1988, p. 11).

**Maximization of Time**

The maximization of time becomes a critical issue when therapy is brief. The initial contacts are important not only because of time constraints, but because the maximal impact of treatment occurs early on (Howard, et al., 1986). It is important that the counselor listen carefully for a theme that has brought the client for help (Budman & Gurman, 1988). Budman and Gurman suggest that the counselor share trial formulations, even if they are wrong, so that the client can be more quickly understood. Homework assignments can assist the individual in growing outside of therapy.
The issue of termination is important in brief therapy, however, it is more relevant with clients who have had previous separation and object losses (Budman & Gurman, 1988). Although treatment is formally terminated, many individuals who have received brief therapy and long-term therapy as well, will seek out more treatment when it is wanted and needed (Patterson, Levene, & Breger, 1977). Brief therapy can be viewed as a periodic aid to growth at symptomatic junctures in the client's life (Peake, Borduin, & Archer, 1988).

Cognitive Approaches

Cognitive forms of therapy have always emphasized the use of goal oriented procedures of brief duration (Burbach, Borduin, & Peake, 1988), so that they are appropriate for use in brief therapy. This section includes a selective review of cognitive therapy appropriate for use in brief treatment.

Rational-emotive therapy (RET) is a form of the cognitive restructuring therapies. These therapies are based on the theory that disturbances of behavior and affect are mediated by dysfunctional cognitive processes. The goal of therapy is to eliminate the dysfunctional processes and/or alter the client's beliefs, values, and expectations (Burbach, Borduin, & Peake, 1988). RET (Ellis, 1962; & Ellis & Grieger, 1977) hypothesizes that most psychopathology is a result of irrational ideas that clients maintain about
themselves and the world around them. It is the client's thoughts, not reality, that produce emotional distress (Ellis, 1962). A confronting and challenging approach is taken by the therapist in changing the client's irrational ideas.

Problem-solving therapies are another form of cognitive therapy. D'Zurilla and Goldfried (1971) use a five-step process of general orientation, problem definition and formulation, brainstorming, evaluating alternatives, and verification, in their behavioral problem-solving therapy. Clients are trained in this technique, and their performance is evaluated. Similarly, Mahoney's (1977) personal science approach assists clients to solve their problems through the scientific application of problem-solving procedures with the goal that clients will be able to function more autonomously.

Working Alliance in Brief Therapy

Short-term therapy creates a demand for change that is much more pressured than approaches that are nondirective and/or long-term. The time limit creates a need for focus on immediate issues and on change that must be quickly accomplished (Rush, 1985). Rush suggests that some individuals do not do well with this pressure, and may drop out, be noncompliant with directives, or have symptom exacerbation. Other individuals, he says, respond well to a
time-limited directive approach and are able to comply with treatment and change rapidly. Sharp time limits are not suggested for individuals with borderline or schizotypal personality disorders (Rush, 1983; & Beck et al., 1979), schizophrenia, manic-depressive states, psychotic depressions or severe narcissistic disorders (Mann, 1985). Time limits and directive techniques are not appropriate with those individuals who have difficulty forming working alliances and collaborative interpersonal relationships (Rush, 1983; & Beck et al., 1979).

A client's disorder can disrupt the development of the working alliance, as can style. Some individuals do not react well to a time limited directive approach, or have difficulty organizing and processing information quickly (Rush, 1985). The counselor must balance being active and directive with listening, so that the formation of the working alliance is not as likely to be disrupted. In addition, impairment in a client's memory, concentration, and abstraction abilities need to be dealt with appropriately (Rush, 1985).

Research Regarding Brief Therapy

There is evidence in the literature to suggest that psychotherapy can be harmful (Mays & Franks, 1985), and this is more true in brief therapy where it is necessary to cut corners (Peake, Bordiun, & Archer, 1988). Strupp et al.
(1977) suggest that therapist variables, such as deficiencies in training, personality factors, an absence of genuineness, or a dearth of self-scrutiny are associated with negative effects in brief therapy. Excessive negativism on the part of the client has consistently been related to negative effects (Peake, Borduin, & Archer, 1988).

Client-therapist variables negatively influencing brief therapy are too much or too little rapport, transference and countertransference issues, a lack of choices for the client, and situations where professional distance is not maintained (Strupp et al., 1977). Strupp and his associates have also discovered that failure to discuss the reality of goals, failure to reach mutual agreement on goals, and the development of inappropriate goals produce a negative impact on brief therapy.

Extratherapy variables have also been considered for their negative impact on brief therapy. Examples of these are life stage, life strains, life events, and social support considerations, such as overprotective family members and harsh family members (Mays & Franks, 1985).

Positive effects of brief therapy have been shown, although research in this area is incomplete (Peake, Borduin, & Archer, 1988). There is no evidence suggesting that long-term therapy is more effective than short-term therapy. In fact, brief therapy has been shown to be equally effective,
as well as more cost effective (Smith, Glass, & Miller, 1980). Smith, Glass, and Miller concluded that the major impact in treatment occurs in the first six to eight sessions. Beyond this time, there is a reduction in positive effects, these researchers say. Therapists who dealt effectively with the issue of termination, rapid assessment, the quick establishment of an interpersonal relationship, flexibility of technique, prompt intervention, as well as management of treatment focus, limited goals, and time structure, have produced positive effects in brief therapy (Koss & Butcher, 1986).

In general, the brief treatment of individuals has been shown to be effective in comparison to chemotherapy (Elkin, 1986), to nonprofessional counseling (Woody et al., 1983), and to long-term therapy (Smith, Glass, & Miller, 1980). There is no evidence as yet to suggest that any one mode of brief therapy is superior to another (Smith, Glass, & Miller, 1980; & Budman & Gurman, 1988).

Summary

Several conclusions can be made based upon the previous review of literature. First, the existing empathy literature is vast, and, yet, there remains confusion regarding the definition, the components, the development, and the impact therapeutically. In the counseling/psychotherapy
literature, the research emphasis has been on therapist empathy and its impact on counseling/therapy outcome. Cognitive and affective components are recently being defined and examined separately.

The working alliance, like empathy, is an old concept that has gained renewed interest. Although a number of ideas are being generated and researched regarding variables affecting the development of the working alliance, little is known at this time. The most consistent finding is that the working alliance is an important generic factor in determining therapeutic process and outcome, particularly in the first few sessions. If the alliance does not develop early in the process, it probably will never develop.

Chronic pain has been considered to be primarily a physical phenomenon. Recently, it has been shown that there also exist emotional and sociological aspects of chronic pain, so that a multidisciplinary approach to treatment is needed. There is some evidence to suggest that there are predisposing emotional problems causing the chronic pain syndrome.

Finally, brief therapy has been shown to be just as effective as long-term therapy, but must be handled carefully. There must be a directive approach with a specific focus. Clients with severe pathology may not be appropriate for brief intervention.
CHAPTER III
RESEARCH METHODOLOGY

This chapter contains a description of the research methodology and statistical analysis used in this study. A description of the research setting, the selection and description of the sample population, a description of the instruments utilized, and the data collection procedures are presented in this chapter.

Research Setting

This study was conducted at the J. Leonard Camera Industrial Rehabilitation Center, located in Columbus, Ohio, a large mid-Western city near a major university. Data were collected for a period of eight months, from October, 1988 to June, 1989. The primary goal of the Industrial Commission of Ohio Rehabilitation Center is to return to work individuals who have been injured on their jobs. The clients participating in this program have been injured, and although the original injury has healed, they are still experiencing pain, so that their pain is chronic. Individuals who participate in this program are randomly assigned to a group (10-12 clients) and remain in treatment.
for a period of six weeks. A new group of clients begins
every six weeks and individuals participate in the program
as if they are working a 40 hour work week. Clients who
enter the program are residents of Ohio. Clients living
outside of the Columbus area stay in a dormitory adjacent to
the rehabilitation center. Several services are a part of
the multidisciplinary treatment approach, such as medical
and nursing care, nutrition, occupational therapy, physical
therapy, therapeutic recreation, vocational evaluation,
career counseling, work simulation, family services and
education, and health psychology.

Health psychology is a specialized area of psychology
with the goals of promotion and maintenance of health, the
prevention of illness, and the rehabilitation of individuals
who are ill or have been injured. Each week, a new group of
clients is admitted into the program and is assigned a
counselor. In the first week of treatment, clients receive
psychological testing in order to evaluate strengths and
weaknesses, the psychological impact of the injury, and to
develop rehabilitation goals.

Clients are seen individually by their counselor on a
weekly basis. In the first week, an intake interview is
conducted and the goals of counseling are discussed. In the
four weeks that follow the personal issues are dealt with
that interfere with the individual's rehabilitation and
return to work. A cognitive, problem-solving approach is taken by the counselors. The time constraint makes it impossible to deal with more serious or in-depth problems. The sixth week of treatment is the termination session. Post-treatment test results are discussed and compared with pre-treatment results. In addition, discharge recommendations are made by the counselor, and individuals with emotional problems are referred for treatment.

Self management groups are held four times a week and are led by the counselor who has been assigned to that group upon admission into the program. A series of lectures are presented that includes biofeedback orientation, an introduction to Health Psychology Department services, the meaning of rehabilitation, concepts of self management and personal competency, the meaning of pain and pain management, Gate Control Theory, and stress management. In addition, relaxation concepts and techniques are taught, as is personality theory, how pain behaviors are reinforced, secondary gain, concepts of communication, dealing with feelings, assertiveness training, conflict management and problem solving, sexual functioning, pharmacology, cognitive disorders, the rational emotive therapy approach to irrational thinking, and post discharge life style and goals.
The rehabilitation program is designed to simulate a work week. Clients typically go to breakfast at 7:30 a.m. and begin their day at 8:00 a.m. The clients are given a schedule each day when they arrive, although their schedules vary little from day to day. Clients attend health psychology, occupational therapy, physical therapy and recreational therapy daily. They break for lunch, and their day ends at 4:45 p.m.

In the first week of the program clients are evaluated in the areas mentioned, as well as by a physician, a nurse, and a nutritionist. An individualized treatment plan is developed by the staff to meet the rehabilitation needs of each client. The nurse, physician and nutritionist are seen as needed. Physical therapy and occupational therapy are steadily increased as the weeks pass. Work simulation is added if the client knows what job he or she will be returning to. Weekly staffings are held for all clients. All of the staff working with a particular client meet together to discuss progress and any changes needed in the plan of treatment.

Population

The client subjects for this study were injured workers with chronic pain (no organic findings) receiving extensive multidisciplinary treatment to assist them in returning to work. All of the subjects were unemployed due to their
chronic pain and receive temporary total worker's compensation from the state of Ohio. Anyone interested in participating in this study was recruited.

Eight counselors participated in this study, two males and six females. One participant was Ethiopian (male), one was black French American (female), and six subjects were white. The Health Psychology counseling staff was composed of three Ph.D. psychologists, one psychology assistant (Ph.D. nonpsychologist), and two pre-doctoral psychology assistants. Two pre-doctoral student interns from The Ohio State University Clinical Psychology department also participated.

The student interns were placed in the Health Psychology Department to partially fulfill pre-doctoral internship requirements. Counseling staff members must have at least a Masters degree in psychology, or the equivalent. Nonpsychologist staff (psychology assistants) must be supervised weekly by a licensed psychologist. In addition, experience is required in health psychology, rehabilitation, and behavioral medicine or neuropsychology.

Instrumentation

Four instruments were completed by each subject in the study: (a) Interpersonal Reactivity Index (IRI) (Davis, 1980); (b) Working Alliance Inventory (WAI) (Horvath &
Greenberg, 1986), (c) an outcome measure; and (d) a Personal Data Form. The IRI was completed by all counselor and client subjects. The WAI (client form) was completed twice by all client subjects, and the therapist form was completed twice by counselor subjects on a selected sample of clients participating in the study. An outcome question was asked of all participating subjects regarding the accomplishment of the goals of counseling from the counselor's and client's perspective. The Personal Data Form was completed by client subjects.

_Interpersonal Reactivity Index (IRI)_

Davis (1980), noting shortcomings in previously existing empathy inventories, has developed a multidimensional measure of the individual differences of this construct. His instrument is designed to capture separate estimates of the cognitive, perspective-taking capabilities, as well as the emotional reactivity of the individual. In his reviews of the literature, he notes two major deficiencies of previous inventories. First, the focus on empathy and empathy measures has historically been either on the cognitive or emotional components, not taking into account the multidimensionality of this construct. Inventories which have tapped into both cognitive and emotional components have yielded a composite score, so that the separate influences cannot be determined. The second
inadequacy Davis notes is the lack of precision in measuring empathy. Rather than assessing just empathy, many previous inventories have measured a variety of traits.

**Development of the IRI**

In Davis' initial empathy questionnaire of over 50 items, some items were extracted from previously existing measures of empathy (e.g., Mehrabian & Epstein Emotional Empathy Scale and Stotland's Fantasy-Empathy Scale), however, most items were new. The new items were constructed to measure either cognitive or emotional aspects of empathy. Two hundred and one males and 251 females responded on a five-point Likert scale to statements not describing them well (0) to statements describing them very well (4). The initial factor analyses were conducted separately for males and females and yielded four major factors (Davis, 1980).

Fantasy items assess the tendency of individuals to become deeply involved imaginatively in the feelings and behaviors of characters in books, movies, plays, or other fictitious representations. Perspective-taking items suggest the ability to take the psychological point of view or perceptual perspective of another. Perspective-taking and fantasy empathy are both cognitive forms of empathy. Empathic concern items suggest the experience of feelings of
concern and compassion brought on by the unfortunate experiences of another. Finally, the fourth set of items, personal distress items, denote "self-oriented" feelings and measures the experience of feelings of discomfort and anxiety caused by the unfortunate experiences of another. These two subscales tap into the affective component of empathy.

In the second version of the empathy questionnaire, 45 items were used. Some of these items were from the original questionnaire, some items were adaptations from this questionnaire, and new items were constructed for the four major empathy factors. Two hundred and twenty-one male and 206 female introductory psychology students responded to these items. The factors that emerged were almost identical for males and females, and again consisted of fantasy, perspective-taking, empathic concern, and personal distress items. The infrequency with which items loaded on more than one factor supports the multidimensional nature of the questionnaire (Davis, 1980).

In the final item selection, the items loading heaviest for both sexes on a factor were retained in the appropriate subscale. This selection of items produced four seven-item subscales consisting of the four factors previously mentioned. These final 28 items were randomly ordered and administered to a third set of respondents (introductory
psychology students, 579 males and 582 females). Again, four separate and distinct factors emerged for both sexes, that were relatively independent. Internal reliability was found to be satisfactory (.70-.78) and very similar for both sexes, as well as test-retest reliability (.61-.81).

**Administration and Scoring**

The final instrument is a self-report measure consisting of 28 items, some worded positively and some negatively. There are four seven-item subscales, rated on a Likert scale format of 0 ("does not describe me well") to 4 ("describes me very well"). The time needed for administration of this instrument is approximately 10 minutes. Instructions are printed at the top of the form. Subjects are asked to circle the number response that best describes them on all 28 items. The possible range of scores on each of the 4 subscales is 0 to 28. The score for each subscale is obtained by summing the weighted values chosen by the subject.

**Validity**

Convergent and discriminant validity was examined in which the four subscales of the IRI were compared to established measures of social functioning, self-esteem, emotionality and sensitivity to others (Davis, 1983). The relationship among the four sub-scales, between the
subscales and other psychological measures, and between the subscales and established empathy measures was successfully evaluated. These three investigations strongly support the validity of the four IRI subscales (Davis, 1983). The subscales measure separate but related constructs, supporting Davis' multidimensional view of empathy (Davis, 1980).

Davis (1983) found that the perspective taking subscale is positively correlated with better social and interpersonal functioning, higher self-esteem, and relatively little emotionality. The empathic concern subscale demonstrated a consistent relationship to social competence or self-esteem and a strong relationship to emotional reactivity. The fantasy subscale showed some similarity to the empathic concern scale, with differences of a greater relationship with verbal intelligence and less other-oriented sensitivity. The personal distress scale was shown to have negative relationships to social competence and self-esteem. A significant relationship was found with anxiety, emotional vulnerability and a strong tendency toward chronic fearfulness (Davis, 1983).

Reliability

The reliability of the four empathy subscales was tested over time using an independent sample of University of Texas undergraduates. Fifty-six males and 53 females
completed the inventory twice, with an elapsed time ranging from 60-75 days between administrations. The correlation between the test and retest scores for males ranged from .61 to .79, and for females from .62 to .81. These findings suggest satisfactory temporal stability of the four empathy subscales for both males and females (Davis, 1980). The intercorrelations of the four empathy subtypes indicate that the IRI reliably assesses four separate and relatively independent characteristics in the individual. The internal reliability coefficients on each of the four empathy subscales suggest that there is satisfactory internal reliability (Davis, 1980).

Working Alliance Inventory (WAI)

The Working Alliance Inventory, developed by Horvath and Greenberg (1986), is theoretically based on Bordin's (1975, 1976, 1980) conceptualization of the therapeutic working alliance. Bordin suggests that the working alliance consists of three components (bonds, goals, and tasks) and represents a generic relationship variable common to most forms of therapy/counseling. He contends that this alliance is the key to client change in therapy and its strength (particularly in early sessions) determines the effectiveness of therapy. The WAI was designed to capture the three elements in therapy, bonds, goals, and tasks, in
their early stages of development (between the third and fifth sessions), using any theoretical orientation. In research, it has been used as a process oriented measure, or as a prognosticator of the outcome of therapy (Horvath & Greenberg, 1986).

Attempts at trying to demonstrate a difference in the effectiveness of treatments have not been successful (Smith & Glass, 1977). The Working Alliance Inventory was developed out of an interest in measuring generic relationship variables that might affect the success of therapy. Previous instruments designed to measure generic factors in counseling have posited that the therapist is the major variable influencing change. The working alliance conceptualization postulates that it is the interactive components of the therapist and client that affect therapeutic outcome, not therapist or client attributions alone. Other instruments designed to measure the working alliance have used third party evaluation, which Horvath and Greenberg (1986) feel are time consuming, cumbersome to use in clinical situations, and miss important affective and cognitive material.

**Development of the WAI**

In the initial development of the WAI, approximately 90 items were generated for each of the three elements, bonds, goals, and tasks. Expert psychologists from different
theoretical backgrounds made judgments regarding the construct validity and specificity of items. Fifty-five items remained and constituted the final item pool. From this pool, items were selected that were most representative of the construct. The final inventory consisted of 36 items; 12 representing each of the three components of the working alliance. An alternate and parallel form was produced from the original items for therapists to measure their perception of the working alliance, since research has shown (Hill, 1974; Meltzoff & Kornreich, 1970; & Mintz, 1977) the conceptualization of therapy to be different for clients and therapists.

The WAI was revised by Horvath in 1982. In order to increase the variability of the scales, the original five point Likert scale was changed to a seven point scale, and several items were revised for clarity and to improve the distinction among the scales.

Administration and Scoring

The final inventory is a self-report instrument containing 36 items which are made up of three subscales of 12 items representing bonds, goals, and tasks. Items are randomly interlaced and are rated on a seven point Likert scale. Some items are positively worded, and others are negatively worded. The completion time is approximately 20
minutes. Instructions are printed on the first page of the form. Subjects are asked to circle the appropriate number response from a range of 1 ("never" response) to 7 ("always" response) that best describes their feelings and thoughts about their therapist. All 36 items must be responded to. The possible range of scores on each of the 3 subscales is 1 to 84, with 12 items making up each subscale. The score for each subscale is obtained by summing the weighted values for each response. A composite score is obtained by summing the three subscales. The therapist form is completed and scored in the same manner.

Validity

Original validity of the WAI items was accomplished by repeated judgments by experts on the successively refined versions of the inventory (Horvath, 1981). The items were examined to determine whether or not they represented the true working alliance construct and specificity of individual items to one of the three subscales (bonds, goals, and tasks). Campbell and Fiske's (1959) model of multitrait-multimethod analysis was used in the second phase of construct validation. In addition, a clinical field trial was performed to determine the ability of the WAI to predict psychotherapy outcome. The statistical analysis supported the convergent validity of the goal and task subscales of the WAI. Findings regarding the convergent
validity of the bond subscale were equivocal. An elevated correlation was found between the bond subscale and empathy, indicating a similarity in the constructs. A significant relationship was also demonstrated between the client's bond scale and the therapist's goal scale, suggesting that these two constructs were difficult to differentiate (Horvath & Greenberg, 1986).

The Client Posttherapy Questionnaire (PTQ) (Strupp, et al., 1964) was employed as an outcome criteria against which to measure prediction variables. The findings indicated that the WAI more efficiently predicted outcome than the Barrett-Lennard Relationship Inventory (1962) or the Counselor Rating Form (Barak & La Crosse, 1975). In addition, the task scale was found to be the best predictor of therapy outcome.

**Reliability**

Item analysis was conducted and indicated the subscale reliabilities to be sufficient for the client and therapist form, with the exception of the therapist bond subscale. Reliability co-efficients ranged from .82 - .88. The composite reliability indices, .87 - .93 were also adequate.

**Outcome Measure**

A question was asked of all participating client and counselor subjects following the fifth session, regarding
the client's progress toward the goals of counseling. The possible response choices were that excellent progress was made, satisfactory progress, minimal progress, and no progress was made toward the goals of counseling.

**Personal Data Form**

The Personal Data Form was completed by all client subjects. This form was designed so that clients could provide information regarding gender, age, marital status, education and race.

**Data Collection Procedures**

Following the approval of The Ohio State University Human Subjects Review Committee, the director of the Health Psychology Department at the Industrial Commission, Rehabilitation Division was contacted by telephone by the researcher. He was told that the study involved examining the relationships between client and counselor empathy, the working alliance and an outcome measure. It was explained that at least five counselors would be needed for the study, and their clients, if they were agreeable. It was further explained that the counselors would be required to complete the IRI initially (requiring 10-15 minutes) and the WAI (requiring 20 minutes) therapist form on a sample of participating subjects following their third and fifth
session of treatment. An outcome question would be asked of counselors regarding all participating client subjects following the fifth session. The director was also informed that participating clients would complete an IRI and two WAIs (client form), one to be completed following the third session, and one following the fifth session. Personal data information would be required, as well as a measure of outcome following the fifth session (see Appendix I).

The director of Health Psychology gave his consent for the research project, contingent upon the Industrial Commission's Human Subjects Review Committee approval, approval of the counseling staff, and the collection of data outside of treatment time. After receiving approval from the Human Subjects Review Committee, this researcher talked individually with each counselor to determine interest in participation. All six counselors on staff, and two student interns agreed to participate in the research. All counselor subjects were given the IRI prior to the beginning of the research project.

In order to collect data from client subjects, the researcher attended group sessions during the third week of treatment. The counselor made introductions and explained the purpose for the researcher being there. A brief and general explanation was made regarding the purpose of the study (the relationship of specific personality variables to
the counseling sessions) and how to complete the inventories. Clients were informed that they would be completing the Davis Inventory, the Working Alliance Inventory, a personal data sheet, and two consent forms following their third individual session with their counselor (time requirement of 35-40 minutes). In addition, they would be completing a second Working Alliance Inventory and a question regarding the outcome of counseling following the fifth individual session with their counselor.

Clients were asked to complete the inventories privately in the evening. They were instructed to read the directions on each inventory, to answer questions quickly, and to answer all items. They were told to complete the inventories in the order presented, the Davis Inventory, followed by the Working Alliance Inventory. It was explained that all packets containing test forms would be coded, that there would be complete confidentiality of the results, and that their treatment would not be affected if they chose not to participate. Interested clients were given the materials and were asked to return them sealed in the envelop provided to the receptionist. During the fifth week of treatment, the counselors handed out envelopes containing the fifth session Working Alliance Inventory and the outcome question. These packets were again returned in a sealed envelop to the receptionist.
When envelopes were returned by client subjects in their third week of treatment, a random sample of two subjects was chosen. The counselors completed Working Alliance Inventories for these subjects following the third and fifth sessions. Time constraints did not allow for a WAI to be completed on every participating client. The outcome measure was completed by counselors on all participating client subjects following the fifth session.

Ninety-six client subjects participated in this study. Thirty-five subjects completed inventories following the third session, but did not complete the fifth session packet due to lack of interest or premature termination from the program (medical problems or chose not to continue treatment).

Statistical Analysis

The analysis of variance (ANOVA) is a technique of statistical analysis most commonly utilized when three or more groups are involved, and is a method of analyzing the differences among the means of various groups. In ANOVA, two independent estimates of variance are obtained. The between-group variance is based upon variability between groups, and the within-group variance is based upon the variability within groups. The significance of the difference between the between-group and within-group
variance is provided by Fisher's F-distributions (Runyon & Haber, 1971).

The F-ratio is the between-group variance divided by the within-group variance. If the F-ratio is found to be significant, the experimental treatments have resulted in a significant difference in means. That is, it is concluded that not all of the group means are estimates of a common population mean (Runyon & Haber, 1971).

Regression analysis provides a systematic way for testing, within confidence limits, whether or not new data is consistent with the research questions. Regression analysis serves to estimate the constants of the relationship in which basic causative variables are suggested from previous research. This form of analysis does not necessarily suggest causal relationships, rather, it can provide a valid prediction of the dependent variable value for each set of independent variable values. A regression relationship of \( y \), the dependent variable, on \( x \), the independent variable, gives for each \( x \), the mean of the corresponding \( y \) distribution. The curve obtained as a result of this analysis is an approximation of the true regression and can predict the \( y \) values (Crow, Davis, & Maxfield, 1960).

A two-way linear regression was used in the initial analysis of the data. Linear regression is employed to
predict scores on a variable, given the scores on the other variable. The raw scores are transformed into standard scores in order to compare paired values, and obtain a coefficient of the relationship. The correlation coefficient describes the similarity between the paired values. The size of the difference between the standard scores relates to the amount of the relationship between the variables. The correlation coefficient is obtained by squaring the differences between the paired values and then subtracting half of that average from one (Welkowitz, Ewen, & Cohen, 1976).

Using this equation, a value of zero indicates that the variables are not correlated. The size of the value of the correlation coefficient indicates the strength of the relationship. The sign indicates the direction of the relationship, with the largest possible value being +1.00, and the largest negative value being -1.00 (Welkowitz, Ewen, & Cohen, 1976).

Pathanalysis, which is a data-analytic strategy based on multiple regression, was also employed in analyzing the data after the linear relationships were determined. A recursive model was used that incorporates endogenous variables arranged in a causal, earlier to later sequence. Pathways illustrate direct and indirect causal effects. The exogenous variables were four types of counselor and
client trait empathy. The endogenous variables were time sequence measures of counselor and client perception of the working alliance and an outcome measure.

Pathanalysis "brings to bear on the interpretation of correlations among the variables a theoretical model that specifies the causal connections among the variables" (Nichols, 1986, p. 27). The pathanalysis model is derived from the theory regarding how the variables being considered are related in the real world. How accurate the results are is a product of the accuracy of the data and the accuracy of the model (Nichols, 1986). Path coefficients show the degree of a causal relationship along paths between variables.

An exogenous variable is the starting point of the model, with none of its variance being explained by the model. Endogenous variable variation, on the other hand, can be explained within the model. It is possible to have a direct causal effect of one variable on another, as well as an indirect causal effect. The indirect effect is the sum of the path coefficients along the indirect path. Direct, indirect and non-causal relationships can be found between variables (Nichols, 1986).

In a recursive model, the arrows indicating relationships all flow in one direction. In this model, all of the endogenous variables are sequentially arranged and
all causal arrows go from an earlier point to a later point in the sequence. All relevant variables are specified, and endogenous variables are sequentially ordered. A strong theoretical justification is needed for the sequence. Recursive models are analyzed with stepwise multiple regression (Nichols, 1986).

Summary
Chapter III contains a description of the research setting, population, instrumentation, and data collection procedures. A description of the statistical analysis utilized is also provided.
CHAPTER IV

RESULTS

This chapter contains a presentation of the results of the data analysis by demographic variable and the 11 research questions. It also includes the results of the descriptive and regression analysis of the client and counselor data.

Findings by Demographic Variable

This section contains a description of the client sample with regard to the demographic data of gender, age, marital status, education, and race. The counselor sample is also described with regard to demographic data.

Client Subjects

The client sample consisted of 96 individuals with chronic pain who were in an intensive six week multidisciplinary treatment program located within a rehabilitation center in a large midwestern city. The Personal Data Form was designed so that clients could provide information regarding gender, age, marital status, education, and race. This data is summarized in Table 1, by frequency and percent. There were 55 males (57% of the sample) and 41 females (43%) participating in this study.
TABLE 1
Self Reported Client Demographic Variables by Frequency and Percent

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>41</td>
<td>.43</td>
<td>.43</td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
<td>.57</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Age Range</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-33</td>
<td>24</td>
<td>.25</td>
<td>.25</td>
</tr>
<tr>
<td>34-40</td>
<td>25</td>
<td>.26</td>
<td>.51</td>
</tr>
<tr>
<td>41-46</td>
<td>24</td>
<td>.25</td>
<td>.76</td>
</tr>
<tr>
<td>47-62</td>
<td>23</td>
<td>.24</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>67</td>
<td>.70</td>
<td>.70</td>
</tr>
<tr>
<td>Not Married</td>
<td>29</td>
<td>.30</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades 1-8</td>
<td>2</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Grades 9-12</td>
<td>27</td>
<td>.28</td>
<td>.30</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>48</td>
<td>.50</td>
<td>.80</td>
</tr>
<tr>
<td>13-16 years</td>
<td>19</td>
<td>.20</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>83</td>
<td>.87</td>
<td>.87</td>
</tr>
<tr>
<td>Black</td>
<td>12</td>
<td>.12</td>
<td>.99</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>

N=96
The self-reported age range for these subjects was 20 to 62, with 24 (25%) ranging in age from 20 to 33, 49 (51%) from age 34-46, and 23 (24%) from age 47-62. In this sample, 67 (70%) of the subjects reported they were married, and 29 (30%) indicated they were not married. The majority had at least a high school education. Forty-eight (50%) of the subjects reported they were high school graduates, 19 (20%) had 13-16 years of education, 27 (28%) had 9 to 12 years of education, and 2 (2%) reported they had less than 9 years of education. Eighty-three (87%) of the subjects reported they were white, 12 (12%) indicated they were black, and 1 (1%) was Hispanic.

**Counselor Subjects**

The counselor sample consisted of eight subjects who were part of a multidisciplinary rehabilitation team and were involved in a therapeutic relationship with the chronic pain subjects. Two of the counselor subjects were males, and six were females. One counselor was an Ethiopian male, one was a black French American female, and six subjects were white; one male and five females. This staff was composed of three Ph.D. psychologists, one psychology assistant (Ph.D. nonpsychologist), two pre-doctoral psychology assistants, and two pre-doctoral student interns. One of the pre-doctoral psychology assistants was majoring in counseling, and the other in developmental psychology.
Both pre-doctoral student interns were majoring in clinical psychology. These results are summarized in Table 2 by frequency.

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>6</td>
<td>.75</td>
<td>.75</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>.25</td>
<td>1.00</td>
</tr>
<tr>
<td>Age Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27-45</td>
<td>8</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Marital Status</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>5</td>
<td>.63</td>
<td>.63</td>
</tr>
<tr>
<td>Non-married</td>
<td>3</td>
<td>.37</td>
<td>1.00</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-doctoral psychology intern</td>
<td>2</td>
<td>.25</td>
<td>.25</td>
</tr>
<tr>
<td>Pre-doctoral psychology assistant</td>
<td>2</td>
<td>.25</td>
<td>.50</td>
</tr>
<tr>
<td>Ph.D. nonpsychologist</td>
<td>1</td>
<td>.13</td>
<td>.63</td>
</tr>
<tr>
<td>Ph.D. psychologist</td>
<td>3</td>
<td>.37</td>
<td>1.00</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>6</td>
<td>.75</td>
<td>.75</td>
</tr>
<tr>
<td>Black French American</td>
<td>1</td>
<td>.13</td>
<td>.88</td>
</tr>
<tr>
<td>Ethiopian</td>
<td>1</td>
<td>.12</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Findings by Research Question

The first three research questions pertain to the descriptive analysis. The nature of empathy and working alliances in both clients and counselors is described and discussed. Also presented were significant differences in client empathy, working alliance, and outcome scores as a result of demographic data.

Research Question One:

1. What is the nature of trait empathy (affective and cognitive) and the working alliances developed in a sample population of chronic pain clients?

The mean scores, standard deviations, and minimum and maximum scores were generated for the self reported client empathy types, as measured by the Interpersonal Reactivity Index (IRI), and the self reported working alliance components, as measured by the Working Alliance Inventory (WAI). Working alliance data were collected at week 3 and week 5, in a six week program. These results are summarized in Table 3. The working alliance scores were similar across the task, goal and bond components and demonstrated an increase in the means from week 3 to week 5.
TABLE 3

Summary Statistics by Self Reported Client Empathy Type and Working Alliance Component at Week 3 and Week 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRI-Perspective</td>
<td>18.75</td>
<td>4.47</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>IRI-Fantasy</td>
<td>12.28</td>
<td>5.46</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>IRI-Empathic</td>
<td>21.91</td>
<td>4.39</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>IRI-Personal Dist</td>
<td>9.87</td>
<td>5.80</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>WAI-Task 1 week 3</td>
<td>69.83</td>
<td>10.80</td>
<td>40</td>
<td>84</td>
</tr>
<tr>
<td>WAI-Task 2 week 5</td>
<td>71.21</td>
<td>11.57</td>
<td>31</td>
<td>84</td>
</tr>
<tr>
<td>WAI-Goal 1 week 3</td>
<td>68.71</td>
<td>11.31</td>
<td>35</td>
<td>84</td>
</tr>
<tr>
<td>WAI-Goal 2 week 5</td>
<td>71.10</td>
<td>11.26</td>
<td>32</td>
<td>84</td>
</tr>
<tr>
<td>WAI-Bond 1 week 3</td>
<td>70.80</td>
<td>11.44</td>
<td>21</td>
<td>84</td>
</tr>
<tr>
<td>WAI-Bond 2 week 5</td>
<td>72.45</td>
<td>11.40</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>WAI-Composite 1 week 3</td>
<td>209.26</td>
<td>32.00</td>
<td>96</td>
<td>229</td>
</tr>
<tr>
<td>WAI-Composite 2 week 5</td>
<td>214.84</td>
<td>32.77</td>
<td>115</td>
<td>233</td>
</tr>
</tbody>
</table>

N=96

Research Question Two:

2. What is the nature of trait empathy (affective and cognitive) and the working alliances developed in the counselors of these clients?

Means scores, standard deviations, and minimum and maximum scores for the self reported counselor empathy types, and the self reported working alliance components were generated, results which are presented in Table 4. The working alliance data were collected at weeks 3 and 5. A
comparison of client and counselor empathy types showed that counselors were lower on the personal distress scale and higher on the perspective taking and fantasy scales. They produced almost identical empathic concern scores. The client range of empathy scores on all four empathy types was wider than the counselor range of scores, indicating there was more variability in client scores.

TABLE 4
Summary Statistics by Counselor Empathy Type and Working Alliance Component at Week 3 and Week 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRI-Perspective Taking</td>
<td>21.13</td>
<td>2.11</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>IRI-Fantasy</td>
<td>16.36</td>
<td>6.06</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>IRI-Empathic Concern</td>
<td>21.95</td>
<td>1.47</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>IRI-Personal Distress</td>
<td>6.00</td>
<td>1.53</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>WAI-Task 1 week 3</td>
<td>64.31</td>
<td>7.01</td>
<td>51</td>
<td>81</td>
</tr>
<tr>
<td>WAI-Task 2 week 5</td>
<td>66.76</td>
<td>7.57</td>
<td>44</td>
<td>79</td>
</tr>
<tr>
<td>WAI-Goal 1 week 3</td>
<td>65.79</td>
<td>6.56</td>
<td>51</td>
<td>77</td>
</tr>
<tr>
<td>WAI-Goal 2 week 5</td>
<td>67.55</td>
<td>6.48</td>
<td>51</td>
<td>77</td>
</tr>
<tr>
<td>WAI-Bond 1 week 3</td>
<td>67.72</td>
<td>7.72</td>
<td>51</td>
<td>79</td>
</tr>
<tr>
<td>WAI-Bond 2 week 5</td>
<td>69.28</td>
<td>7.41</td>
<td>52</td>
<td>81</td>
</tr>
<tr>
<td>WAI-Composite 1 week 3</td>
<td>197.83</td>
<td>19.55</td>
<td>155</td>
<td>232</td>
</tr>
<tr>
<td>WAI-Composite 2 week 5</td>
<td>203.59</td>
<td>19.85</td>
<td>150</td>
<td>230</td>
</tr>
</tbody>
</table>

N=8
Client subjects also demonstrated a wider range of scores than counselor subjects on all measures of working alliance. Overall, the client means were higher on all aspects of the working alliance than counselor means. In addition, all means produced on the working alliance components for the clients and counselors were higher at the fifth week than the third week.

Table 5 provides a summary of the mean scores for the client and counselor sample and the norming sample for the Interpersonal Reactivity Index. Standard deviations were not available for the norming sample. The counselor subjects produced the highest perspective taking mean and the lowest personal distress mean. The client sample produced the lowest fantasy mean. The mean scores of client and counselor subjects and the norming sample for empathic concern were comparable.
### TABLE 5

**Mean Scores of Client Sample, Counselor Sample and the Norming Samples**

by Interpersonal Reactivity Index Scales

<table>
<thead>
<tr>
<th>Emathy Types</th>
<th>Mean Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Client Sample</td>
</tr>
<tr>
<td></td>
<td>N=96</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>18.75</td>
</tr>
<tr>
<td>Fantasy</td>
<td>12.28</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>9.87</td>
</tr>
</tbody>
</table>

Research Question Three:

3. Are there significant differences in client empathy, working alliance, and outcome scores as a result of gender, age, marital status, education or race?

The differences in mean scores of empathy, working alliance, and outcome were examined by the demographic data. The significant results are presented in Tables 6 through 11. No significant differences were found between the t-tests of married and nonmarried client subjects on empathy, working alliance, and outcome scores.

Gender Effect

Table 6 presents the results of t-tests between male and female chronic pain subjects, with regard to the Davis empathy types and self-rated outcome scores. The female client subjects' personal distress (PD) empathy mean scores were significantly higher than the male subjects' scores \( t = -2.01; p = .05 \). A significant difference was found between the self-rated outcome scores of male and female subjects. Outcome was scored on a four point scale of 1 = excellent progress, 2 = satisfactory, 3 = minimal, and 4 = no progress made, so that lower scores were indicative of a better outcome. Female subjects demonstrated significantly higher
TABLE 6

Results of t-tests Between Male and Female Client Subjects
for Davis Empathy Types and Client-rated Outcome Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Research sample</th>
<th>Cases</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis PT</td>
<td>Male</td>
<td>55</td>
<td>18.69</td>
<td>4.79</td>
<td>-0.15</td>
<td>.879</td>
</tr>
<tr>
<td>Davis PT</td>
<td>Female</td>
<td>41</td>
<td>18.83</td>
<td>4.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis FS</td>
<td>Male</td>
<td>55</td>
<td>11.60</td>
<td>5.20</td>
<td>-1.40</td>
<td>.164</td>
</tr>
<tr>
<td>Davis FS</td>
<td>Female</td>
<td>41</td>
<td>13.20</td>
<td>5.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis EC</td>
<td>Male</td>
<td>55</td>
<td>21.38</td>
<td>4.63</td>
<td>-1.39</td>
<td>.168</td>
</tr>
<tr>
<td>Davis EC</td>
<td>Female</td>
<td>41</td>
<td>22.61</td>
<td>4.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis PD</td>
<td>Male</td>
<td>55</td>
<td>8.85</td>
<td>5.72</td>
<td>-2.01</td>
<td>.048</td>
</tr>
<tr>
<td>Davis PD</td>
<td>Female</td>
<td>41</td>
<td>11.22</td>
<td>5.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Score</td>
<td>Male</td>
<td>55</td>
<td>1.67</td>
<td>.70</td>
<td>-2.26</td>
<td>.026</td>
</tr>
<tr>
<td>Outcome Score</td>
<td>Female</td>
<td>41</td>
<td>1.98</td>
<td>.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

means than male subjects, indicating that the female self-reported progress was less positive than the male self-reported progress.

Race Effect

The results of t-tests between white and black client subjects for Davis empathy types and working alliance scores are presented in Table 7. Several significant mean score differences were noted. Black subjects' perspective taking empathy mean scores were significantly higher than white
TABLE 7

Results of t-tests Between White and Black Client Subjects for Davis Empathy Types and Working Alliance Components at Week 3 and Week 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Research Sample</th>
<th>Cases</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis PT</td>
<td>White</td>
<td>83</td>
<td>18.45</td>
<td>4.54</td>
<td>-2.29</td>
<td>.035</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>21.00</td>
<td>3.46</td>
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<td></td>
</tr>
<tr>
<td>Davis FS</td>
<td>White</td>
<td>83</td>
<td>11.94</td>
<td>5.39</td>
<td>-1.31</td>
<td>.212</td>
</tr>
<tr>
<td></td>
<td>Black</td>
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<td>14.25</td>
<td>5.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis EC</td>
<td>White</td>
<td>83</td>
<td>21.75</td>
<td>4.53</td>
<td>-1.41</td>
<td>.174</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>23.25</td>
<td>3.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Davis PD</td>
<td>White</td>
<td>83</td>
<td>10.30</td>
<td>5.75</td>
<td>1.95</td>
<td>.071</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>6.83</td>
<td>5.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA Task 1 wk3</td>
<td>White</td>
<td>83</td>
<td>69.35</td>
<td>10.70</td>
<td>-3.06</td>
<td>.005</td>
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<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>75.67</td>
<td>5.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA Task 2 wk3</td>
<td>White</td>
<td>83</td>
<td>70.53</td>
<td>11.81</td>
<td>-1.67</td>
<td>.115</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>75.58</td>
<td>9.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA Bond 1 wk3</td>
<td>White</td>
<td>83</td>
<td>70.72</td>
<td>10.50</td>
<td>-1.91</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>75.50</td>
<td>7.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA Bond 2 wk3</td>
<td>White</td>
<td>83</td>
<td>71.77</td>
<td>11.81</td>
<td>-3.27</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>78.25</td>
<td>5.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA Goal 1 wk3</td>
<td>White</td>
<td>83</td>
<td>68.67</td>
<td>11.04</td>
<td>-1.07</td>
<td>.301</td>
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<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>71.75</td>
<td>9.05</td>
<td></td>
<td></td>
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<tr>
<td>WA Goal 2 wk3</td>
<td>White</td>
<td>83</td>
<td>70.39</td>
<td>11.58</td>
<td>-2.35</td>
<td>.030</td>
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<tr>
<td></td>
<td>Black</td>
<td>12</td>
<td>76.42</td>
<td>7.72</td>
<td></td>
<td></td>
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</tbody>
</table>
TABLE 7 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Research Sample</th>
<th>Cases</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA Compl wk3</td>
<td>White</td>
<td>83</td>
<td>208.65</td>
<td>30.80</td>
<td>-2.13</td>
<td>.046</td>
</tr>
<tr>
<td>WA Compl wk5</td>
<td>Black</td>
<td>12</td>
<td>222.92</td>
<td>19.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA Comp2 wk3</td>
<td>White</td>
<td>83</td>
<td>212.78</td>
<td>33.92</td>
<td>-2.57</td>
<td>.018</td>
</tr>
<tr>
<td>WA Comp2 wk5</td>
<td>Black</td>
<td>12</td>
<td>230.25</td>
<td>19.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note that this data is based upon an N of 12 for black subjects. The significance of this data will be further discussed in Chapter 5.

...subjects (t = -2.29; p = .05). The means for working alliance task 1 scores (t = -3.06; p = .005), bond 2 scores (t = -3.27; p = .005), goal 2 scores (t = -2.35; p = .05), and composite 1 (t = -2.13; p = .05), and composite 2 scores (t = -2.57; p = .05) were significantly higher for the black subjects than the white subjects, in this sample population of 12 black subjects.

**Age Effect**

Analysis of Variance was utilized with the demographic variable of self reported age in order to determine the
existence of main effects or interaction effects based on this variable. Table 8 contains a summary of the Analysis of Variance for the dependent variables of empathy and the working alliance, by the independent variable, self reported age. A main effect was found for perspective taking \((F=2.81; \text{df}=3; p=.05)\) and empathic concern empathy \((F=3.50; \text{df}=3; p=.05)\), due to age. Age groups 1 (age 20-33) and 4 (age 47-62) perspective taking mean scores were significantly lower than age group 3 (age 41-46). Age group 1 (age 20-33) empathic concern means were significantly lower than the mean scores for group 3 (age 41-46). The mean scores for perspective taking and empathic concern by age group are presented in Table 9.
### TABLE 8

Univariate F tests of Dependent Variables Client Empathy

Types and Third and Fifth Week Working Alliance Components by

**Independent Variable Self Reported Age**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRI-Perspective Taking</td>
<td>3</td>
<td>159.21</td>
<td>53.07</td>
<td>2.81</td>
<td>.044*</td>
</tr>
<tr>
<td>IRI-Fantasy</td>
<td>3</td>
<td>43.22</td>
<td>14.41</td>
<td>.48</td>
<td>.700</td>
</tr>
<tr>
<td>IRI-Empathic Concern</td>
<td>3</td>
<td>187.85</td>
<td>62.62</td>
<td>3.50</td>
<td>.019*</td>
</tr>
<tr>
<td>IRI-Personal Distress</td>
<td>3</td>
<td>89.29</td>
<td>29.77</td>
<td>.88</td>
<td>.434</td>
</tr>
<tr>
<td>WAI-Task 1 week 3</td>
<td>3</td>
<td>545.41</td>
<td>181.80</td>
<td>1.59</td>
<td>.198</td>
</tr>
<tr>
<td>WAI-Task 2 week 5</td>
<td>3</td>
<td>408.53</td>
<td>136.18</td>
<td>1.02</td>
<td>.389</td>
</tr>
<tr>
<td>WAI-Goal 1 week 3</td>
<td>3</td>
<td>411.96</td>
<td>137.32</td>
<td>1.08</td>
<td>.363</td>
</tr>
<tr>
<td>WAI-Goal 2 week 5</td>
<td>3</td>
<td>409.85</td>
<td>136.62</td>
<td>1.08</td>
<td>.361</td>
</tr>
<tr>
<td>WAI-Bond 1 week 3</td>
<td>3</td>
<td>855.16</td>
<td>285.05</td>
<td>2.27</td>
<td>.086</td>
</tr>
<tr>
<td>WAI-Bond 2 week 5</td>
<td>3</td>
<td>393.79</td>
<td>131.26</td>
<td>1.01</td>
<td>.393</td>
</tr>
<tr>
<td>WAI-Composite 1 week 3</td>
<td>3</td>
<td>4959.28</td>
<td>1653.09</td>
<td>1.65</td>
<td>.184</td>
</tr>
<tr>
<td>WAI-Composite 2 week 5</td>
<td>3</td>
<td>3602.01</td>
<td>1200.67</td>
<td>1.12</td>
<td>.344</td>
</tr>
</tbody>
</table>

*p ≤ .05

### TABLE 9

Client Perspective Taking and Empathic Concern Mean Scores by Age Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Group 1 Age (20-33)</th>
<th>Group 2 Age (34-40)</th>
<th>Group 3 Age (41-46)</th>
<th>Group 4 Age (47-62)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective Taking</td>
<td>17.86</td>
<td>19.67</td>
<td>20.36</td>
<td>17.74</td>
<td></td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>19.97</td>
<td>22.15</td>
<td>23.04</td>
<td>22.83</td>
<td></td>
</tr>
</tbody>
</table>

N=96
**Education Effect**

Table 10 presents the Analysis of Variance for the dependent variables client and counselor outcome, by the independent variable, self reported education. A main effect was found for the client outcome score ($F=3.62; df=3; p=.05$), due to education. Table 11 is a crosstabulation of self reported education and client outcome scores. Group 2 (grades 9-12) had a significantly larger percent of minimal progress (value 3) scores than the other education groups. No main effect was found for the outcome 2 score, counselor rating. No main effects due to education were demonstrated for the empathy types and working alliance components. Interaction effects were not found for any of the demographic data and the empathy types, working alliance components, and outcome scores.
### TABLE 10

Univariate F tests of Dependent Variables Client and Counselor Outcome Scores by Independent Variable Self Reported Education

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Outcome</td>
<td>3</td>
<td>4.56</td>
<td>1.52</td>
<td>3.62</td>
<td>.016*</td>
</tr>
<tr>
<td>Counselor Outcome</td>
<td>3</td>
<td>1.30</td>
<td>.43</td>
<td>.90</td>
<td>.444</td>
</tr>
</tbody>
</table>

*P < .05

### TABLE 11

Cross-tabulation of Self Reported Education and Client Outcome Scores by Frequency and Percent

<table>
<thead>
<tr>
<th>Education</th>
<th>Client Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Grades 1-8</td>
<td></td>
</tr>
<tr>
<td>frequency</td>
<td>1.00</td>
</tr>
<tr>
<td>%</td>
<td>50.00</td>
</tr>
<tr>
<td>(2) Grades 9-12</td>
<td></td>
</tr>
<tr>
<td>frequency</td>
<td>3.00</td>
</tr>
<tr>
<td>%</td>
<td>11.10</td>
</tr>
<tr>
<td>(3) High School Graduate</td>
<td></td>
</tr>
<tr>
<td>frequency</td>
<td>19.00</td>
</tr>
<tr>
<td>%</td>
<td>39.60</td>
</tr>
<tr>
<td>(4) 13-16 years</td>
<td></td>
</tr>
<tr>
<td>frequency</td>
<td>9.00</td>
</tr>
<tr>
<td>%</td>
<td>47.40</td>
</tr>
</tbody>
</table>
Research Question Four:

4. Are there correlations between the client or counselor empathy types and the different aspects of the working alliance, as perceived by the client?

Research questions 4 through 11 pertain to the regression analysis and identify significant one to one relationships between client and counselor empathy types, working alliance components, and outcome. Pearson correlation coefficients and two tailed tests of significance were computed.

Table 12 contains a summary of the correlation results between the client empathy types and the client working alliance components. The results indicate that there are several positive correlations at the $p=.01$ and $p=.05$ levels of confidence between the empathy variables and the working alliance variables. The strongest positive correlations ($p=.01$) were found between empathic concern and goal 1, at .38; empathic concern and composite 1, at .38; and empathic concern and bond 1, at .37. Other positive correlations found at the $p = .01$ confidence level were between empathic concern and task 1, at .32; empathic concern and task 2, at .30; empathic concern and bond 2, .30; empathic concern and goal 2, .25; and between perspective taking and goal 1, with a correlation coefficient of .29.
TABLE 12

Pearson Correlation Coefficients for Client Empathy Types

and Third and Fifth Week Client Working Alliance Components

<table>
<thead>
<tr>
<th>Empathy Types</th>
<th>Working Alliance Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Task 1</td>
</tr>
<tr>
<td></td>
<td>week 3</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>.23*</td>
</tr>
<tr>
<td>Fantasy</td>
<td>-.08</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>.32**</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>-.15</td>
</tr>
</tbody>
</table>

* p ≤ .05  ** p ≤ .01

Two-tailed Significance  N=96
Positive correlations at the $p = .05$ level of confidence were discovered between empathic concern and composite 2, at .29; perspective taking and composite score 1, at .25; and perspective taking and task 1, at .23. Empathic concern empathy had the most significant correlations with the working alliance components, and fantasy and personal distress empathy demonstrated no significant correlations with the working alliance.

Table 13 provides a summary of correlation findings between the counselor empathy types and the different client working alliance components. A negative correlation was found at the $p = .05$ level of confidence between counselor perspective taking and client task 2, at -.20. No other significant relationships were demonstrated between counselor empathy types and client working alliance components.

**Research Question Five:**

5. Are there correlations between the client or counselor empathy types and the different aspects of the working alliance, as perceived by the counselor?

Again, Pearson correlation coefficients were computed to determine whether or not there were significant relationships between empathy types and the working alliance components, using a two-tailed test of significance.
<table>
<thead>
<tr>
<th>Counselor Empathy Types</th>
<th>Client Working Alliance Components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Task 1</td>
</tr>
<tr>
<td></td>
<td>week 3</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>-.14</td>
</tr>
<tr>
<td>Fantasy</td>
<td>.03</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>-.05</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>.04</td>
</tr>
</tbody>
</table>

*<em>p ≤ .05</em>

Two-tailed Significance  N=96
Tables 14 and 15 contain summaries of these correlations. Table 14 provides a summary of the coefficients for client empathy types and counselor working alliance composite scores. The significant relationship was between client empathic concern and counselor working alliance composite 2 score, at .40 ($p=.05$).

Table 15 demonstrates the relationships between counselor empathy types and counselor working alliance composite scores. Significant relationships ($p=.01$) were found between counselor fantasy and counselor composite score 1, at .47, and between counselor empathic concern and counselor composite score 1, at .52. These results are based on a sample of 29 counselor working alliance scores.
### TABLE 14
Pearson Correlation Coefficients by Client Empathy Types and Counselor Third and Fifth Week Working Alliance Composite Scores

<table>
<thead>
<tr>
<th>Client Empathy Types</th>
<th>Counselor Working Alliance Components</th>
<th>Working Alliance Composite Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite 1 week 3</td>
<td>Composite 2 week 5</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>.19</td>
<td>.10</td>
</tr>
<tr>
<td>Fantasy</td>
<td>-.07</td>
<td>-.01</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>.11</td>
<td>.40*</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>-.24</td>
<td>-.11</td>
</tr>
</tbody>
</table>

* \( p \leq .05 \)
Two-tailed Significance N=29

### TABLE 15
Pearson Correlation Coefficients by Counselor Empathy Types and Counselor Third and Fifth Week Working Alliance Composite Scores

<table>
<thead>
<tr>
<th>Empathy Types</th>
<th>Working Alliance Components</th>
<th>Working Alliance Composite Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite 1 week 3</td>
<td>Composite 2 week 5</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>-.10</td>
<td>-.17</td>
</tr>
<tr>
<td>Fantasy</td>
<td>.47**</td>
<td>.12</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>.52**</td>
<td>.26</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>.02</td>
<td>-.17</td>
</tr>
</tbody>
</table>

** \( p \leq .01 \)
Two-tailed Significance N=29
Research Question Six:

6. Are there correlations between third and fifth week client working alliances?

Table 16 shows the results of the correlations found between the third and fifth week client working alliances. All of the client working alliance scores at week 3 are highly correlated with week 5 client working alliance scores, at a confidence level $p = .005$. Task 1 and task 2 demonstrated a correlation of .75; bond 1 and bond 2 were correlated, at .76; goal 1 and goal 2 were correlated, at .80; and composite scores 1 and 2 yielded a correlation of .84.

**TABLE 16**

*Pearson Correlation Coefficients by Third and Fifth Week*

<table>
<thead>
<tr>
<th>Client Working Alliance Components</th>
<th>Task 2 week 5</th>
<th>Goal 2 week 5</th>
<th>Bond 2 week 5</th>
<th>Composite 2 week 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 week 3</td>
<td>.75***</td>
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<td></td>
</tr>
<tr>
<td>Goal 1 week 3</td>
<td></td>
<td>.80***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond 1 week 3</td>
<td></td>
<td></td>
<td>.76***</td>
<td></td>
</tr>
<tr>
<td>Composite 1 week 3</td>
<td></td>
<td></td>
<td></td>
<td>.84***</td>
</tr>
</tbody>
</table>

*** $p \leq .005$

Two-tailed Significance N = 96
Research Question Seven:

7. Are there correlations between the client working alliance components and the counselor working alliance components?

The results of this analysis, presented in Table 17, indicate that there was one positive correlation between the client and counselor perception of the working alliance. Client and counselor bond 1 scores were correlated at .37, with a confidence level of \( p = .05 \).

Other differences were noted between client and counselor working alliance scores in the data presented in Tables 3 and 4. There was an overall pattern of counselor mean working alliance scores being lower than the client mean scores at week 3 and also week 5. All of the working alliance component mean scores of clients and counselors increased from week 3 to week 5. At the same time, there was a consistent pattern of the client scores being more variable and extreme than the counselor scores, as demonstrated by the wide range of client working alliance scores.
TABLE 17

Pearson Correlation Coefficients for Client Working Alliance Components and Counselor Working Alliance Components at Week 3 and Week 5

<table>
<thead>
<tr>
<th>Client Working Alliance Components</th>
<th>Task 1</th>
<th>Task 2</th>
<th>Goal 1</th>
<th>Goal 2</th>
<th>Bond 1</th>
<th>Bond 2</th>
<th>Composite 1</th>
<th>Composite 2</th>
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<tbody>
<tr>
<td></td>
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<td>week 5</td>
<td>week 3</td>
<td>week 5</td>
<td>week 3</td>
<td>week 5</td>
<td>week 3</td>
<td>week 5</td>
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<tr>
<td>Task 1</td>
<td>.10</td>
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<td>Bond 1</td>
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<td></td>
<td>.37*</td>
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</tr>
<tr>
<td>Bond 2</td>
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<tr>
<td>Composite 1</td>
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<td></td>
<td></td>
<td></td>
<td>.23</td>
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</tr>
<tr>
<td>week 3</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Composite 2</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

* p ≤ .05
Two-tailed Significance N = 29
Research Question Eight:

8. Are there correlations between the different components of the client or counselor working alliance and the client outcome scores?

The results for this research question are summarized in Tables 18 and 19. Table 18 presents the Pearson correlation coefficients for the relationship between the client working alliance components and client outcome scores, where an outcome score of 1 = excellent progress, 2 = satisfactory progress, 3 = minimal progress, and 4 = no progress. Therefore, negative correlations indicate that as client working alliance scores increase, client outcome scores improve. All of these relationships were strongly significant, seven of eight scores at a confidence level of $p=.005$ and one score at a confidence level of $.01$. This indicates that client working alliance scores were correlated with the clients' perception of the outcome of counseling. In addition, a pattern was found that fifth week working alliance components were more highly correlated with outcome than third week scores.

Table 19 summarizes the relationships between the counselor working alliance and the client outcome scores. These results are based on an N of 29. A positive correlation was discovered between counselor bond 1 and client outcome, at .44, and a confidence level of $p=.05$. 
### TABLE 18

**Pearson Correlation Coefficients for Third and Fifth Week**

**Client Working Alliance Components and Client Outcome Scores**

<table>
<thead>
<tr>
<th>Client Working Alliance Components</th>
<th>Client Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 week 3</td>
<td>-.49***</td>
</tr>
<tr>
<td>Task 2 week 5</td>
<td>-.62***</td>
</tr>
<tr>
<td>Goal 1 week 3</td>
<td>-.50***</td>
</tr>
<tr>
<td>Goal 2 week 5</td>
<td>-.61***</td>
</tr>
<tr>
<td>Bond 1 week 3</td>
<td>-.34**</td>
</tr>
<tr>
<td>Bond 2 week 5</td>
<td>-.51***</td>
</tr>
<tr>
<td>Composite 1 week 3</td>
<td>-.47***</td>
</tr>
<tr>
<td>Composite 2 week 5</td>
<td>-.61***</td>
</tr>
</tbody>
</table>

**Two-tailed Significance**

Two-tailed Significance N = 96

### TABLE 19

**Pearson Correlation Coefficients for Counselor Working**

**Alliance Components and Client Outcome Scores**

<table>
<thead>
<tr>
<th>Counselor Working Alliance Components</th>
<th>Client Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 week 3</td>
<td>.14</td>
</tr>
<tr>
<td>Task 2 week 5</td>
<td>.08</td>
</tr>
<tr>
<td>Goal 1 week 3</td>
<td>.35</td>
</tr>
<tr>
<td>Goal 2 week 5</td>
<td>.23</td>
</tr>
<tr>
<td>Bond 1 week 3</td>
<td>.44*</td>
</tr>
<tr>
<td>Bond 2 week 5</td>
<td>.26</td>
</tr>
<tr>
<td>Composite 1 week 3</td>
<td>.33</td>
</tr>
<tr>
<td>Composite 2 week 5</td>
<td>.20</td>
</tr>
</tbody>
</table>

**Two-tailed Significance**

Two-tailed Significance N = 96
This result suggests that for this population of 29 chronic pain clients and their counselors, higher counselor bond scores at week 3 were correlated with higher client outcome scores, where higher outcome scores indicate less progress.

**Research Question Nine:**

9. Are there correlations between the different components of the client or counselor working alliance and the counselor outcome scores?

The results for this research question are summarized in Tables 20 and 21. All of the negative correlations found between the client working alliance and counselor outcome scores were significant, with the tendency for correlations to increase from week 3 to week 5. These relationships are summarized in Table 20, and indicate correlations ranging from -.30 to -.36, all at the $p = .01$ level of confidence. Higher client working alliance scores are correlated with lower counselor outcome scores, or improvement in outcome.

Table 21 contains a presentation of the resulting correlations between the counselor working alliance components and counselor outcome scores. These findings are based on an $N$ of 29. Several negative correlations were found to be significant, ranging from -.36 to -.71. The fifth week counselor task 2, goal 2, and composite 2 scores were negatively correlated with counselor outcome, at a
### TABLE 20

**Pearson Correlation Coefficients for Third and Fifth Week Client Working Alliance Components and Counselor Outcome Scores**

<table>
<thead>
<tr>
<th>Client Working Alliance Components</th>
<th>Counselor Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 week 3</td>
<td>-.34**</td>
</tr>
<tr>
<td>Task 2 week 5</td>
<td>-.35**</td>
</tr>
<tr>
<td>Goal 1 week 3</td>
<td>-.30**</td>
</tr>
<tr>
<td>Goal 2 week 5</td>
<td>-.34**</td>
</tr>
<tr>
<td>Bond 1 week 3</td>
<td>-.33**</td>
</tr>
<tr>
<td>Bond 2 week 5</td>
<td>-.35**</td>
</tr>
<tr>
<td>Composite 1 week 3</td>
<td>-.34**</td>
</tr>
<tr>
<td>Composite 2 week 5</td>
<td>-.36**</td>
</tr>
</tbody>
</table>

**p < .01**
Two-tailed Significance *N = 96*

### TABLE 21

**Pearson Correlation Coefficients for Third and Fifth Week Counselor Working Alliance Components and Counselor Outcome Scores**

<table>
<thead>
<tr>
<th>Counselor Working Alliance Components</th>
<th>Counselor Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1 week 3</td>
<td>-.39*</td>
</tr>
<tr>
<td>Task 2 week 5</td>
<td>-.64***</td>
</tr>
<tr>
<td>Goal 1 week 3</td>
<td>-.36*</td>
</tr>
<tr>
<td>Goal 2 week 5</td>
<td>-.71***</td>
</tr>
<tr>
<td>Bond 1 week 3</td>
<td>-.08</td>
</tr>
<tr>
<td>Bond 2 week 5</td>
<td>-.43*</td>
</tr>
<tr>
<td>Composite 1 week 3</td>
<td>-.29</td>
</tr>
<tr>
<td>Composite 2 week 5</td>
<td>-.64***</td>
</tr>
</tbody>
</table>

* p < .05  **p < .01  ***p < .005
Two-tailed Significance *N = 29*
confidence level of $p=0.005$. The third week counselor task 1, goal 1, and bond 2 scores were negatively correlated with counselor outcome, at the $p=0.05$ confidence level. All of the week 5 working alliance components were correlated with outcome. When week 3 and week 5 scores both demonstrated correlations with outcome, week 5 correlations were stronger. These results indicate that higher counselor working alliance scores are correlated with lower (better) counselor outcome scores.

Tables 18 through 21 contain a presentation of the correlations between client and counselor working alliance components and outcome scores. Two consistent patterns were apparent from this data. First, correlations between the working alliance and outcome were higher for week 5 than for week 3. Second, correlations were stronger when comparing client to client variables and counselor to counselor variables. Correlations between client and counselor variables were not as strong.

**Research Question Ten:**

10. Is there general agreement between clients and counselors regarding their perceptions of the outcome of counseling?

Table 22 contains a presentation of the mean scores and standard deviations for the client and counselor outcome scores. The mean scores were similar for clients and
counselors. The client outcome mean score was 1.80, and the counselor outcome mean score was 1.72, where a value of 1 = excellent progress, 2 = satisfactory progress, 3 = minimal progress, and 4 = no progress toward the goals of counseling. These results indicate that overall, both clients and counselors perceive the outcome of the counseling sessions to be slightly better than satisfactory.

Table 23 presents the frequency and percent of the outcome values for clients and counselors. The most frequent value chosen by clients and counselors was value 2 (satisfactory progress). Fifty-four percent of the client subjects rated themselves satisfactory (value 2). Counselors rated the progress of counseling satisfactory (value 2) for 48% of their clients. Thirty-three percent of the clients rated their progress to be excellent (value 1), while counselors rated 41% of their clients in this category. Twelve percent of the clients cited their progress as minimal (value 3), and 1% chose value 4 (no progress). Ten percent of the counselor subjects chose value 3, and 1% chose value 4 when rating their clients.
### TABLE 22

Summary Statistics for Client and Counselor Outcome Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum Score</th>
<th>Maximum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Outcome</td>
<td>1.80</td>
<td>.68</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Counselor Outcome</td>
<td>1.72</td>
<td>.69</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

N = 96

### TABLE 23

Frequency and Percent by Client and Counselor Outcome Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>f</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value 1</td>
<td>32</td>
<td>.33</td>
<td></td>
</tr>
<tr>
<td>Value 2</td>
<td>52</td>
<td>.54</td>
<td>.87</td>
</tr>
<tr>
<td>Value 3</td>
<td>11</td>
<td>.12</td>
<td>.99</td>
</tr>
<tr>
<td>Value 4</td>
<td>1</td>
<td>.01</td>
<td>1.00</td>
</tr>
<tr>
<td>Counselor Outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value 1</td>
<td>39</td>
<td>.41</td>
<td></td>
</tr>
<tr>
<td>Value 2</td>
<td>46</td>
<td>.48</td>
<td>.89</td>
</tr>
<tr>
<td>Value 3</td>
<td>10</td>
<td>.10</td>
<td>.99</td>
</tr>
<tr>
<td>Value 4</td>
<td>1</td>
<td>.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>

N = 96
Research Question Eleven:

11. Are there correlations between client empathy and client or counselor outcome? Are there correlations between counselor empathy and client or counselor outcome?

The results for the first part of research question eleven are summarized in Table 24. These results indicate that there were no significant relationships between client empathy and client or counselor outcome.

Table 25 addresses the second part of this research question and contains a presentation of the correlations between counselor empathy and client and counselor outcome scores. There was one significant finding. Counselor perspective taking was positively correlated with counselor outcome scores ($r = .22; p = .05$). This correlation suggests the existence of an inverse relationship between counselor perspective taking and counselor outcome. This analysis was based on an $N$ of 8 counselors.

Figure 1 contains a summarization of the significant results pertaining to Research Questions 4 through 11, the regression analysis. This model demonstrates the one-to-one correlations between client and counselor empathy, working alliance, and outcome scores.
### TABLE 24

**Pearson Correlation Coefficients For Client Empathy Types and Client and Counselor Outcome Scores**

<table>
<thead>
<tr>
<th>Client Empathy Types</th>
<th>Client Outcome</th>
<th>Counselor Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective Taking</td>
<td>-.02</td>
<td>-.16</td>
</tr>
<tr>
<td>Fantasy</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>-.15</td>
<td>-.19</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>.14</td>
<td>.10</td>
</tr>
</tbody>
</table>

Two-tailed Significance N = 96

### TABLE 25

**Pearson Correlation Coefficients for Counselor Empathy Types and Client and Counselor Outcome Scores**

<table>
<thead>
<tr>
<th>Counselor Empathy Types</th>
<th>Client Outcome</th>
<th>Counselor Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perspective Taking</td>
<td>.07</td>
<td>.22*</td>
</tr>
<tr>
<td>Fantasy</td>
<td>.13</td>
<td>-.02</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>.12</td>
<td>.20</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>.02</td>
<td>.15</td>
</tr>
</tbody>
</table>

* P ≤ .05
Two-tailed Significance N=8
Figure 1. Model Depicting One-to-One Correlations Between Client and Counselor Empathy Types, Working Alliance Components and Outcome Scores

* p ≤ .05  ** p ≤ .01  *** p ≤ .005
Research Questions Twelve through Fourteen

It was the original intention of this researcher to answer the remaining research questions posed in Chapter 1 with the use of pathanalysis. Regression analysis was utilized to determine the existence of one to one relationships between empathy, working alliance, and outcome variables, and also to assist in determining the appropriate paths to be analyzed to further explain these relationships. After inspection of this data, it was evident that pathanalysis was not an appropriate tool for this analysis, for several reasons.

First, the outcome measure did not regress well because client and counselor subjects tended to cluster on values 2 and 1. Second, paired independent variables were found to be highly correlated. Consequently, the relationships between other variables along a path appeared weak relative to them, or appeared not to exist at all. Third, the regressions on which pathanalysis is based are sensitive to outliers and to departures from assumed distributions of the residuals. If each regression, in a set of several used in a pathanalysis, has a large potential error, then the conclusions from the path model can be very misleading. This variability in client scores made it difficult to have a precise and reliable pathanalysis. Therefore,
pathanalysis was not employed for data analysis purposes in the present study.

Summary

Chapter IV presents the analysis of the data by demographic variable and the 11 research questions. Several significant relationships were demonstrated between the client empathy types and client and counselor working alliance components, and client working alliance components and client and counselor outcome. Significant relationships were not shown between counselor empathy types and client working alliance or counselor working alliance and client outcome. Finally, significant relationships were not demonstrated between client or counselor empathy and client or counselor outcome.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Several shortcomings exist in the literature regarding the study of empathy. First, there remains confusion regarding the effect of counselor empathy on counseling outcomes (Gladstein, 1983; & Goldstein & Michaels, 1985). Second, in the counseling/psychotherapy literature, empathy has been studied primarily from a unidimensional perspective. Until recently, it has been viewed and researched as a cognitive or an affective construct, rather than a multidimensional construct containing both components (Barrett-Lennard, 1981; Davis, 1980; & Gladstein, 1983). Third, the study of empathy has focused on counselor empathy, with no regard for the impact of client empathy. Fourth, empathy's relationship to outcome has been examined. Outcome measures have varied widely across studies, making comparisons of results difficult (Gladstein, 1983). In addition, researchers have been interested in the outcome of counseling, so that the process of counseling has received little attention. Finally, the chronic pain population, and more specifically, individuals with chronic pain who were 182
injured on the job, have not been studied with regard to empathy.

The purpose of this study was to: (1) explore the trait of empathy in a population of chronic pain clients and their counselors, using a multidimensional measure of the construct; (2) examine the process of counseling, using a generic measure, the working alliance; (3) explore the working alliance, developed between the clients and counselors, from both of their points of view; (4) examine the impact of client and counselor trait empathy on the development of the working alliance and an outcome measure; and (5) examine the impact of the development of the working alliance on an outcome measure.

This investigation was conducted with 96 adult individuals with chronic pain and their eight counselors. The client subjects were injured on the job and were unable to return to work because of their chronic pain. They were involved for six weeks in an intensive physical and psychological rehabilitation program, in a large midwestern city. The client subjects were required to see their counselors in individual counseling sessions once weekly.

Each client participant completed an outcome measure and two inventories: the Interpersonal Reactivity Index (IRI); and the Working Alliance Inventory (WAI), which was completed following the third and fifth session with the
counselor. Each counselor subject completed an outcome measure, the IRi, and the "therapist form" of the WAI, following the third and fifth counseling sessions. The counselors were unable to complete Working Alliance Inventories on all of their participating clients, due to time constraints. Therefore, they completed these instruments for a sample of 29 of the 96 participating clients. The counselors completed working alliances on approximately four of their clients. These clients were chosen randomly. The purpose of the inventories was to measure the four empathy types in the client and counselor sample and to measure the working alliance and outcome from both of their perspectives.

The statistical analyses were conducted in three steps. In the descriptive analysis, frequencies and percents were determined on the client sample, regarding gender, age range, marital status, education, and race. Mean scores, standard deviations, and minimum and maximum scores were generated for the empathy types and the working alliance components for both client and counselor subjects. Frequencies, percents, means, standard deviations, and minimum and maximum scores were computed for client and counselor outcome measures. Gender, age, marital status, education, and race were examined for their effect on client
empathy, working alliance, and outcome, using t-tests and Analysis of Variance.

Regressions were run to identify significant one to one relationships between empathy, the working alliance, and outcome. Pathanalysis was then employed to determine the relationships of several variables along appropriate paths. As discussed in Chapter IV, this analysis did not prove to be appropriate for the data produced by this population. First, the outcome measure did not regress well because client and counselor subjects clustered on two of the four responses. Second, paired independent variables were found to be highly correlated, so that other variables along a path appeared weak relative to them. Finally, the variability in client scores made it difficult to have a reliable pathanalysis.

Results

Demographic Variables

The self reported descriptive data of the client subjects revealed the following: 57% of the sample were males, 43% were females; subjects ranged in age from 20-62, with 51% of the subjects being age 34-46; 70% of the subjects were married, and 30% were not married; 70% of the subjects had at least a high school education, 28% had 9-12 years of education, and 2% had less than 9 years of
education; and 87% of the subjects were white, 12% were black, and 1% was Hispanic.

The counselor sample consisted of eight subjects, two males and six females. Six of the counselors were white, one was black French American, and one was Ethiopian. This staff ranged in age from 27 to 45 and was composed of three Ph.D. psychologists, and one psychology assistant (Ph.D. nonpsychologist), two pre-doctoral psychology assistants, and two pre-doctoral student interns. The pre-doctoral counselors were majoring in counseling or psychology. These results are also based on self report data.

Results by Research Questions

Research Question One:

1. What is the nature of trait empathy (affective and cognitive) and the working alliances developed in a sample population of chronic pain clients?

Statistics for client empathy types indicated that client perspective taking, empathic concern, and personal distress empathy scores were comparable to the norming sample. Fantasy empathy mean scores, which correlate with verbal and abstract intelligence (Davis, 1979), were not comparable. The client fantasy mean score was 12.28; the norming sample fantasy mean was 17.24.

Statistics for third and fifth week client working alliance components indicated that the scores were similar,
with bonding being the highest. Scores on all of the working alliance components increased from week 3 to week 5. The working alliance scores were not normally distributed and were skewed strongly to the right at week 3 and week 5.

Research Question Two:

2. What is the nature of trait empathy (affective and cognitive) and the working alliances developed in the counselors of these clients?

Counselor empathy types indicated that fantasy and empathic concern scores were comparable to the norming sample. Perspective taking and personal distress scores were not comparable. The counselor perspective taking mean was 21.13; the norming sample mean was 17.37. The counselor personal distress mean was 6.00, and the norming sample personal distress mean was 10.87.

Client and counselor empathic concern means were very similar. Personal distress empathy means were not comparable. The client sample personal distress mean was 9.87; the counselor sample mean was 6.00. Client and counselor cognitive empathy means differed, with client perspective taking and fantasy means being 18.75 and 12.28, respectively. The counselor perspective taking and fantasy scores were 21.13 and 16.36, respectively. Finally, except for fantasy empathy, the counselors produced a narrower range of scores than the clients.
The counselor working alliance component mean scores were similar, with the bond component demonstrating the highest mean. The clients demonstrated the same pattern. That is, their working alliance scores were similar and the highest mean was yielded by the bond component. All of the working alliance mean scores produced by the counselors at the fifth week were higher than those produced at the third week. The counselor working alliance mean scores were consistently lower than the mean scores produced by the clients. The counselor mean scores were lower relative to the client scores, however, as with the client sample, they scored in the upper limit of the four working alliance components at week 3 and week 5. Consequently, their scores were not normally distributed and were skewed strongly to the right. Finally, the range of working alliance scores produced by the counselors was narrower than those produced by the clients.

Research Question Three:

3. Are there significant differences in client empathy, working alliance, and outcome scores as a result of gender, age, marital status, education or race?

Research question three is the last of the questions pertaining to the descriptive analysis of the data. Effects were found as a result of sex, race, age, and education. Marital status had no effect on these variables.
The only significant difference in empathy between males and females was with personal distress empathy. The female clients demonstrated significantly higher personal distress empathy than the males. Davis' (1979) female norming sample also demonstrated higher personal distress empathy.

The other significant gender difference was with regard to the self-rated outcome scores. Women did not rate their outcomes as positively as men. There was no significant difference in the counselors' scoring of men and women.

Several significant differences were observed between white and black clients with empathy and the working alliance. It is important to note that this information is based on an N of 12. Black subjects produced significantly higher perspective taking means and significantly lower personal distress means than the white subjects. Several of the working alliance mean scores were significantly higher for the black subjects, than the white subjects, those being task 1, bond 1, bond 2, goal 2, and composite 1 and 2 scores.

Main effects were discovered for perspective taking and empathic concern empathy, due to age. The mean scores for perspective taking empathy were group 1 (age 20-33), 17.86, group 2 (age 34-40), 19.67, group 3 (age 41-46), 20.36, and group 4 (age 47-62), 17.74. Age groups 1 and 4 mean scores
were significantly lower than age group 3. The mean scores for empathic concern empathy were group 1, 19.97, group 2, 22.15, group 3, 23.04, and group 4, 22.83. Age group 1 mean scores were determined to be significantly lower than the mean scores for group 3.

A main effect was discovered with the self-rated client outcome score, due to education. The group with less than a high school education (grades 9-12) had a significantly larger number of individuals scoring their progress in counseling as minimal. No main effect was found for the counselor rating of outcome. These data are based upon an N of 27 client outcome scores and 27 counselor outcome scores.

Research Question Four:

4. Are there correlations between the client or counselor empathy types and the different aspects of the working alliance, as perceived by the client?

For research questions 4 through 11, regressions were run to identify significant one to one relationships between empathy, the working alliance, and outcome. Pearson correlation coefficients and two tailed tests of significance were computed. The results of this analysis are presented in this section.

Several significant positive correlations were found between client empathy and aspects of the client working alliance. Client empathic concern was correlated with every
aspect of the client working alliance. The correlation coefficients ranged from .25 to .38, at $p=.01$ and $p=.05$ levels of confidence. A trend was noted in which the week 3 task, goal, bond and composite scores had higher correlation coefficients than the corresponding week 5 scores.

Significant positive correlations were also demonstrated between perspective taking and the task 1, goal 1, and composite 1 working alliance components. The correlations ranged from .23 to .29, at the $p=.05$ and $p=.01$ levels of confidence. Perspective taking empathy had its impact on week 3 working alliance components.

There were consistent relationships between both client empathic concern and perspective taking empathy and the working alliance, with empathic concern demonstrating the stronger relationships. The impact of empathy was more on the third week of the counseling sessions, than the fifth week.

In examining the relationship between counselor empathy and the client working alliance, a significant negative correlation was found between counselor perspective taking and the client task 2 score, at -.20, and a confidence level of $p=.05$. It is important to note that these empathy data were based on an N of 8 counselors. In addition, this was an isolated finding not showing a consistent pattern, so that it may have been an artifact. No positive correlations
were shown between counselor empathy and the client working alliance.

Research Question Five:

5. Are there correlations between the client or counselor empathy types and the different aspects of the working alliance, as perceived by the counselor?

The data for this analysis were based on an N of 29 counselor working alliance composite scores, so that the results must be viewed with some caution. One strongly significant correlation was demonstrated between client empathic concern and counselor composite score 2 (week 5) at .40, and a confidence level of $p=.05$. Client empathic concern empathy did impact upon the counselor's week 5 working alliance composite score.

When examining the effect of counselor empathy on the counselor's working alliance composite scores, a similar pattern was seen as with the client to client variable comparisons. The impact of empathy was in the third week of counseling. Counselor empathic concern demonstrated an impact on the counselor working alliance. It was correlated with the counselor composite 1 score, at .52. Counselor fantasy empathy also showed a relationship with the composite 1 score, at .47. Confidence levels for both correlations were at the $p=.01$ level. The results were
based on the empathy scores of 8 counselors and 29 working alliance scores.

**Research Question Six:**

6. Are there correlations between third and fifth week client working alliances?

All of the week 3 client working alliance components were strongly correlated with the week 5 measures. The correlations ranged from .75 to .84, at a confidence level of $p=.005$.

**Research Question Seven:**

7. Are there correlations between the client working alliance components and the counselor working alliance components?

One correlation was discovered between the client and counselor working alliance components. Client bond 1 (week 3) scores and counselor bond 1 (week 3) scores were correlated, at .37, with a confidence level of $p=.05$.

**Research Question Eight:**

8. Are there correlations between the different components of the client or counselor working alliance and the client outcome scores?

Client working alliance and client outcome comparisons indicated the existence of strong correlations, ranging from .34 to .62, with all but one score demonstrating a
confidence level of $p=.005$. A pattern was evident, in which the fifth week working alliance scores were more highly correlated with outcome than the third week scores.

When examining the relationships between the counselor working alliance and the client outcome scores, one correlation was found. A positive correlation, demonstrating an inverse relationship, was discovered between counselor bond 1 (week 3) and client outcome, at .44 and a confidence level of $p=.05$.

**Research Question Nine:**

9. Are there correlations between the different components of the client or counselor working alliance and the counselor outcome scores?

All aspects of the client working alliance and the counselor outcome were correlated at a confidence level of $p=.05$. These correlations ranged from -.30 to -.36. Higher client working alliance scores were correlated with more positive outcome ratings from the counselor.

Several components of the counselor's perception of the working alliance were correlated with their perception of outcome. Task 1 and goal 1 (week 3) yielded correlation coefficients of -.39 and -.36, respectively, at the .05 level of confidence. All of the fifth week working alliance components were correlated with the outcome measure: task 2, -.64, goal 2, -.71, and composite 2, at -.64, all at a
confidence level of $p=.005$. Bond 2 was correlated at $-.43.$, with a confidence level of $p=.05$. Higher counselor working alliance scores were correlated with a more positive counselor outcome score. Week 3 working alliance components demonstrated fewer and weaker correlations with outcome than did week 5 working alliance components. These data are based upon an N of 29 counselor working alliance scores.

Research Question Ten:

10. Is there general agreement between clients and counselors regarding their perceptions of the outcome of counseling?

The outcome measure required that clients and counselors rate the progress toward the goals of counseling as 1 = excellent, 2 = satisfactory, 3 = minimal, and 4 = no progress. The overall goal of counseling was to remove obstacles that hindered the client's return to work.

To a great extent, clients and counselors agreed on the outcome of counseling. The mean scores, standard deviations, and frequency that a particular value was chosen were similar. Clients' and counselors' outcome scores clustered on value 2 (satisfactory progress), and to a lesser extent, on value 1 (excellent progress). Eighty-seven percent of the clients and 89% of the counselors rated outcome with a value of 1 or 2. Generally, the clients and
the counselors perceived the outcome of counseling positively.

Research Question Eleven:

11. Are there correlations between client empathy and client or counselor outcome? Are there correlations between counselor empathy and client or counselor outcome?

Correlations for client empathy and client and counselor outcome scores were computed, and demonstrated no significant relationships. Relationships between counselor empathy and client and counselor outcome scores were examined. The only significant finding was a positive correlation ($r=.22; p=.05$) between counselor perspective taking and counselor outcome indicating an inverse relationship. No consistent relationships were produced. Client and counselor empathy did not demonstrate an impact on outcome.

Research Questions Twelve through Fourteen:

As explained earlier in this chapter, the data produced by this population did not regress well, due to a clustering of responses on the outcome measure. In addition, paired independent variables were highly correlated, making it difficult to find other relationships along a path. Finally, pathanalysis is sensitive to outliers. The variability in client scores made it difficult to have a reliable pathanalysis.
Conclusions

Several conclusions can be drawn based on the results of the data analysis. These conclusions are organized around the 11 research questions.

1. & 2. Research questions one and two deal with the descriptive analysis of client and counselor empathy and the working alliances developed. It is important to note that approximately 50% of the total population of chronic pain clients participated in this study. The majority of the population studied was white, married, had at least a high school education, and ranged in age from 34-46. Therefore, generalizations cannot be made to all individuals with chronic pain who have been injured on the job.

Except for fantasy empathy, client empathy means were comparable to the norming sample means. These results suggest that the chronic pain subjects who participated in this study are not empathically impaired. It has been suggested that this is generally a rather self-centered, withdrawn population that has difficulty developing and maintaining relationships (Philips, 1988; & Finer, 1974). This finding suggests that these characteristics in many chronic pain individuals may be in reaction to the injury and persistent pain, rather than being premorbid traits of these individuals. Their working alliance scores suggest
the ability of most of the subjects to develop relationships.

Fantasy empathy scores of the client subjects may be lower than the norming sample due to its apparent correlation with verbal intelligence and abstract thinking (Davis, 1979). The Interpersonal Reactivity Index was normed on college students. Their verbal and abstract thinking abilities would be expected to be better than a sample in which 80% of the subjects have a high school education, or less, and are probably more concrete in their thinking. Another possible conclusion might be that these individuals have difficulty fantasizing and abstracting due to their being constricted and emotionally repressed.

The counselor empathy scores showed less variability than did the clients, as might be expected. Individuals who are lacking in empathy would not be expected to have an interest in counseling. Counselor perspective taking mean scores were higher than the norming sample perspective taking mean scores. Perspective taking empathy has been found to be statistically correlated with better social functioning and self-esteem (Davis, 1979). Counselor personal distress empathy mean scores were lower than the norming sample. Personal distress empathy correlates with social anxiety and low self-esteem (Davis, 1979). The counselors in this study demonstrated higher levels of
perspective taking and self-esteem, and lower levels of anxiety than the norming sample for these variables.

The client working alliance scores suggest that most of the clients perceived themselves to have strong alliances with their counselors, that showed slight improvement from week 3 to week 5. This finding is in conflict with Wickramasekera (1989), Greenson (1967), and Zetzel (1956), who state that the major obstacle to working with these individuals in therapy is their inability to form working alliances. It is interesting to note that the bond 1 and bond 2 scores were comparable to the goal and task scores. The literature suggests that the bond aspect of the working alliance does not develop as rapidly as the other components (Bordin, 1975; & Gelso & Carter, 1985). This did not hold true for the client or counselor subjects in this study. It is possible that because the treatment program was brief and there was not time for the bonding aspect to develop more slowly, clients and counselors had to quickly develop this aspect, if it was ever to occur. In a sense, their brief contact forced the bonding to occur.

A point of interest with regard to relationships was this researcher's experience with this population. The explanation of the study and the data collection was to be done outside of treatment time. Originally, the data collection was attempted at the dinner hour. However, there
was so much concern on the part of the clients as to who this researcher was and what the researcher was doing, that the director of the health psychology department suggested going into the groups where introductions could be made by the counselor.

There was still a great deal of suspicion, and concern regarding who would see the results of the inventories, and the reception was sometimes cool. It would appear that this group was highly distrusting of "outsiders." However, most were capable of developing working alliances, and apparently trusted and liked their counselors well enough to accomplish this. This lack of trust in a group that is capable of trusting, could suggest a reaction to previous experiences with the system, as suggested by Sternbach (1974). These individuals have often sought treatment from several sources, without relief, and have been told that the pain is psychological. Apparently the majority of these subjects felt understood, unthreatened, and not judged by their counselors.

As noted, there were differences in the client and counselor mean working alliance scores. Both sets of mean scores tended to be high, but were lower from the counselor's point of view. These data are based on a limited sample of 29 client and 29 counselor Working Alliance Inventories. This finding suggests that the
perceptions of client and counselor working alliances differed, with most clients viewing the process more favorably. An additional explanation that could be drawn from this data is that this was the first counseling experience for most clients and they had nothing by which to judge the experience. The counselors, on the other hand, have had numerous counseling sessions, so that they could make comparative judgments relative to the many sessions they have had.

Overall, both counselors and clients perceived the working alliances developed to be strong, and to improve slightly in the fifth week of treatment. This finding is consistent with the literature regarding the working alliance, in which a strong working alliance has been shown to develop by the third to fifth session of counseling. The alliance may continue to improve somewhat, but does not change much beyond that point (Horvath & Greenberg, 1986; Hartley & Strupp, 1982; Luborsky et al., 1983; & Morgan et al., 1982).

The standard deviations produced by the counselor subjects were lower than those produced by the clients, suggesting less variability in the counselors' working alliance scores. This result suggests differences in the counselors' and clients' perceptions of the working alliance.
3. Research question three is the last question pertaining to the descriptive analysis of the data. The demographic data were examined for their effect on client empathy, working alliance, and outcome scores.

The empathy literature has consistently shown gender differences (Feshbach, 1978; Kohut, 1971; & Davis, 1980), in which females have scored higher on empathy. The female clients demonstrated significantly higher personal distress empathy than the males. This form of empathy is correlated with anxiety and low self-esteem (Davis, 1979). Davis' female norming sample also demonstrated higher personal distress empathy. It would appear that this type of empathy is more prevalent in women, than men. This finding may suggest a tendency for the females in this study to feel distressed about their present situation. The male subjects, on the other hand, may tend to react to their situation in a less emotional way, by somatizing. The literature suggests that individuals with chronic pain are distressed and hypochondriacal (Fordyce, 1976; & Sternbach, 1974).

Women did not rate their outcomes as positively as men. The counselors did not rate women and men differently on outcome. Possibly the women in this study underestimated their progress. This finding is consistent with the high
personal distress scores, and concomitant anxiety and low self-esteem.

The 12 black subjects in this study produced significantly higher perspective taking means and significantly lower personal distress means than the white subjects. In addition, several of the working alliance component mean scores were significantly higher for the black subjects than the white subjects. These black subjects may be a cognitively higher functioning group that is not representative of the black population. Conclusions cannot be drawn, however, patterns are suggested that warrant further research. There is a paucity of research regarding racial influence and the working alliance, as well as empathy.

Main effects, due to age, were found for perspective taking and empathic concern empathy. A pattern was suggested, in which the youngest age group in this sample population demonstrated comparatively lower empathic concern and perspective taking empathy. There was also an upward trend of scores from group 1 (age 20-33) to group 2 (34-40), and group 3 (41-46). It is possible that these empathy types have not developed fully in the group 1 subjects.

Client subjects with less than a high school education (grades 9-12), scored their outcomes less favorably than the other education groups. The counselors did not rate
outcomes differently based on education level. There is the suggestion from this data of 27 subjects that the subjects with less education underrated their progress in counseling.

4. Research question four pertains to the correlations between the client and counselor empathy types and the different aspects of the working alliance, as perceived by the client. Consistent relationships were demonstrated between client empathic concern and perspective taking empathy, and the client working alliance. Empathic concern demonstrated the stronger relationships, and the impact of both empathy types was more on the third week of counseling than the fifth week. Higher empathic concern and perspective taking empathy in clients had an impact on the therapeutic process, particularly early in the process, at week 3.

Positive correlations between counselor empathy and the client working alliance were not discovered. The lack of correlations between these variables suggests the following conclusion. All of the eight counselors in this study demonstrated high levels of perspective taking, empathic concern, and fantasy empathy. The existence of adequate levels of counselor empathy is necessary to the development of the working alliance. However, beyond a certain "threshold" level of high empathy, higher levels of empathy probably have relatively little impact on the therapeutic
process. What becomes important is adequate levels of client empathy.

5. Research question five pertains to the correlations between client and counselor empathy types and the counselor working alliance. Client empathic concern empathy demonstrated an impact upon the week 5 counselor working alliance composite score, again suggesting the importance of client empathy in the therapeutic process. Counselor empathic concern and fantasy empathy demonstrated an impact upon the counselor perception of the working alliance. This impact was evident in the third week of counseling.

Client empathic concern empathy, and to a lesser extent, perspective taking empathy, showed consistent tendencies in the data analysis. These client variables had a positive impact upon the working alliance, as perceived by the client, and to a lesser extent, as perceived by the counselor.

6. Research question six pertains to the relationships between the third and fifth week client working alliances. The week 3 components were strongly correlated with the week 5 components, suggesting that the working alliance did not strengthen significantly beyond the third session. The working alliance in brief counseling develops quickly, peaking very early in the counseling process, and not changing significantly beyond that point. Overall, the
alliances formed were strong at week 3, so that a ceiling effect existed on how much higher these scores could be at week 5.

7. Research question seven deals with the relationships between the client working alliance and the counselor working alliance. The client perception of the working alliance is considered to be a more important measure than the counselor's perception (Horvath & Greenberg, 1986). Horvath and Greenberg suggest that the counselor's belief that the working alliance is developing well has little meaning if the client is displeased with the process. It is important, however, that counselors and clients perceive this process similarly, so that adjustments can be made if the alliance is not developing.

Research question seven deals with this issue of whether or not clients and counselors were perceiving the process similarly. Only one correlation was found. The client bond 1 and counselor bond 1 scores were positively correlated. Clients and counselors were viewing this process differently. They both agreed that mutual trust, understanding, and caring existed at week 3. At week 5, they did not perceive the bonding aspect similarly. Neither did they agree on the changes to be made and the tasks for accomplishing this at week 3 or week 5.
In part, this discrepancy could also be due to a concrete thinking style of the clients, as mentioned earlier. The Working Alliance Inventory is a rather detailed and complex measurement of the process. It may be difficult for this population to express the therapeutic process in this way. This is supported by the fact that clients and counselors tended to score outcomes similarly.

Even so, it is important that the counselors be more aware of how their clients are perceiving the specifics of the therapeutic process, so that they are on the same "track," and adjustments can be made where there are problems for the client. In a sense, clients should be taught how to be in therapy. They need to understand their part in the process and to be aware of their goals. They also need to understand the importance of communicating their goals and expectations to the counselor, so that they can work together in an alliance. This mutual understanding must occur early, since the working alliance develops so quickly in brief therapy.

8. & 9. Research questions eight and nine deal with the relationships between client and counselor working alliance and client and counselor outcome scores. A similar pattern was demonstrated between these variables as was shown between the empathy and working alliance variables. The client perception of the working alliance had more
impact on client and counselor scores than did the counselor working alliance.

Client working alliance and client outcome demonstrated strong correlations. The fifth week working alliance scores were better predictors of client outcome than third week scores.

As with counselor empathy and client working alliance, the counselor's perception of the working alliance did not demonstrate a positive impact on client outcome. A positive correlation, indicating an inverse relationship, was found between counselor bond 1 and client outcome. There was no consistent pattern, nor was there a correlation between either composite score and client outcome, suggesting that this may have been an artifact of the data. This finding may also suggest that higher levels of counselor bonding too early in the process may have a negative impact on the client outcome. Because this is an isolated finding, further investigation would be needed to draw substantial conclusions.

The fact that the counselors' perceptions of the working alliance were not correlated with client perception of outcome, underscores the importance of the client in this process. As with counselor empathy, counselor working alliance scores tended to be high and did not vary. Consequently, higher counselor working alliance scores
probably did not significantly impact upon outcome. Beyond a certain point, an increase in the counselor's working alliance score does not seem to make a difference, rather, the client working alliance becomes the important factor. Getting the clients to "get on board," so to speak, with the counselors with regard to empathy and the working alliance is what makes the impact in the therapeutic process. The counselor's empathic abilities and ability to form working alliances is simply not enough to effect change. Counselors need to enhance the client's empathic response so that they can work with each other to produce strong working alliances and positive outcomes. The counselor and client must "meld" together to understand each other and agree upon the work to be done.

All aspects of the client working alliance and the counselor outcome were negatively correlated, indicating that higher client working alliance scores were correlated with more positive outcome ratings from the counselor. The client working alliance impacted both their own rating of outcome, as well as the counselor's rating. The client variables proved to be highly significant to the therapeutic process and outcome for the subjects participating in this study.

Finally, several components of the counselor working alliance were correlated with a more positive counselor
outcome score. The fact that there appears to be a consistent finding of counselor variables being correlated with each other, but not consistently correlated with the client variables, may be another indicator that the counselors and clients are not working closely with each other.

A consistent pattern that was demonstrated by this data was that there existed higher correlation coefficients between the working alliance and outcome scores at week 5 than week 3. As mentioned earlier, empathy demonstrated a greater impact at week 3, than week 5. Empathy had its greater impact in the early sessions, and the fifth week working alliance scores were better predictors of outcome than the earlier third week scores.

Overall, the client perception of the working alliance was a good predictor of both client and counselor outcome scores, a finding which is consistent with the working alliance literature. Although client impact has not been the focus, several researchers have suggested that the strength of the working alliance may be the most important factor in determining therapeutic process and outcome (Bordin, 1985, 1976, 1975, 1974; Horvath, 1981; Luborsky, 1984; Luborsky et al., 1980; Luborsky, 1976; Horwitz, 1974; Gomez-Schwartz, 1978; & Marmar et al., in press).
10. Research question ten deals with whether or not the client and counselor viewed the outcome of the counseling sessions similarly. Clients and counselors generally agreed on the outcome of counseling and perceived it positively. The fact that clients and counselors agreed on outcome and not on the working alliances developed suggests two conclusions.

First, as earlier mentioned, this is a population of individuals who thinks concretely. The outcome measure is a more concrete measure than the Working Alliance Inventory, and therefore, would be easier for clients to understand and respond to. In addition, there were not enough outcome response choices in a population whose scores clustered at the high end of the measure. More choices would probably have produced more variation in the scores, so that the differences in the perception seen between counselors and clients on the working alliance would have appeared again.

11. The last research question, question eleven, deals with relationships between empathy and outcome. Relationships between client and counselor empathy and client and counselor outcome yielded one positive correlation. Counselor perspective taking was positively correlated with counselor outcome, suggesting an inverse relationship. No consistent relationships were produced, suggesting that empathy's impact was on the working
alliance, and the working alliance's impact was on outcome, as has been suggested by Bordin (1979) and Hansen, Stevie, and Warner (1982).

Recommendations for Further Research

1. The literature suggests that individuals with chronic pain have difficulty establishing relationships and are self-oriented. Many of the client subjects who participated in this study developed strong working alliances and demonstrated adequate levels of empathy. Further research is needed to further clarify this discrepancy and to better understand this population.

2. The results of the present study suggest that client variables have as much, if not more impact on the working alliance and outcome as counselor variables. The research emphasis has been to examine the impact of counselor variables. Future research should include the other part of the dyad, the client.

3. Empathy research has focused on the impact of empathy on outcome. The present study suggests that empathy's impact is on the working alliance, and the working alliance has its impact on outcome. Further research is needed to replicate these findings.

4. The working alliances developed by the clients and the counselors were strong at week 3 and did not change significantly at week 5. The working alliances developed in
brief treatment may peak very early in the process. Further research is needed to determine if differences exist in the development of the working alliance in brief and longer term therapy.

5. The female subjects in this study had significantly higher personal distress empathy than the male subjects and underestimated their progress in counseling. It appears that the women in this study demonstrated more anxiety and lower self-esteem. Further research is needed to determine if these characteristics are more commonly demonstrated in female chronic pain patients.

6. The black subjects in this study demonstrated significant differences from the white subjects on several working alliance components and two of the four empathy types. Conclusions cannot be drawn based on the small sample size. However, these findings do warrant additional research. A paucity of research exists regarding racial similarities and differences with regard to empathy and the working alliance.

7. This study suggests that empathic concern empathy and perspective taking empathy may continue to develop into adulthood, as this sample demonstrated a tendency for higher empathy with increasing age. Research regarding the development of empathy beyond adolescence should be conducted to help clarify this possibility.
8. Client subjects in this study with less than a high school education underrated their outcome compared to the subjects with a high school education. The counselors did not rate them differently. Future research should be designed to determine the effect of educational level on client perception of outcome.

9. An inverse relationship was discovered between counselor bonding at week 3 and client outcome. Whether or not this isolated finding is an artifact of the data or suggests that higher levels of counselor bonding early in the process have a negative impact on the client merits further investigation.

10. The client subjects in this study demonstrated lower levels of fantasy empathy than the norming sample and the counselor sample. Further research should be focused on explaining this difference. Variables such as client education level, verbal intelligence, abstract intelligence, and emotional constriction and repression should be explored in relationship to fantasy empathy.

11. It is recommended that this study be conducted with a group of client subjects who are empathically impaired. More variation in empathy scores on the lower end of the Davis Inventory may demonstrate more powerful relationships between variables.
12. More research needs to be conducted, for example, in a college setting, utilizing the Working Alliance Inventory, so that norming scores can be generated and correlations between counselor and client perceptions of the alliance can be examined and reported. Norms could also be generated from research that has already been conducted.

13. A future research direction would be to administer an outcome measure to the client subjects several months after they have completed the treatment program. Relationships between the working alliance and out-of-counseling outcome could be examined, to determine, for example, whether the working alliance predicts return to work.

14. It is recommended that an outcome measure be used that contains more response choices. The outcome measure utilized in this study had four responses for clients and counselors regarding the progress of counseling. Their scores clustered on the first two responses. Additional response choices could reduce the tendency for scores to cluster.

15. Ideally, a situation for data collection is needed in which the researcher can collect the data directly from the clients, rather than the clients completing the inventories on their own time. This would allow for questions regarding individual inventory items and the
instructions for completing the inventories to be dealt with immediately. This strategy may more feasible in a less structured and less intense program, such as a community mental health center.

16. The collection of only 29 counselor working alliances was a weakness in this study. Similarly, conclusions based on a counselor sample size of eight are tentative at best. It is suggested that a setting, such as a large community mental health facility, be utilized in which more counselors could participate. This would also serve to reduce the number of clients per counselor participating in the study. Therefore, counselors could complete Working Alliance Inventories on most or all of their clients. In addition, a larger client sample would serve to increase the precision and reliability of a pathanalysis, making it more likely that pathanalysis could be used to analyze the data.
APPENDIX A
MODEL DEPICTING PATHANALYSIS RESEARCH QUESTIONS
Figure 2. Model Depicting Pathanalysis Research Questions

*Analysis repeated for counselor perception of working alliance and the outcome measure
## PERSONAL DATA

<table>
<thead>
<tr>
<th>Sex</th>
<th>Race</th>
<th>Age</th>
<th>Marital Status</th>
<th>Education Level</th>
<th>Occupation before injury</th>
</tr>
</thead>
</table>

- Education Level (0-8 years, 9-12 years, high school graduate, 13-16 years, more than 16 years)
APPENDIX C
INTERPERSONAL REACTIVITY INDEX
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

222–223
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APPENDIX D

WORKING ALLIANCE INVENTORY (Client form)
APPENDIX E

WORKING ALLIANCE INVENTORY (Therapist form)
APPENDIX F

CLIENT OUTCOME MEASURE

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APPENDIX G

COUNSELOR OUTCOME MEASURE
APPENDIX H

CONSENT FORM
CONSENT FOR PARTICIPATION IN
SOCIAL AND BEHAVIORAL RESEARCH

I consent to participating in research entitled:
*The Nature of Trait Empathy in a Sample Population of Clients with Chronic Pain and Their Counselors and Its Impact on the Development of the Working Alliance and Outcome.*

James V. Wigtil, Ph.D. or his/her authorized representa­
tive has explained the purpose of the study, the procedures to be followed, and the expected duration of my participation. Possible benefits of the study have been described as have alternative procedures, if such procedures are applicable and available.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that I am free to withdraw consent at any time and to discontinue participation in the study without prejudice to me. The information obtained from me will remain confidential unless I specifically agree otherwise by placing my initials here.

Finally, I acknowledge that I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: 

Signed: (Participant)

Signed: Nancy M. Forrest
(Principal Investigator
or his/her Authorized Representative)

Signed: James V. Wigtil
(Person Authorized to Consent for Participant
- if Required)

Witness: 

NOTE: To be used only in connection with social and behavioral research.

Appendix A, Item 2
APPENDIX I

TELEPHONE INTERVIEW WITH DIRECTOR
Telephone Interview with Health Psychology Director

The following is a statement of the information to be provided to the Health Psychology Director regarding the participation of clients and counselors in this research project. The following information will be included in the conversation:

"I am Nancy Walker Forman, a counselor education doctoral candidate in the Department of Human Services in the College of Education at The Ohio State University. I am contacting you regarding the Health Psychology Department's participation in a research study of chronic pain clients and their counselors. I am investigating the impact of client and counselor personality variables on the working alliance and an outcome measure. This information will be helpful in further understanding the client's impact on the therapeutic process and outcome. The research emphasis has been on the counselor's contribution to the outcome of counseling.

A minimum of five counselors and their clients will be needed for the data collection. The counselors will be regarded to complete the Interpersonal Reactivity Index initially, requiring 20 minutes, on a sample of participating subjects following their third and fifth session of treatment. An outcome question will be asked of
counselors regarding all participating client subjects following the fifth session. Participating clients will complete an IRI and two WAI's, one to be completed following the third session, and one following the fifth session. Personal data information will be required, as well as a measure of outcome following the fifth session. All participating subjects will be guaranteed complete confidentiality. Thank you for your help?
APPENDIX J

TELEPHONE INTERVIEW WITH COUNSELORS
Telephone Interview with Counselors

The following is a statement of the information provided to the counselor research subjects prior to voluntary participation in this research study. A telephone conversation was conducted by this investigator with each of the eight counselors to determine their interest in participating. The following information was included in the conversation:

"I am Nancy Walker Forman, a counselor education doctoral candidate in the Department of Human Services in the College of Education at The Ohio State University. I am contacting you regarding your interest in participating in a research study of chronic pain clients and their counselors. I am investigating the impact of client and counselor personality variables on the working alliance and an outcome measure. This information will be helpful in further understanding the client's impact on the therapeutic process and outcome. The research emphasis has been on the counselor's contribution to the outcome of counseling.

The materials you will complete should you decide to participate include the Interpersonal Reactivity Index, requiring 10-15 minutes, the Working Alliance Inventory, requiring 20 minutes per form, and an outcome question. The Working Alliance Inventory will be completed at week 3 and
week 5 of treatment on a sample of your participating clients. Participating clients will complete an Interpersonal Reactivity Index, two Working Alliance Inventories, one at week 3 and one at week 5, the outcome measure, and a personal data information form. I will require five to ten minutes with your group during their third week of treatment to present the research project and the materials.

Complete confidentiality of your results and your clients' results are guaranteed. All inventories will be number coded, and the name-number key will be destroyed at the completion of the study. Participation is completely voluntary. A copy of the dissertation will be made available to the department of Health Psychology. Thank you for your help.
Conversation Held with Clients

The following is a statement of the information provided to the client research subjects prior to their voluntary participation in this research study. This investigator presented an explanation of the study in the third week of treatment in their group meeting. The following information was included in the conversation:

"I am Nancy Walker Forman, a counselor education doctoral student in the Department of Human Services at The Ohio State University. I want to speak with you regarding your interest in participating in a research study of chronic pain clients and their counselors. I am investigating the impact of client and counselor personality variables on your counseling sessions. This information will be helpful in understanding the client's impact in the counseling process. Typically the counselor's impact has been studied.

The materials you will complete should you decide to participate include the Interpersonal Reactivity Index, requiring 10-15 minutes, the Working Alliance Inventory, requiring 20 minutes per form, an outcome question, and a personal data form. The Working Alliance Inventory will be completed following your third and fifth individual sessions. Please complete inventories in the order they are
presented. Read the questions carefully and answer all questions.

Your involvement in this study is completely voluntary. Should you decide not to participate, your treatment will not be affected. You are guaranteed complete confidentiality of your results. All inventories will be number coded, and the name-number key will be destroyed at the end of the study. A summary of the research results will be made available to you at the completion of the research study. Thank you for your help."
APPENDIX L
THE OHIO STATE UNIVERSITY APPROVAL
FOR RESEARCH DATA COLLECTION

251
Research Involving Human Subjects

ACTION OF THE REVIEW COMMITTEE

With regard to the employment of human subjects in the proposed research protocol:

87B0064 THE NATURE OF TRAIT EMPATHY IN CLIENTS WITH SUBSTANCE DEPENDENCE DISORDER AND THEIR THERAPISTS AND ITS IMPACT ON THE EARLY DEVELOPING WORKING ALLIANCE AND OUTCOME, James V. Wigtal, Nancy Walker Forman, Human Services Education

THE BEHAVIORAL AND SOCIAL SCIENCES REVIEW COMMITTEE HAS TAKEN THE FOLLOWING ACTION:

_____ APPROVED

X APPROVED WITH CONDITIONS*

_____ DISAPPROVED

_____ WAIVER OF WRITTEN CONSENT GRANTED

* Conditions stated by the Committee have been met by the Investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Review Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: April 17, 1987
Signed: 
(Chairperson)
BEHAVIORAL AND SOCIAL SCIENCES
HUMAN SUBJECTS REVIEW COMMITTEE
THE OHIO STATE UNIVERSITY

Research Involving Human Subjects

ACTION OF THE REVIEW COMMITTEE

With regard to the employment of human subjects in the proposed research protocol:

AMENDMENT 87B0064 THE NATURE OF TRAIT EMPATHY IN CLIENTS WITH SUBSTANCE DEPENDENCE DISORDER AND THEIR THERAPISTS AND ITS IMPACT ON THE EARLY DEVELOPING WORKING ALLIANCE AND OUTCOME, James V. Wigtill, Education Services and Research

THE BEHAVIORAL AND SOCIAL SCIENCES REVIEW COMMITTEE HAS TAKEN THE FOLLOWING ACTION:

X APPROVED AMENDMENT

DISAPPROVED

APPROVED WITH CONDITIONS*

WAIVER OF WRITTEN CONSENT GRANTED

* Conditions stated by the Committee have been met by the Investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Review Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: October 31, 1988 Signed: [Signature]
(Chairperson)
RESEARCH PROTOCOL:

AMENDMENT
87B0064 THE NATURE OF TRAIT EMPATHY IN CLIENTS WITH SUBSTANCE DEPENDENCE DISORDER AND THEIR THERAPISTS AND ITS IMPACT ON THE EARLY DEVELOPING WORKING ALLIANCE AND OUTCOME, James V. Wigtill, Education Services and Research

presented for review by the Behavioral and Social Sciences Review Committee to ensure proper protection of the rights and welfare of the individuals involved with consideration of the methods used to obtain informed consent and the justification of risks in terms of potential benefits to be gained, the Committee action was:

X APPROVED AMENDMENT

DEFERRED*

APPROVED WITH CONDITIONS*

DISAPPROVED

NO REVIEW NECESSARY

*CONDITIONS/COMMENTS:

Request to amend the protocol to include individuals receiving treatment for chronic pain, investigators to collect data (instead of therapists), therapists to administer the Working Alliance Inventory, and investigators to collect data following client's third and sixth visits was administratively APPROVED.


Bordin, E.S. (1980). Of human bonds that bind or free. Presidential Address presented at the meeting of the Society for Research in Psychotherapy, Pacific Grove, California.


