ABSTRACT

Title of Dissertation: SUPPORTIVE MESSAGES PERCEIVED AND RECEIVED IN A THERAPEUTIC SETTING

Jeanine Rice Barr, Doctor of Philosophy, 1994

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This study examines how communication of social support influences the behavioral change process in a particular environment. Specifically, the research question is: How is social support related to commitment to recovery from alcoholism/addiction? A one group pre-test/post-test research design was used with subjects in two addictions treatment centers. Questions were designed to measure changes that took place in individual's perception of supportiveness of messages received, the network support available to them, changes in uncertainty and self-esteem. Finally, how these variables predict commitment to recovery was examined.

Results showed no relationship between strength of network at time 1 and the supportiveness of messages received. Strength of network support, self-esteem, and uncertainty reduction improved from time 1 to time 2. The major predictor of a patient's commitment to recovery was the level of self esteem at time 2. However, a strong correlation was found between self-esteem and strength of network at time 2.

SUPPORTIVE MESSAGES PERCEIVED AND RECEIVED IN A THERAPEUTIC SETTING

by

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Dissertation submitted to the faculty of the Graduate School of The University of Maryland in partial fulfillment of the requirements for the degree of Doctor of Philosophy
1994

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ACKNOWLEDGMENT

The faculty, family and friends who contributed to this effort are many. I need to give a great big generic thank you to all of the people along the way who offered advice, love and support. I am most grateful.

Special acknowledgment must be extended to Vicki S. Freimuth and the faculty in the Speech Communication Department at the University of Maryland. She was the right advisor who said all the right things to keep me working and to encourage me when I could not work anymore.

In addition, the faculty and administration at York College of Pennsylvania, where I teach, deserve a special thank you for all the encouragement and advice that I received. The former Dean William A. DeMeester and Department Chair Thomas V. Hall were very supportive. My statistical consultant, John S. Levisky, spent many long hours with me making sure I understood what I was doing. Secretaries, Cheryl Ludwig and Mary Seyler, typed and copied for me.

I learned so much from all my students and fellow graduate students in this process. A former student, Melissa Kraus Taylor, spent many hours gathering research information and teaching me the insides of SPSS.

However, the person who lived through it all was my husband, John W. Barr. I doubt that I would have started this project had he not been there for me from the beginning. I am so grateful that he is also there for me at the end of the process.

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CHAPTER 1

INTRODUCTION

The buzz words of the decade appear to be "dysfunctional," "dependent," and "co-dependent." One often encounters the processes and effects of dysfunction, drugs, and co-dependency on the nightly news, television talk shows, in the print media, and in everyday conversations. The press delights in presenting all sides of the story on dysfunctional families whether the family in question is named Reagan (Davis) or Barr (Arnold). Closer scrutiny reveals that most families do have some dysfunction and co-dependency simply because they are made up of human beings. Other families have serious problems related to a variety of addictions. Thus, many individuals are dependent or co-dependent on someone or something be it alcohol or drugs, food, shopping, sex, or a person.

While there may well be a general dysfunctional haze falling on society, there are certain specific dysfunctions that can be changed with proper treatment and support. Support groups and self-help groups are springing up for every possible disease or dysfunction. The primary purpose of these groups is to help people cope with everyday living problems related to a particular disease or dysfunction. Treatment centers across the country are offering help for all kinds of dysfunction. The key to healing and change comes from the communication of support from others who have experienced the

same or a similar difficulty. Examining details of a specific dysfunction and describing how supportive communication can facilitate change and healing within individuals, should provide better understanding of the communication of social support.

This study examines how communication of social support influences the behavioral change process. To make the research manageable only the listener's side of the communication process was observed. Specifically, the research question was: How is social support related to commitment to recovery from addiction?

The study was designed to shed new light on the communication of social support and increase knowledge about the process of communicating supportive messages in times of personal change. The personal change taking place is movement from addictive behaviors to recovery behaviors for the chemically dependent person. The time of personal change is within the first 90 days of recovery from addiction. The subjects are inpatients at two treatment centers for chemical addiction in the northeastern United States. The kind of social support and specific unit of analysis are the perceived support and received support from sources inside and outside of the treatment setting. In addition, the perceived support network is assessed, the level of uncertainty reduction is evaluated, and self-esteem is examined. Finally, the

relationships among network support, uncertainty reduction, self-esteem and commitment to recovery are examined.

Facial expressions, eye contact, gestures, posture, and nuance of movement all make important contributions to communication. Ideally, they should be assessed in some way when examining supportive communication. One of the problems encountered with this study has been to keep the measuring tools simple so they can be easily understood by newly sober patients in treatment. Therefore, the decision to eliminate nonverbal communication measures was made reluctantly.

This chapter will review the literature in four areas relevant to the research question: (a) social support, (b) uncertainty reduction, (c) self-esteem, and (d) addiction treatment. Finally, an attempt is made to integrate the various bodies of literature resulting in a rationale for this study.

REVIEW OF RESEARCH

Social Support

There are three issues embedded in the social support literature that need further refinement and will be examined in this section. The first issue is definition of terms and typologies offered from the health and social sciences fields. In this section a definition of social support from the speech communication discipline will be offered. The second issue concerns explanation of the existing models of social support.

The third issue revolves around differences between perceived and received support.

Definitions

The recognition of social support as an area worthy of study stems primarily from several seminal works (Caplan, 1974, 1976; Cassel, 1974, 1976; & Cobb, 1974, 1976). First, Caplan's research looked at guidance and feedback (Lin, Dean & Ensel, 1985) in the context of support systems. Caplan (1976, p. 19) conceptualized a support system as:

> continuing interactions with others that provide individuals with opportunities for feedback about themselves and validation of their expectations of others, which may offset deficiencies in these communications within the larger community context.

Secondly, Cassel recognized the need to strengthen the individual's social support particularly within primary groups (Sarason, Sarason & Pierce, 1990). Finally, Cobb (1976) examined emotional support (being cared for and loved), esteem support (being valued and esteemed), and network support (belonging to a network of mutual obligations).

Recently, Sarason, Sarason, and Pierce (1990) presented social support as an interactional process involving intra-personal, interpersonal and situational processes. They perceived social support from the psychological perspective rather than the communication perspective. However, many of the ideas expressed in their books and articles (Sarason,

Levine, Bashem, & Sarason, 1983; Sarason, Shearin, Pierce, & Sarason, 1987) discuss communication concepts. In the introduction to their recent book (1990, p. 2) they described social support as:

> ...an interactional process requiring well-defined assessment tools, observational methods, intervention strategies, and integrative theories....social support is both a consequence (a developmental product) and an antecedent (an influence) over an individual's life and the lives of significant others.

This definition relates well to the topic of communicating to an addicted person. Of particular import is the idea that social support is both a consequence and an antecedent. The chemically dependent person needs to learn how to perceive and receive social support messages in recovery. Living and coping as a recovering person is vastly different from living and coping as an addicted person. This study should help to further refine assessment tools and draw conclusions about types of supportive messages.

Most of the research on social support has come from fields other than communication (Sarason, Sarason, & Pierce, 1990). However, there have been a few attempts to view social support from the perspective of communication scholars (Albrecht, Adelman & Associates, 1987; Duck & Silver, 1990; Burleson, Albrecht & Sarason, 1994). Duck and Silver called

for a synthesis of the social support literature with the literature on personal relationships in which we see the instances of help, comforting, and sympathy in coping with daily life as processes that go hand in hand. Goldsmith and Parks (1990) looked at the way people see and respond to support dilemmas and stress that "relationships are created in and experienced through communication" (Duck & Silver, 1990, xiii).

These recent collected works written primarily by communication scholars imply communication in the titles: Communicating Social Support (Albrecht, Adelman, & Associates, 1987), Personal Relationships and Social Support (Duck & Silver, 1990), Communication of Social Support: Messages, Interactions, Relationships and Community, (Burleson, Albrecht, & Sarason, 1994).

Albrecht and Adelman (1987, p. 20) state that:

> Conceiving of social support from a communication perspective casts it as a transactional, symbolic process of mutual influencing occurring between two or more individuals that alters their affective, cognitive, or behavioral states.

Looking at communication as a transactional process that alters affective, cognitive, or behavioral states provides the communication perspective for this study.

Typologies

Following these initial research efforts, the search for functions of social support stretched over a decade as various researchers (Cobb, 1976; Gottlieb, 1978; Barrera, 1986) examined a variety of populations attempting to categorize the dimensions of social support. House (1981) identified four categories: "expression of emotional support," "appraisal support," "giving information," and "providing instrumental support." Recent typologies include categories such as "informational support," "esteem support," "emotional support," "tangible aid," and "network support" (Barrera, 1986; Cohen & Wills, 1985; Cutrona, Suhr, & MacFarlane, 1990). Cutrona (1986a) discussed the various typologies, concluding that they are more similar than different.

Cutrona and Russell (1984) used Robert Weiss's (1974) model of social provisions, originally conceived to study loneliness, as the conceptual framework for the development of the Social Provisions Scale. The categories originally used to examine network support were reliable alliance, attachment, guidance, nurturance, social integration and reassurance of worth. These six categories can be subsumed under three broader categories related to problem solving, esteem support, and emotional support. Cutrona and Russell have studied three differing stressors: the transition to parenthood (Cutrona, 1984), public school teaching (Russell, Altmaier & Van Veizen, 1987), and nursing (Constable & Russell, 1986). This line of

research has "worked from a multidimensional model of the functions of interpersonal relationships, and devoted considerable effort to the development of a reliable and valid measure of support" (Cutrona & Russell, 1987, p. 39). In their many studies Cutrona, Russell and associates have searched to understand the various processes though which interpersonal relationships improve or sustain well-being under stressful situations. Their model relates well to the stressor of addiction because interpersonal communication in group therapy and the therapeutic community is the primary means of giving support.

This study was originally designed to look on a daily basis at these three types of social support, problem solving support, esteem support, and emotional support developed by Cutrona and Russell. A fourth category, providing information and feedback (House, 1981; Barrera, 1986), was included. Each patient was asked to record a selected memorable supportive message and rate it according to each of these four divisions. Network support, self-esteem, and uncertainty reduction were examined before and after treatment. Based on research discovered in the review of the literature (Barrera, 1986; Cohen & Wills, 1985; Constable & Russell, 1986; Cutrona, 1984; Cutrona, Suhr, & MacFarlane, 1990; House, 1981; Russell, Altmaier & Van Veizen, 1987) it was anticipated that these supportive messages would lead to the following outcomes:

enhanced network support, increased self-esteem, and reduction of uncertainty.

Main Effects/Buffering Effects Models

During the past decade social support research has expanded particularly in the fields of psychology (Barrera, 1986; Sarason, Sarason & Pierce, 1990; Lin, Dean & Ensel, 1986), sociology (Thoits, 1983, 1984), human services and health (Cohen & Symes, 1985), resulting in two distinct statistically derived models: the main effects model and buffering effects model.

The main effects model views social support as enhancing general well-being and health regardless of the level of stress. This model suggests that support provides a sense of predictability and stability as well as a recognition of self-worth (Cohen & Wills, 1985).

The buffering effects model suggests that social support directly protects people from the effects of stressful events in that support has beneficial effects in stressful situations. Support "buffers" people from possible harm caused by stressful events (Cohen & Wills, 1985). For example, individuals who have a strong support system will display less severe psychological and physical distress when exposed to high levels of stress than individuals having weak support (Dunkel-Schetter & Bennett, 1990).

Working from the main or direct effects model, support is measured by assessing the degree to which a person is

integrated within a social network. With the buffering effects model, support is measured by assessing the availability of resources that actually are responsive to needs resulting from stressful events (Cohen & Syme, 1985; Cohen & Wills, 1985).

This research viewed the messages received by the addicted individual entering treatment through the buffering effects model. The more support a person has the better the chances for reducing stress and, thus, for effecting the life changes necessary for recovery.

Perceived/Received Support

Another issue in the social support literature is the difference between perceived and received support. Perceived social support can be characterized as the recipient's "cognitive appraisal of being reliably connected to others" (Barrera, 1986, p. 416) and the belief that support is available (Lakey & Heller, 1988). Received support is often conceptualized as the recipient's understanding of helpful communication (Sarason, Sarason, & Pierce, 1990) or the outcome of advice or reassurance from others (Lakey & Heller, 1988).

Distinctions between perceived and received support have only recently been clearly drawn in the literature. According to Sarason, Sarason and Pierce (1994 p. 98),

> Perhaps one of the most important developments in the social support literature is the (recent)

> agreement that the only aspect of social support that is related to health outcomes is perceived support, or the belief that help would be available if needed, as contrasted with help that is actually received.

Generally, the distinctions have shown perceived support as expectation and received support as more concrete experience in specific situations (Schwarzer & Leppin, 1991). In fact, the suggestion that received support buffers stress has not been adequately tested (House, 1981; Wilcox, 1991) especially in relationship to alcoholism (Billings & Moos, 1982, 1983) initially suggested this study. The messages of received support should be more obvious in a population that "shares a common negative life event" (Dunkel-Schetter & Bennett, 1990, p. 288). The Social Provisions Scale (SPS) discussed earlier is generally accepted as an excellent measure for assessing perceived support (Cutrona, 1986b). Perceived social support, as measured by the SPS, supports the stress-buffering model of social support.

Uncertainty Reduction

The cognitive function of support in this communication context is uncertainty reduction (Albrecht & Adelman, 1987). Uncertainty is defined by Berger and Calabrese (1975) as a cognitive response that occurs when one does not know how and why events are occurring. The "role played by communication in the development of relationships is mediated by uncertainty

reduction" (Berger & Bradac, 1982, p. 5). Reducing uncertainty is an important process in any interpersonal relationship. If people are uncertain about their conversational partners' actions and reactions, the flow of interaction is disturbed and communication becomes difficult. People in the early stages of addiction recovery find communication extremely difficult due to a sudden shift from addictive behaviors to recovery behaviors.

Uncertainty reduction theory relates to both process and outcome of communication (Berger, 1986). Support occurs when meanings are obtained that reduce uncertainty, both for one's situation and interpersonal relationships (Albrecht & Adelman, 1987).

Providers of social support reframe the cognitive processes of the recipient over time, improve skill levels, give tangible assistance and give emotional support (Albrecht & Adelman, 1987; Barrera, 1986; Barrera & Ainley, 1983; Dunkel-Schetter, Folkman, & Lazarus, 1987). Reducing uncertainty helps communicants develop a sense of "perceived control over stressful circumstances" (Albrecht & Adelman, 1987, 24).

A few studies (Selye, 1965; Lazarus, 1974; Mishel, 1981) have looked at the relationship between illness and the concept of reducing uncertainty. Specifically, Mishel (1984) explored the concept of uncertainty during illness based on

four factors that were expanded by Albrecht and Adelman (p. 24):

1. **Ambiguity** - multiple meanings for one's situation.
2. **Complexity** - in managing and coping with stressors, producing confusion and overload.
3. **Lack of information** about the illness and recovery.
4. **Unpredictability** about the present and the future.

The chemically dependent person at the onset of recovery is dealing with all four types of uncertainty that need to be addressed in the clinical setting. Communication about or related to these four concepts should serve to reduce uncertainty and thus be supportive. Therefore, I have included all four factors in the measurement of uncertainty reduction in this study.

Self-Esteem

Cobb (1976) defined social support primarily at the emotional level as being cared for and loved, being valued and esteemed, and belonging to a network of mutual obligations. He went on to suggest that esteem support encourages a person to cope.

Self-esteem is often defined as how well we like ourselves. The Oxford English Dictionary supports this concept with the primary definition as "a favourable appreciation or opinion of oneself." Common synonyms are "self-reliance," "self-confidence," "poise," "confidence," "pride" (Steinem, 1992, p. 31), "self-worth," "capable,"

"significant" and "successful".

The common thread in many theoretical definitions seems to be how favorably (or unfavorably) a person evaluates the self. Self-esteem can be defined in terms of evaluative attitudes about self. Rokeach viewed an attitude as "a relatively enduring organization of beliefs around an object or a situation predisposing one to respond in some preferential manner" (1969, p. 112). Sniderman (1975 p. 44) provided an elaborated justification for defining self-esteem in terms of self-attitudes concluding that self-esteem:

> refers to a particular aspect of the attitudes individuals hold about themselves, embracing what they believe to be their desirable (and undesirable) qualities and whether or not they like themselves.

Thus, high self-esteem equals favorable self-attitudes; low self-esteem refers to unfavorable self-attitudes. In this study, self-esteem signifies "a positive or a negative orientation toward an object" (Rosenberg, 1979, p. 44). High self-esteem equals self-respect; the person views the self as a person of worth. Low self-esteem equals lack of respect for self; the person sees the self as unworthy, inadequate, or "otherwise deficient as a person" (p. 54).

Addiction and the Treatment Setting

The specific population to be addressed in this research are the chemical dependency people. The terms "alcoholic,"

"addicted," and "chemically dependent" are used interchangeably throughout. As more research has been conducted on drug abuse the more widely used term is "chemically dependent." However, there is more published research related to alcoholism, alcoholic families, and treatment. Alcohol is a drug and the results of addiction to alcohol and/or other drugs are quite similar (Milam & Ketchum, 1981). In general, the terms "alcoholic," "addicted," and "chemically dependent" are used to refer to a person who has become dependent on a drug to the point where having that drug is more important than any other aspect of life. Specifically alcoholism is (Milam & Ketchum, 1981, p. 189):

> a chronic, primary, hereditary disease which progresses from an early, physiological susceptibility into an addiction characterized by tolerance changes, physiological dependence, and loss of control.

People entering treatment for chemical dependency need to break from their own addictive actions as well as the enabling behaviors of family and friends and begin to take on more responsibility for their own behaviors in future interactions. The time spent in treatment is used to change old behaviors and communication patterns as the person is just beginning the recovery process. The recovery process, in and of itself, is stressful and uncertain. As is predicted in the buffering effects model, the more support a person receives the better

the chances for reducing stress and, thus, for effecting the life changes necessary for recovery (Brennan & Moos, 1991; Moos, Fenn, Billings & Moos, 1989).

On one hand, some addicts arrive at a treatment center with little or no support from anyone. By the time these people seek treatment they have managed to isolate themselves to the point where there is no one in their lives to give them support. Many people in treatment for chemical dependency have already lost their families and friends. As the addiction cycle spirals downward it becomes easier to be a loner than to live with other people telling the addict what to do and how to do it, especially when the conversation is related to consumption of alcohol or drugs. These people may well need to establish new roles, new patterns of interaction and get continual reinforcement for new patterns of behavior. If they do not, they are likely to drink or use drugs again. It is this group of people who are told in early recovery that they "must change people, places and things" (Anonymous, 1992) if they are going to make a strong commitment to recovery. Changes in support tend to be reflected in changes in functioning, particularly for this type of alcoholic.

On the other hand, many people arrive at a treatment center with families and friends still available to them although estranged. These family members and friends are willing to help once the way is pointed out to them. This kind of support may serve to reduce uncertainty, enhance self-

esteem, and strengthen commitment to recovery. The availability of old friends and family members may enhance coping with changes and the ability to stay in the recovery process if these significant others are willing and able to learn about recovery (Billings & Moos, 1982, Whitfield, 1991).

> As the understanding of addiction and intervention grows, people are receiving treatment earlier in the addiction cycle. Thus, today many more people are arriving at treatment centers at younger ages with families and support systems still, at least partially, in place. These people, sometimes referred to as high-bottom alcoholics (Miller, 1989, p. 67), may have a better chance of making a serious commitment to recovery. Thus, it is important to measure the social network as the person enters treatment.

What is successful treatment for chemical dependency? The patient's answer to this question might include outcomes such as alleviating depression, improved personal functioning, feeling better, regaining an impaired or lost relationship or reclaiming a jeopardized job (Anonymous, 1992, 1993). Some patients state they wish to learn how to drink without getting drunk. Others simply wish to stop the painful results of addiction (Anonymous, 1993). A treatment center professional would probably answer that question by focusing on ideas like "abstinence from alcohol and other drugs, enhanced self-

esteem, improved working skills, and overall life satisfaction" (Hester & Miller, 1989, p. 87). In addition, successful treatment will start patients on the path of building or rebuilding social support networks to aid in staying away from alcohol and drugs and reducing uncertainty in their lives.

By looking at the communication networks perceived to be in place as the patient enters treatment, the supportive messages received during treatment, the commitment to recovery throughout the process and at the end of treatment, and the perceived support networks at the end of treatment, professionals in treatment centers should have a clearer idea of messages that are heard by patients in early recovery. Increased self-esteem and reduction in uncertainty should also lead to enhanced commitment to recovery.

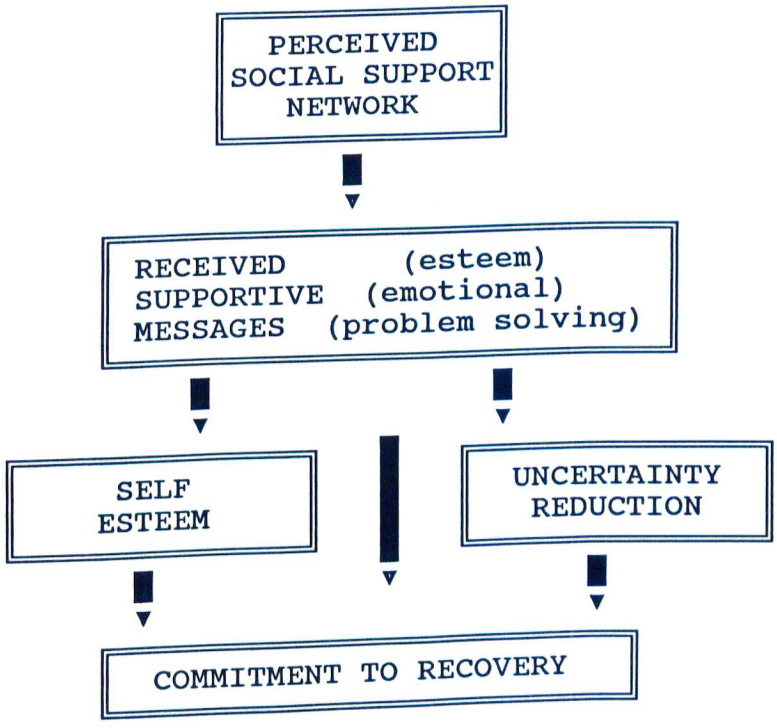
INTEGRATION AND HYPOTHESES

A model provides a pictorial representation of what is transpiring in a given situation. In the communication field we often use models to provide a clearer visualization of exactly what we mean.

The following model graphically shows the relationships predicted:

Figure 1

Perception and Reception of Supportive Messages in a Therapeutic Setting



Explanation of Model Leading To Hypotheses

Although ideally, the dependent variable of this study would be actual recovery from chemical dependency, recovery is a life-long process and impractical to measure in the short term. In fact, there is considerable difference of opinion as to how to define successful recovery (Milam & Ketcham, 1981; Nathan & Skinstad, 1987; Vaillant, 1983). Thus, a behavioral intention measure, commitment to recovery, was used in this study. It was assessed both by self-report from the addicted person and by the report of the counselor who worked closely with the addicted person. In this study, the relationships among various types and outcomes of social support related to the commitment to recovery intention were explored.

The model shown in Figure 1 of the social support process related to commitment to recovery guided the exploration. The first component of the model is the support network, or the perceived support. I hypothesized that the strength of the network at the beginning of treatment would affect the perception of the supportiveness of the messages received and the commitment to recovery at the end of treatment. Therefore, hypothesis one is:

H1: There is a positive relationship between strength of network at time 1 and perception of supportiveness of the messages received.

I also predicted that the strength of the network would be greater at the end of treatment than it was at the beginning.

Therefore, hypothesis 2 is:

H2: The strength of the network at time 2 (T2) is greater than the strength of the network at time 1 (T1).

The second component of the model is the actual supportive messages or the received support. Participants were asked to record one memorable message each day, and rate it for degree of helpfulness on four functions of support and perception of overall supportiveness. These messages should result in cognitive change (reduction of uncertainty), affective change (enhancement of self-esteem), and intention of behavioral change (commitment to recovery). In other words, supportive messages should lead to increased self-esteem, a reduction in uncertainty, and commitment to recovery. If it were feasible to record every supportive message received during treatment, relationships between types of messages and outcomes could be assessed. Since participants were asked to record only one representative message per day, however, these relationships in the model cannot be assessed at this time. I measured amount of uncertainty and self-esteem both at the beginning and end of recovery so that I could see how the recovery process affected these variables. Therefore, hypotheses 3 and 4 are:

H3: The level of uncertainty reduction at time 2 is greater than at time 1.

H4: Self-esteem is greater at time 2 than time 1.

In order to explore the relative contribution of the social network (perceived support) the supportiveness of the messages (received support), changes in self-esteem and uncertainty on commitment to recovery, regression analysis was used to test hypothesis 5:

H5: Commitment to recovery at the end of treatment can be predicted from strength of network, average supportiveness of messages, changes in self-esteem and uncertainty.

INTEGRATION

The primary objective of the recovery process is to help a person abandon behaviors that support continued addictive behavior and move toward behaviors associated with recovery. Uncertainty needs to be reduced, self-esteem needs to be rebuilt, and new behaviors need to be learned. Supportive communication is vital to this goal. The more support that is communicated to the patient in treatment and early recovery, the more likely the person will be to cope with changes demanded in the process and commit to recovery without relapse (Finney & Moos 1991, 1992). Thus, the kinds and amount of support available to the person become critical.

Providers of social support in the treatment setting reframe the cognitive processes to reduce uncertainty for the recipient over time, improve skill and esteem levels, give important information and tangible assistance toward problem solving, and give emotional support (Albrecht & Adelman, 1987;

Barrera, 1986; Barrera & Ainley, 1983; Dunkel-Schetter, Folkman, & Lazarus, 1987). The studies cited here grew out of and relate back to earlier support studies (Caplan, 1974, 1976; Cassel, 1974, 1976; & Cobb, 1974, 1976). The communication angle of uncertainty reduction provides a new lens through which to view social support. Reducing uncertainty helps patients develop a sense of "perceived control over stressful circumstances" (Albrecht & Adelman, 1987, p. 24). Hopefully, many of the messages received in the treatment community serve to reduce uncertainty and thus develop a greater sense of control of behavior for the patient in recovery.

Self-esteem is the experience of one's personal worth. People who need continual reassurance and validation from others to determine self-worth may be described as having a low sense of self, which is revealed through shifts in self-esteem (Skager & Kerst, 1989). Healthy people do not need to seek out support and validation to enhance their sense of worth (Rosenberg, 1989). These people already have a high sense of self-esteem.

It is clear that most troubled human beings suffer from low self-esteem (Skager & Kerst, 1989). Frank (1982) characterized the mental states of such people as including personal demoralization, loss of self-esteem, alienation, hopelessness (feeling that no one can help) and helplessness (feeling that other people could help, but will not).

This description applies equally well to the alcoholic or the addict. (Anonymous, Personal Stories, 1992, 1993). There is little doubt that self-esteem is central to the recovery from addiction (Billings & Moos, 1983; Finney & Moos, 1991; Gordon & Zrull, 1991; Hester & Miller, 1989; Milam & Ketcham, 1981). In fact, the first step to recovery in both Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), self help groups for recovering addicts, is "we admitted we were powerless over alcohol that our lives had become unmanageable." Members of AA and NA believe that the addict must break through the barriers of denial and rationalization to a sense of helplessness in the face of a life that is out of control. AA describes this crisis as the concept of hitting bottom. "More than anything else, hitting bottom is a state of negative self worth, a vacuum where self-denigration replaces self-esteem" (Skager & Kerst, 1989, p. 250). Many addicts enter treatment precisely at this point.

For the past twenty years, low self esteem has been the most popular psychological explanation of drug and alcohol abuse (Skager & Kerst, 1989). In general, we believe that self esteem grows in recovery. Several longitudinal studies support this premise (Finney & Moos, 1991, 1992; Hester & Miller, 1989; Moos & Moos, 1992; Page, Mitchell & Morris, 1985). Very few studies have been conducted using members of AA and NA due to the anonymous traditions of 12-step programs. The literature is inconsistent regarding changes in self-

esteem as a result of treatment (see Skager & Kerst, 1989, pp. 278-282), particularly in short term treatment programs. Thus, measuring high or low self esteem at the beginning of treatment and then looking at whether that esteem level changes in the early process of treatment is important.

In general, successful treatment tends to be related to motivation and commitment on the part of the person, but Miller (1989) suggests that counselors can provide tools to increase that commitment. These tools include giving advice, reducing barriers to recovery, putting the emphasis on choice for the patient, decreasing attractiveness of drinking or using drugs, examining external contingencies, giving feedback on improvement throughout the treatment process, setting clear goals for changes, and displaying a helpful attitude. All of these tools serve to reduce the uncertainty discussed by Mishel (1984): ambiguity is lessened by decreasing attractiveness of drinking or taking drugs and reducing barriers to recovery; complexity is enlightened by setting clear goals, giving advice, giving feedback on improvement and displaying a helpful attitude; unpredictability is softened by examining external contingencies, and the emphasis on patient choice. Underlying all of the tools is the idea of providing knowledge and information on the disease and recovery, which clearly relates to Mishel's third point about lack of information.

We know many things about broad social support, but know very little about exactly how messages are perceived (Sarason, Sarason & Pierce, 1990) and received (Dunkle-Schetter & Bennett, 1990). While it has been convincingly shown that perceived and received support are usually uncorrelated (Dunkel-Schetter, 1984; Dunkel-Schetter & Bennett, 1990), "perceived availability of support has yet to be distinguished from the activation of support" (Scharzer & Leppin, 1991, p. 102). We know even less about how perceived and received support function in a therapeutic setting. Much of the work in the social support literature has been related to health rather than therapeutic settings. We need to know more about the communication of social support in that arena. Some work has been done with schizophrenia (Hammer, 1981, 1983; Pattison & Pattison, 1981). Few studies have been conducted relating social support to addiction.

One program of research (Billings & Moos, 1982, 1983; Moos & Finney, 1983; Moss et al., 1989; Brennen & Moos, 1991; Finney & Moos, 1991, 1992; Moos & Moos, 1992) has systematically examined alcoholics. In fact, in the last five years this line of research has shown several important concepts about social support and alcoholism. For example, Cronkite and Moos (1980) used path analysis to determine post-treatment functioning of alcoholics. The results of this longitudinal study produced a conceptual framework for assessing the interrelationships among pre-treatment,

treatment and post-treatment variables and outcomes (Cronkite & Moos, 1980). Another study examined the relationship between social support and personal functioning in a longitudinal study of men and women (Billings & Moos, 1982, 1983). Alcoholic and non-alcoholic samples were compared showing less stability for alcoholic patients in levels of support and functioning. Also, family support was more closely related to the alcoholic's functioning than work support (1982, p. 306). Finally, changes in family support had a greater impact on adjustment among alcoholics than among members of the community group (p. 304).

In this chapter I introduced the topic of research and the overall research question. Then I examined the social support, uncertainty reduction, self-esteem, and addictions literatures. Next, the attempt was made to pull these diffuse bodies of information together into a model predicting the results for this study. Then, I created five hypotheses to test. Throughout the integration section, I built the rationale for this study. The next chapter discusses methods, including subjects, data collection, demographics, and operational definitions.

CHAPTER 2

METHODS

This research is primarily quantitative with a one group pre-test/post-test research design to measure what kinds of changes take place in the individual's perception of the network support available to them, supportive messages received, uncertainty and self-esteem and how these variables predict commitment to recovery. Strength of network support, amount of uncertainty and level of self esteem were measured at the beginning and at the end of the 21 to 90 day treatment process.

The study focuses on social support both perceived and received by a specific population. This research combines a pre-test/post-test questionnaire with daily logs and the evaluations of trained counselors in the therapeutic community.

Data Collection

Gathering the data for this research took almost a full year: from mid July 1993 to late May 1994. Just as data collection began in July, funding for drug and alcohol treatment all but disappeared in the state of Pennsylvania. In early April of 1994 a new funding plan began. Populations at treatment centers doubled or tripled. Many patients began the project and abandoned it due to stress in treatment, early discharge, or leaving treatment without completing the final piece of the research project. Thus, their questionnaires had

to be discarded. Out of 128 people who began the project, 38 completed the final form. In order to be counted as a case, the minimal requirements were completion of the pre-test upon entry into treatment and the post-test at the end of treatment. Some patients completed 18 or more logs. However, seven subjects did not complete any logs.

Subjects and Demographics

Chit Chat Farm in Wernersville, PA, and Colonial House in York, PA, were chosen as research sites because clients came to these treatment centers from a broader geographical area than just central Pennsylvania. For both treatment centers, about one-third to one-half of the population of the patients in any given week came from central Pennsylvania. However, the other half to two-thirds of the population came from all over the United States.

Permission of both the patients and the treatment centers was necessary. Patients signed an informed consent form approved by the Human Subjects Committee at the University of Maryland.

The patients came from varied demographic backgrounds. Twelve subjects were from Pennsylvania, eight from Maryland, five from New Jersey, with the rest of the patients coming from five different states and two other countries. Fifteen patients lived in large cities or suburbs and 12 lived in small towns. The rest of the clients claimed to be from major cities (N=6) or rural areas (N=4). Ages ranged from 18 to 62

years old with an average age of 40. Ten subjects reported being married; 16 were single and 12 labeled themselves as divorced or separated. Thus, a total of 28 people (74%) were not currently married. More people claimed religious affiliation than did not. Twelve clients (32%) reported they were Catholic, eight (21%) were Protestant, and nine claimed "other." The "other" category included people primarily from the Jewish or Muslim traditions. Twenty eight respondents (74%) were Caucasian, nine (24%) were Black, and one was Hispanic. Sixteen subjects (42%) were employed; twenty-two (58%) were not. There were 24 males and 14 females participating in the study. All subjects in the study were voluntary participants.

Procedures

Upon entry into treatment all patients signed a consent form and completed a pre-test (see Appendix A) consisting of the strength of social network measure, Rosenburg's Self-Esteem Scale, the Social Provisions Scale (Cutrona & Russell, 1987), and an Uncertainty Scale based on Mishel (1984). There were also open-ended questions asking the patient to recall a specific message that encouraged them to seek treatment. A question asking for a commitment to recovery rating on a scale of 1 (lowest) to 100 (highest) was also included.

At Chit Chat Farm these measures were given as part of admission procedure by the night counselors and placed in a box for weekly collection by the researcher. Information on

demographics was taken from the treatment center intake questionnaire. The researcher had little or no contact with the patients. Because of a very low number of completions (11 cases in five months) another site was added. With the move to Colonial House in York, PA, in November, the researcher became more active in the data collection process. Weekly on-site patient contact included conducting an hour long meeting related to AA recovery issues and socializing with clients during the dinner hour immediately following the meeting. Thus, from Colonial House an additional 27 cases were collected over a five-month period.

A post-test (see Appendix C) was given after a full month of treatment had been completed. This instrument repeated the same measures given on the pre-test. The final rating of the patient's commitment to recovery was taken at this time using the same scale (1 to 100) described above. At Chit Chat this measure was taken by the individual counselors as a part of the exit interview. Each counselor also gave their rating of commitment to recovery. At Colonial House the researcher collected the post-test from the clients and the commitment to recovery rating from the counselors.

Critical incident logs were kept daily by each patient at both sites (See Appendix B). Subjects were given a tablet with 22 log sheets to be used to report at least one critical incident where they received messages judged to be helpful to recovery. Exact messages were requested and open ended

comments were encouraged. During the course of treatment, patients were asked to record one specific received message per day that was supportive. In addition, each patient rated the message on each of the four functions of support using a scale from 1 (not at all) to 5 (most of all). Only one patient completed every log form. The mean number of logs completed was nine. Seven patients did not complete any logs, but did complete the post-test.

All measures were piloted by the researcher for readability and reliability using subjects who are already in recovery groups of Alcoholics Anonymous or Al-Anon and patients in a third treatment facility.

Operational Definitions

Communicating Social Support

The conceptual definition of communicating social support for this research follows the Albrecht and Adelman (1987, p. 20) definition. To reiterate:

> Conceiving of social support from a communication perspective casts it as a transactional, symbolic process of mutual influencing occurring between two or more individuals that alters their affective, cognitive, or behavioral states.

Emphasis for this study is placed on perception and reception of the verbal communication. Although the nuances of nonverbal cues may impact the reception of the message, this study is limited to verbal messages. Thus, the

operational definition of communicating social support is verbal support that is heard and registered (received support) by the listener. Connection to significant others (perceived support) is measured under strength of network.

Strength of Network

Consistent with Caplan's (1976) definition, this variable is operationalized as the summed score of people listed by patients as important members of their social networks on the pre- and post-tests.

There are two measures of strength of network used for this study. These measures were examined separately.

For the first measure created by the researcher the participants were asked to list the important people in their lives. They then rated each member on a scale from 1 to 10 according to the amount of social support available from that person. These ratings were added across all the members listed, creating a single number to represent strength of the network (See Appendix A). For example, one subject had wife - 8, son -6; another participant, obviously grateful that friends and family helped her get to treatment listed eight people, all of whom were rated as 10's.

The second measure the Social Provisions Scale has been used many times as a measure of network support. The scale tests for strength of network support by simply summing the answers. The instrument can be further broken down into

subscales, which was not done with this research. The following questions make up the Social Provisions Scale:

1. Are there people you can depend on to help you if you really need them?
2. Do you feel you could not turn to these people for guidance in times of stress?
3. Are there friends or family members who enjoy the same social activities you do?
4. Do you feel personally responsible for the well-being of your friends and/or family?
5. Do you feel your friends or family do not respect your skills and abilities?
6. If something went wrong, do you feel that no one would come to your assistance?
7. Do your relationships provide you with a sense of emotional security and well-being?
8. Do you feel your competence and skill are recognized by your friends and family?
9. Do you feel none of your friends or family share your interests and concerns?
10. Do you feel none of your friends or family really rely on you for their well-being?
11. Is there a trustworthy person you can turn to for advice if you were having a problem?
12. Do you feel you lack emotional closeness with your friends and family?

Reliability and validity for this measure have previously been established (Russell, et al., 1984; Russell & Cutrona, 1987; Cutrona & Russell, 1987). The individual social provision sub-scales are adequate in research contexts with coefficient alphas ranging from .653 to .760. Nunnaly's formula (1978, p. 248) for the reliability of a linear combination of scores was used to determine a reliability estimate of .915 for the entire Social Provisions Scale (Cutrona & Russell, 1987, pp. 45 - 46). In their many studies Cutrona, Russell and their associates have searched to understand the various processes though which interpersonal relationships improve or sustain well-being under stressful situations. Discriminant validity has also been previously demonstrated (Cutrona & Russell. 1987, pp. 50 - 52).

Self Esteem

This variable is defined as the idea and feeling that people have that they are capable, significant, successful, and worthy. Thus, the definition refers to the attitudes individuals hold about themselves, embracing what they believe to be their desirable (and undesirable) qualities and whether or not they like themselves. High self esteem equals favorable self-attitudes; low self esteem refers to unfavorable self-attitudes.

Self-esteem is operationalized by responses to 10 Guttman scale items, rated on four responses from strongly agree to strongly disagree, on the Rosenburg Self-Esteem Scale (1979, p. 291). The Rosenburg Self Esteem Scale specifically measures high or low self-esteem on six items. "High self-esteem, as reflected in our scale items expresses the feeling that one is 'good enough.' Low self-esteem, on the other hand, implies self-rejection, self-dissatisfaction, self-contempt" (Rosenberg, 1989, p. 31). The following 10 questions were asked on both the pre-test and the post-test:

14. On the whole I am satisfied with myself.
15. At times I think I am no good at all.
16. I feel I have a number of good qualities.
17. I am able to do things as well as most people.
18. I feel I do not have much to be proud of.
19. I certainly feel useless at times.
20. I feel that I am a person of worth, at least on an equal plane with others.
21. I wish I could have more respect for myself.
22. All in all, I am inclined to feel that I am a failure.
23. I take a positive attitude toward myself.

Scale Item I is contrived from the combined responses to items 16, 20, and 22. If the respondent answers two out of three or three out of three positively, he receives a positive (that is, low self-esteem) score for Scale Item I. Scale Item

II is contrived from the combined responses to items 17 and 18. One out of two or two out of two positive responses are considered positive for Scale Item II. Scale Items III, IV, and V are scored simply as positive or negative based on responses to items 14, 21, and 23. Scale Item VI is contrived from the combined responses to items 15 and 19. One out of two or two out of two positive responses are considered positive.

The reproducibility and scalability coefficients suggest that the items have "satisfactory internal reliability" (Rosenburg, 1979, p. 292) with a Coefficient of Reproducibility of 93% and a Coefficient of Scalability of 72% for individuals and 73% for items (Rosenberg, 1989, p. 327).

Uncertainty Reduction

This variable is operationalized as the total score on four semantic differential scales to measure each of Mishel's (1984) four characteristics of uncertainty during illness: clarity/ambiguity, simplicity/complexity, information/lack of information, and predictability /unpredictability. The terms ambiguous, complex, lack of information and unpredictable are each rated 1. The terms clear, simple, informative, and predictable are each rated 7. The numbers for each item are then summed. Scores for time 1 and time 2 were taken and changes noted. The following four scales were used to measure uncertainty reduction:

10. Clear ___:___:___:___:___:___:___Not clear

11. Simple ___:___:___:___:___:___:___Complex

12. Predictable ___:___:___:___:___:___:___Unpredictable

13. Informative ___:___:___:___:___:___:___Not informative

Supportive Message Variables

Each day the patients recorded one supportive message. Source, date and channel of the communication were recorded for each of these messages. Each patient also recorded a 1 to 5 rating for each of the following four functions of support: esteem support, problem solving, level of uncertainty, and emotional support.

Supportiveness

This variable is operationalized as the subjects' self ratings of overall helpfulness on a 100 point scale measuring the level of support of the one message they recorded on each the daily logs.

Commitment to Recovery

This variable is operationalized by two separate measures. The first measure is the patients' self rating of their own commitment to recovery on a scale of 1 - 100 at the end of treatment on the post-test. The second measure is the primary therapist's rating of each patient's commitment to recovery on a scale of 1 - 100 during the exit interview. At Chit Chat each counselor wrote the number on the back of each subject's post-test. At Colonial House the researcher personally collected the number from each counselor.

Data Analysis

Three different procedures will be used to test the five hypotheses. Hypothesis one will be tested by a simple correlation analysis for Pearson's r. Hypotheses two, three and four will be tested using the one-tailed t-test. The final hypothesis will be tested using regression analyses.

CHAPTER 3

RESULTS

The original research question for this study was: How is social support related to commitment to recovery from addiction? This question was broken down into five separate hypotheses which were:

H1: There is a positive relationship between strength of network at time 1 and perception of supportiveness of the messages received.

H2: The strength of the network at time 2 is greater than the strength of the network at time 1.

H3: The level of uncertainty reduction at time 2 is greater than at time 1.

H4: Self-esteem is greater at time 2 than time 1.

H5: Commitment to recovery at the end of treatment can be predicted from strength of network, average supportiveness of messages, changes in self-esteem and uncertainty reduction.

The summary descriptive statistics at time 1, the beginning of treatment (on the pre-test), and at time 2, the end of treatment (on the post-test), for perceived network support, uncertainty reduction, and self-esteem are listed in Table 1. Table 2 lists the results of Cronbach's Alpha for internal consistency for the various scales used in this study.

Report on Each Hypothesis

Hypothesis 1 predicted a positive relationship between strength of network at time 1 and perception of supportiveness of the messages received. This hypothesis was tested by examining the relationship between the strength of network variable(s) and average supportiveness rating across all types of messages using Pearson's Correlation Coefficient.

After preliminary analysis the decision was made to use only the overall helpfulness scores from the daily logs for the first hypothesis. This decision was made because the individual scores for each function (increased self-esteem, helped with problem solving, provided emotional support, and provided information of feedback) were not always recorded by subjects. Even when they were recorded there was little consistency or accuracy among ratings and functions. Table 3 shows that neither of the network measures correlated with the helpfulness measure. Thus, the first hypothesis is not confirmed. A very slight correlation ($r = .18$) between Helpfulness and the Social Provisions Scale can be detected at time 1. There is a smaller relationship among Helpfulness and Network Support ($r = .14$) at time 2. However, none of these correlations are significant.

TABLE 1
Summary Statistics for Variables

Variable	N	$\bar{X}$	Median	σ	Range	
					Possible	Actual
Social Provisions Scale T1	(37)	29.43	30	4.20	12-36	19-35
Social Provisions Scale T2	(36)	30.74	32	4.10	12-36	23-35
Network Support Measure T1	(38)	35.29	35	17.08	0-∞	2-74
Network Support Measure T2	(38)	37.34	37	15.50	0-∞	10-84
Uncertainty Reduction T1	(36)	20.86	22	3.91	4-28	14-28
Uncertainty Reduction T2	(38)	22.72	21	3.91	4-28	10-28
Self-Esteem T1	(36)	2.83	2.80	1.89	6-0	6-0
Self-Esteem T2	(36)	2.00	2.01	1.43	6-0	6-0

NOTE: T1 is the measure taken at Time one on the Pre-test.
T2 is the measure taken at Time two on the Post-test.
Lower score = higher self-esteem

TABLE 2
Reliability Scores for Scales

Variable	N	Cronbach's Alpha
Social Provisions Scale T1	(37)	.71
Social Provisions Scale T2	(36)	.98
Uncertainty Reduction T1	(36)	.47
Uncertainty Reduction T2	(38)	.70
Self-Esteem T1	(36)	.92
Self-Esteem T2	(36)	.92

T1 is the measure taken at time one on the Pre-test.
T2 is the measure taken at time two on the Post-test.

TABLE 3
Correlation Statistics for Average Helpfulness Scores and Multiple Regression Independent Variables

Variable	Pearson's r								
	1	2	3	4	5	6	7	8	9
1. Helpfulness	1.000	-.179	-.091	.015	-.140	0.104	-.138	-.099	-.078
2. S. P. S. T1	-.179	1.000	.600**	.324	.115	.077	.220	-.519**	-.358*
3. S. P. S. T2	-.091	.600**	1.000	-.010	.227	.057	.208	-.632**	-.498**
4. Net. Sup. T1	.015	.324	.010	1.000	.486**	.093	-.054	.072	.078
5. Net. Sup. T2	-.140	.115	.227	.486**	1.000	.011	-.126	-.089	-.221
6. Unc. Red. T1	-.101	.077	.057	.093	.011	1.000	.355*	-.068	-.050
7. Unc. Red. T2	-.135	.221	.208	-.054	-.126	.355*	1.000	-.108	-.021
8. Self Esteem T1	-.099	-.519**	-.632**	.072	-.089	-.068	-.108	1.000	.792**
9. Self Esteem T2	-.078	-.358*	-.498**	.078	-.221	-.050	-.021	.792**	1.000

* Significance < .05 ** Significance <.01

NOTE: 2.3 = Social Provisions Scale
4.5 = Network Support
6.7 = Uncertainty Reduction

Hypothesis 2 stated that the strength of the network at time 2 is greater than the strength of the network at time 1. The hypothesis was tested using the paired t-test for dependent groups, one-tailed test. There were two separate measures for strength of network. The measure created by the researcher asked subjects to list the important people in their lives. The subjects then rated each person they listed on a scale from 1 to 10, according to the amount of social support available from that person. These ratings were added across all the peopled listed, creating a single number to represent strength of the network. Using the summed lists of important people as a measure of strength of network resulted in no significant increase in strength of network from time 1 to time 2 (d.f. = 37; $t = -.76$; $p > .05$). The results are not surprising since this generic measure allowed for much more variability in the network than the Social Provisions Scale. For example, one subject only listed one person and rated the support as a 2 at time 1; while another subject listed seven people all of whom were rated as a 10. The standard deviations of network strength were greater at time 1 than time 2, which indicates more variability in network support. Both measures for network support showed increases in the means from time 1 to time 2. The treatment setting may have given subjects a more focused view of their support system.

However, the size of the standard deviations for network support at time 1 and Network Support at time 2 indicate that

there is much more variability in the strength of the network measure than there is in the Social Provisions Scale.

The other measure, the Social Provisions Scale, has been successfully used many times as a measure of network support. The scale tests for strength of network support by asking about attitudes toward self related to friends and family. The scale is scored by simply summing the answers to 10 individual items. Using the Social Provisions Scale as a measure of strength of networks there was a significant increase in strength of network from time 1 to time 2 (d.f. = 34; $t = -2.09$; $p < .05$). The differences between the mean scores were small ($T1\bar{x} = 29.43$; $T2\bar{x} = 30.74$). The measure for the Social Provisions Scale showed a modest increase in the mean scores and low variability. This measure clearly supported the hypothesis. The reliability of this scale in this research is higher that the results achieved by the original authors (Cutrona & Russell, 1987) on the Social Provisions Scale. They reported coefficient alphas ranging from .65 to .76 on several different studies. This research reports alphas of .71 at time 1 and .98 at time 2.

Hypothesis 3: The level of uncertainty reduction at time 2 is greater than at time 1. The hypothesis was tested using the paired t-test for dependent groups, one-tailed test. This hypothesis was clearly supported (d.f = 36; $t = -2.51$; $p < .05$) in the predicted direction. The average uncertainty reduction reported at time 1 was 20.86 and at time 2 was 22.72 showing

an increase in uncertainty reduction from time 1 to time 2. The mean change was only 1.86, with a consistent standard deviation of 3.91. As shown in Table 3, Cronbach's alpha for this scale was .47 at time 1 and .70 at time 2.

Hypothesis 4: Self-esteem is greater at time 2 than time 1. Since this measure was a Guttman Scale, the Wilcoxon test was used to test the hypothesis ($Z = -3.40$; $p < .005$). The Wilcoxon nonparametric test takes into account the magnitude of the difference between rankings of scores in two distributions. The test is used in preference to a t-test since the data for the self-esteem measure is ordinal and the Wilcoxon test is 95% as powerful as the t-test (Champion, 1981). The measure for self-esteem, where 0.00 equals high self-esteem and 6.00 equals low self-esteem, shows movement in the expected direction and low variability. Therefore, the change in the mean from time 1 ($\bar{x} = 2.8$) to time 2 ($\bar{x} = 2.0$) indicates higher self-esteem after treatment, confirming this hypothesis. The reliability score for this scale was .98 both at time 1 and time 2.

Hypothesis 5: Commitment to recovery at the end of treatment can be predicted from strength of network, average supportiveness of messages, change in self-esteem or uncertainty reduction.

One of the choices the researcher had to make was which set of scores to use for the final regression analyses. Choices included 1) looking only at time 1 measures for

strength of network, average supportiveness of messages, self-esteem and uncertainty reduction which would yield four independent variables; 2) looking only at time 2 measures for strength of network, average supportiveness of messages, self-esteem and uncertainty reduction which also would yield four independent variables; 3) looking at the change score measures for strength of network, average supportiveness of messages, self-esteem and uncertainty reduction which would yield four independent variables; or 4) using some combination of the variables listed in 1, 2, and 3. The change scores from time 1 to time 2 were not significant in this study related to commitment to recovery, and thus were not used in the final analysis. In addition, the support shown for hypotheses 2, 3, and 4 was significantly stronger at time 2 than at time 1 for Network Support, Uncertainty Reduction, and Self-Esteem. All possible combinations were examined before deciding to use both time 1 (T1) and time 2 (T2) scores for the primary regression analysis.

Several different measures were possible for the dependent variable, commitment to recovery. Those measures were 1) the patient's self-reported commitment to recovery at time; 2) the therapist's evaluation of each patient's commitment to recovery; 3) the change score between time 1 and time 2 in patient's self-reported commitment to recovery; and 5) an average of the patient's self-reported commitment to recovery at time 2 and the therapist's evaluation of each

patient's commitment to recovery divided by two. Since there was no strong correlation between the patient's self-reports and the therapist ratings, it did not seem appropriate to use the average of the two scores. Yet each measure correlated well to self-esteem and network support. So, I decided to use the two measures separately. Therefore, regression analyses were run separately with the patient's commitment to recovery at time 2 and the therapist's evaluation of each patient's commitment to recovery as the dependent variable.

A stepwise regression analysis was run with nine independent variables: strength of network (T1, T2), the Social Provisions Scale, self-esteem (T1, T2), uncertainty reduction (T1, T2), and average supportiveness of messages (T1 through T2). Only self-esteem at time 2 was a significant predictor of commitment to recovery whether measured by client's self-report or therapist rating. In both cases only a small amount of the variance (13%, 14%) was accounted for by self-esteem at time 2. Table 4 shows the regression equation statistics.

Although there possibly may be some relationships among the variables, the small sample size and the large amount of variability made relationships other than self-esteem difficult to detect.

Finally, all of the time 2 variables were entered stepwise into the multiple regression model with self-esteem at time 2 as the dependent variable and the Social Provisions

TABLE 4
Summary of Stepwise Regression Analysis for all Variables Predicting Commitment to Recovery (N=33)

Variables	B	SE B	Beta	p
For self-reported commitment time 2 Self-Esteem time 2 R^2 = .130	-3.82	1.75	-.36	.036
For therapist rated commitment Self-Esteem time 2 R^2 = .141	-3.44	1.54	-.37	.033

Scale, Network Support, Uncertainty Reduction, and Patient's Commitment to Recovery at time 2 as independent variables. Since self-esteem was the only predictor of commitment to recovery, there could be a process where other variables impact self-esteem. Indeed, the only variable to emerge as entering the regression equation was the Social Provisions Scale. One quarter of the variance (R^2 = .25; F = 10.53; p < .003) is accounted for by that variable. Table 5 shows the statistics for this regression equation.

Since regression analysis is a powerful tool used to examine relationships and only revealed one predictor, the decision was made to examine the data using other methods of data analysis, particularly using qualitative analysis.

TABLE 5
Summary of Stepwise Regression Analysis for Variable Predicting Commitment to Recovery (N=33)

Variables	B	SE B	Beta	p
For self-esteem at time 2 Social Provisions Scale at time 2 R^2 = .247	-.18	.06	-.50	.003

Descriptive Observations

During the course of treatment patients were asked to record one specific received message that they believed to be most supportive for that day on a daily log. Each patient rated the message on each of the four functions of support using a scale from 1 (not at all) to 5 (most of all). After exploring the alternatives, only those logs with a 5 for one function were used for analysis. These four functions were increased self-esteem (N=11), helped with problem solving (N=19), provided emotional support (N=41), and provided information or feedback (N=46). A fifth category was listed as other, but only three daily logs rated that category as a 5. In the blank space provided those three people listed "provided a spiritual answer."

The return on daily logs was disappointing. The research design called for collecting a total of between 400 and 600 memorable messages from 30 to 40 subjects. Each subject was given 22 logs. Only one patient completed every log form. Seven patients did not complete any logs, but did complete the post-test. The mean number of logs completed by each subject was nine. In fact, only 257 messages were collected from the subjects. One hundred seventeen were selected for qualitative observations because subjects rated those messages as a 5 (most of all) on one particular function. Many of the memorable messages listed by participants were 12-step program slogans such as "Live and let live," "Easy does it," and "One

day at a time," or some derivation of a slogan. For example, the slogan "First things first" was heard by one person as "I need to put me first" and by another person as "I need to take care of my addiction and everything else will fall into line." More often subjects recorded a sentence or two heard in passing, in group therapy, or at an AA meeting. It was difficult to quantify the messages and functions because there often was little or no obvious relationship between the actual message and the reported functions. However, some qualitative observations can be drawn regarding the rating of the memorable messages.

It is interesting to note that the function of providing information and feedback was cited most often (N = 46) as the function for supportive messages. This finding suggests that clients in early recovery are looking for answers that provide information and, thus, reduce uncertainty. Yet the actual messages given are not those that I would consider providing information and feedback. Some examples of messages cited in included: "We don't have to do it alone," "Regular shame is healthy; toxic shame is deadly," and "Feelings are not good or bad, it's what you do with them that matters."

Very few memorable messages (N = 11) were rated as high in increasing self-esteem, even though self-esteem was the only variable that was a significant predictor of commitment to recovery. Seven of the 11 messages that were listed as increasing self-esteem came from other clients in the

treatment center. "Remember where you came from so you won't go back there" and "We get self-acceptance through applying the 12-steps of recovery" are examples of messages heard from fellow clients that served to increase self-esteem.

However, 41 messages were ranked high on provided emotional support. Fifteen of those messages came from fellow clients and 15 of those messages came from counselors. The actual messages rated high for each category were very similar. For example, "You are an important person" was rated high in increasing self-esteem by one person while "Remember you are number one!" was listed as providing emotional support by another person. "You are a great guy" from a fellow client was cited by one person as esteem support and by another person as emotional support. This finding suggests that patients in early recovery may not be able to distinguish between self-esteem and emotional support in the messages they receive.

Many AA slogans were cited as messages for the function of problem solving (N = 19). "Let go and let God" and "It works if you work it" were each cited several times. People who have been in recovery for years have said that in early recovery the slogans often saved their lives (Anonymous, 1992, 1993). This study supports the problem solving ability of the slogans for subjects in early recovery. Some other examples of messages rated high for their problem solving functions were "Gratitude keeps you from feeling self pity," "When we

stop living in the here and now, our problems become unreasonably magnified," and "My head is like a bad neighborhood; every time I go up there alone, I get mugged." Twelve of these messages were heard in the first week in treatment and 13 of them came from counselors and older AA members.

Of the 117 messages used in this analysis, 74 messages came from counselors or older members in Alcoholic Anonymous or Narcotics Anonymous meetings. Thirty-two of those messages came from fellow clients and the rest were scattered among family and significant others. Problem solving, emotional support, and information/feedback were more likely to come from counselors or other recovering people. Self-esteem support was more often from fellow clients.

In general, subjects also gave very high overall helpfulness ratings to the functions of increasing self-esteem ($\bar{x} = 91.7$), provided emotional support ($\bar{x} = 90.7$), and provided information and feedback ($\bar{x} = 90.5$). The mean was significantly lower for the problem solving function ($\bar{x} = 78$). Of the 19 messages rated as high for this function 12 were heard in the first week in the treatment center. Whereas, the other three functions were more evenly distributed over the three week time frame during which the data were collected.

In summary, there was no correlation between network support at time 1 and perception of supportiveness of the messages received. There were significant differences between

pre-treatment and post-treatment scores in strength of network support, uncertainty reduction, and self-esteem. Finally, the results of this study indicate that the variable that is the strongest predictor of commitment to recovery is self-esteem. However, it is also clear that the strength of the network at time 2 as measured by the Social Provisions Scale impacts on Self-Esteem at time 2.

Chapter 4

DISCUSSION

This study was designed to examine how communication of social support influences commitment to recovery from addiction. Specifically, the research question was: How is social support related to commitment to recovery from addiction? Chapter three presented the results of the testing of five hypotheses related to the research question, culminating in multiple regression analysis to test the hypothesized model. This chapter will discuss several issues: (a) limitations of the study, (b) revision of the proposed model, (c) interpretation of the results, (d) implications for alcoholism treatment and communication research, and (e) directions for future research.

Limitations

This research was conducted with a limited number of subjects in two treatment centers. Since participation was voluntary, I was getting a sample of a subset of the larger population. In fact, when the patient count was running 17 to 20, I was only signing four to eight subjects on for the study. As discussed in chapter two, out of 128 people who fill out the pre-test, only 38 subjects completed the post-test. While the facilities were chosen specifically for their broader population bases, the results are limited to the lower number of subjects who were there during the time the data were being gathered. The fact that state funding was not

readily available in Pennsylvania from July to April as I was collecting data impacted the results. Most of the patients in treatment were people who could afford to pay their bills. There were no charity cases. Therefore, the sample from this group of people probably reflects a higher socio-economic level than would be found otherwise.

A measurement issue may also have limited the results of this study. The summed measure of Network Support used was not a good measure of social support for several reasons. First of all, the range of responses was too open ended. Second, instructions on the questionnaire were too vague. Third, there was no way to measure change in the kinds of people listed on the pre-test and the post-test. If I could redesign that measure I would narrow the range of scores by averaging the numbers assigned to each person instead of simply summing them. In addition, I would be more specific in my instructions to the subjects. Finally, I would include a method to distinguish healthy supporters from bartenders and drinking buddies.

Figure 1 illustrates the model originally conceptualized in chapter 1. Based on the results of this study, I would change the model for predicting commitment to recovery to the one shown in figure 2. Clearly from the regression analysis, self-esteem following treatment is the only real predictor of commitment to recovery in the early stages of recovery. While I still believe that network support and uncertainty reduction

impact upon commitment to recovery, those results were not clearly seen in the final hypothesis for this study. Yet both network support and uncertainty reduction were stronger at the end of the recovery period examined as seen in the support for hypotheses two and three. It may be that the impact on commitment to recovery of these two variables is more difficult to detect in early recovery.

Figure 1: Predictor Model Reprint

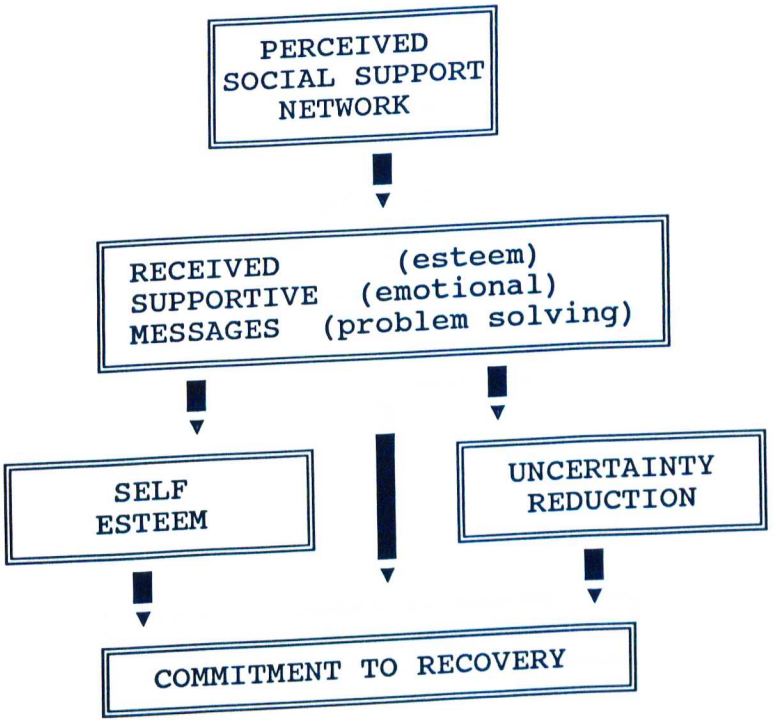
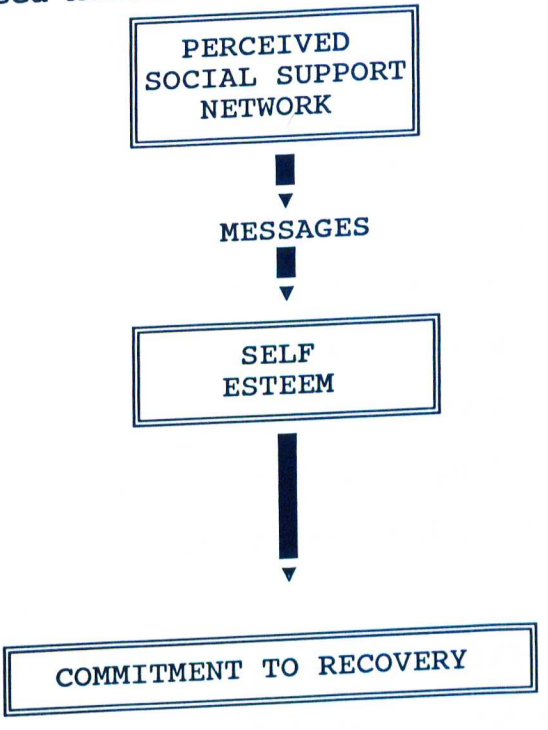


Figure 2 - Revised Model



Uncertainty reduction was not a predictor of commitment to recovery. With normal people there are many different ways in which messages can be perceived and received. With people in addiction it is even more likely that messages will be ignored, distorted, or heard differently due to the effects of alcohol or drugs on the brain and the central nervous system (Milam & Ketcham, 1981; Miller, 1981). People in the first ninety days of recovery are in the process of rebuilding their lives at the same time their entire system is adjusting to being without any form of drugs (Anonymous, 1992, 1993; Billings & Moos, 1983; Miller, 1989). Therefore, it is possible and even probable that many helpful messages that could reduce uncertainty (help solve problems and provide information and feedback) are ignored or distorted, or heard differently than intended. In fact, many of the subjects for this study told me they had a difficult time remembering messages and even more difficulty finding the time to write them down and rate them.

Network Support also was not a significant predictor of commitment to recovery. There is no way to determine the direction and strength of support a person will have following treatment. The staff of a treatment center may do all the right things to assure that network support following treatment is in place, but they have no control over the outcome. For example, when the old support system stays in place, drinking behaviors can be reinforced by old friends. It

stands to reason that old drinking buddies would indeed use messages to reduce uncertainty about recovery that lead to picking up a drink or a drug rather than reinforcing recovery behaviors. If the subject elects to change support systems and attend AA or NA meetings on a regular basis, then messages received and perceived may indeed result in stronger commitment to recovery and uncertainty reduction messages would reinforce recovery behaviors.

In addition, many messages are also received that do not lead directly to commitment to recovery. Thus, the revised model shows messages spreading outward from the model with little or no direct relationship on commitment to recovery and/or reinforcing recovery behaviors.

In this chapter, I returned first to the hypothesized model to launch the discussion section. Next, the results will be interpreted with some additional qualitative observations drawn. Then, the results will be integrated into a larger picture with implications for treatment programs and implications for communication, and finally directions for future research will be discussed.

INTERPRETATION OF THE RESULTS

This section will speculate on the results for each hypothesis, and attempt to relate each section to the revised model presented in this chapter.

The specific messages received by subjects were most often variations of AA/NA slogans or short catch phrases that

could be remembered easily. Subjects, overall, received more helpful messages from counselors and older members of Alcoholics Anonymous or Narcotics Anonymous. This finding suggests that it is important that inpatient clients spend quality time with counselors and people in recovery one-on-one in addition to attending 12-step meetings where older recovering people share information and give feedback.

Network Support

Even though the first measure of network support devised by the researcher did not behave well statistically and showed wide variability, it provided some interesting qualitative information. Most people in this study still had in-tact support systems when they entered treatment. Looking at individual cases, only three people listed network support values under 10 points on the pre-test (T1); whereas, eight people listed network support values over 50 points. At time 2 the lowest point score was 10 points and that was from someone who had only listed 2 points from one person on the pre-test. The highest individual score was 84, listing 11 different people. There were 10 cases giving network support values over 50 points. It is interesting to note that while the majority of cases showed improvement in their overall point count from time 1 to time 2, thirteen subjects had lower scores at time 2. In examining each case more closely, I could see that, overall, subjects listed more people with lower rating scores at time 2. I can speculate that some of

those people may have realized they had an inflated idea of quality of network support when they first entered treatment. In fact, several people listed bartenders and drinking buddies on the pre-test while other subjects recorded friends in treatment, counselors and AA members on the post-test.

People in the early stages of recovery may well have a distorted view of themselves and their friends. Through the alcoholic haze they may perceive themselves as having fewer or more friends than they really do. By the time they have completed treatment they may be more realistic. Reviewing the qualitative comments made by subjects on the post-test supported this idea. Comments included: "I thought my favorite bartender was my best friend, but I was only fooling myself," "The people here and in the AA rooms are much better friends than I used to have," "I no longer believe that my drinking buddies were really my friends," and "I need to change people, places and things in my life when I get home." After intensive inpatient treatment subjects' perceptions of network support could indeed become more realistic and more positive. Changes in the kinds of people reported as supportive from time 1 to time 2 may account for the wider variability at time 1 (s.d. = 17.08) than at time 2 (s.d. = 15.50) for the first network support measure.

The Social Provisions Scale measured significant improvement in strength of network from time 1 to time 2. The Social Provisions Scale also impacted strongly on the measure

of self-esteem in the various regression analyses reported in chapter three.

As suggested by Sarason, Sarason, and Pierce (1994), and previously reported, the only aspect of social support that is continually related to health outcomes is perceived support. There is little evidence that actual received support is related to health outcomes. The Social Provisions Scale (SPS) is generally accepted as an excellent measure for assessing perceived support (Cutrona, 1986). Perceived social support, as measured by the SPS, supports the stress-buffering model of social support. In other words, the more support a person perceives to be available to him or her, the more likely that person is able to reduce stress and embrace recovery.

Uncertainty Reduction

Uncertainty was clearly reduced in this study. Looking at the daily logs of individuals, the majority of people (N=23) moved significantly in the predicted direction with higher scores at time 2. Four subjects maintained exactly the same score on the post-test as they had on the pre-test and 11 moved slightly in the opposite direction.

Uncertainty reduction theory relates to both process and outcome of communication (Berger, 1986). We can take this a step further and reframe this statement by changing the word <u>communication</u> to <u>recovery</u>. In other words, uncertainty reduction relates to both getting sober and staying sober. Thus, we can see how reducing uncertainty, relates to both the

process (getting sober) and the outcome (staying sober) in recovery. As reported in chapter three providing information and feedback was the function most frequently given the highest rating (N = 46) on the daily logs as a strong function of supportive messages. Reducing uncertainty helps people develop a sense of "perceived control over stressful circumstances" (Albrecht & Adelman, 1987, 24). It reframes cognitive processes to improve skill levels, gives tangible assistance, and emotional support. Thus, it could be qualitatively stated that all of the 120 messages analyzed from the daily logs served to reduce uncertainty for the subjects even though the variable was not a empirical predictor of commitment to recovery.

Self-Esteem

Self-esteem is clearly the most important variable in the study. The Wilcoxan Test showed increases in self-esteem from time 1 to time 2. There is reason to believe that recovering persons with higher self-esteem are less likely to relapse. The strongest evidence comes from studies of residents in therapeutic communities, in cases where information was collected over a relatively long period (Skager & Kerst 1989).

Even though self-esteem showed significant correlations with the Social Provisions Scale both at time 1 and time 2 and was the only significant predictor in the regression analysis, it was not mentioned often by subjects as a function of messages heard (received).

As mentioned in chapter three, there seemed to be some confusion in subjects' minds between esteem support and emotional support. This factor suggests that patients in early recovery may not understand exactly what self-esteem is; perhaps, because they have not been able to find it through the alcohol or drug-induced haze. In other words, their perception of self does not include the label, but they are able to understand the label emotional support. The buffering hypothesis relates where the assumption is made that the stressor lessens feelings of belonging or being loved. These emotional losses often result in pathological effects (Cohen & McKay 1984). Thus, emotional support should provide "a reserve of these resources and thus protect one (or help one recover) from the stressor-induced loss" (p. 259).

Thoits (1983, 1984) integrated the coping literature, the social support literature and the psychological distress literature to set forth emotions theory. In fact, she concluded that emotion-management techniques can transform negative feeling states (1984, p. 235). Emotional support is defined as "words or deeds that are intended to alter the damaged self-perceptions of an individual facing stressors" (Thoits, 1983, p. 65). Whereas, self-esteem was conceptually defined for this study as the idea and feeling that people have that they are capable, significant, successful and worthy, people in treatment are given emotion-management techniques to improve their self-esteem. It may take them

some time to realize the connection between emotions and self-esteem. This finding relates to what the recovering alcoholics I interviewed (Anonymous, 1992, 1993) called "getting the ego in check," "finding a realistic view of self," or simply "finding my self-esteem again."

Yet, the results of this study suggest that self-esteem is much higher than I would have predicted by the time the client finishes the treatment cycle. In fact, it was higher than I would have predicted as they entered treatment.

Implications for Alcoholism Treatment

The chemically dependent person in the early days of recovery needs to learn how to both perceive and receive social support messages. Living and coping as a recovering person is vastly different from living and coping as a drug addicted person. This population deals with both the developmental product or process - recovery, and the influence of significant others, therapists, and other newly recovering members of the treatment group. This study should help to further define assessment tools and observational messages for counseling and the overall approach to treatment. The knowledge that patients do not readily identify improvement in self-esteem from messages heard could be important information for counselors who work with newly recovering patients. We can add this knowledge to the understanding that the patients do show significant improvements in self-esteem, but that they see those messages as emotional support in the early days of

treatment. Treatment center workers could change approaches to working with self-esteem and emotional support messages.

While uncertainty is reduced through information and feedback resulting from treatment, it is important to note that the majority of messages recorded as helpful on a daily basis came from counselors and recovering people in 12-step meetings inside or outside the treatment center. This finding implies that continued contact with people in recovery is important to successful treatment.

A random sampling of comments from the post-test in response to the request to explain motivation and commitment to recovery as they leave treatment provides some insights into what the patients believe to be important to commitment to recovery. The five cases cited, chosen at random using a computer program, are typical of the comments given. In addition to the case number the sex and percentage of commitment to recovery is recorded inside the parentheses.

Case 9 (male, 100%) states "I am extremely committed to my recovery at this point in time...With the support of my contact person, AA / NA meetings, my most significant other, and the tools I received here in treatment, I should make it successfully."

Case 13 (female, 75%) "After five weeks in this program, I feel I have my self-esteem back, and my over-all well being has come back to me. It feels so good to awaken each day with a clear head and

start the first day of the rest of my life...I am committing myself to turn my will over to God each morning, work the steps, attend AA meetings daily, and stay in touch with my Higher Power."

Case 22 (male, 90%) "My life depends on my recovery. I have dedicated my whole existence on (sic) recovery. I will receive support from my family and my peers in the 12-step programs. I feel that the hard work begins when I leave treatment."

Case 28 (male, 80%) "Today I know that I am somebody special and I do have what it takes to lead a happy normal life. I still have to open up and express myself better."

Case 31 (female, 100%) "I am no longer ashamed of myself, my past, or my recovery. The meetings and fellowship with others in recovery is (sic) my daily medication for recovery and prayer and meditation is (sic) my strength...I feel my commitment to recovery is based on the first step. No matter what, I cannot drink or use drugs."

No statistical differences can be found as to why some people are able to maintain sobriety and some people are not (Milam & Ketcham, 1981; Miller, 1989). Simply as an interesting fact, I called the treatment centers to determine a six month check for the five random cases. Follow up inquiries to the treatment centers indicated that cases 9, 13, and 31 were able

to maintain sobriety for six months. Case 22 began using drugs again immediately following release from treatment. Case 28 also relapsed soon after leaving treatment. Although nothing is proven statistically by this follow up, it is interesting to note that the three people who have maintained recovery wrote longer responses to this question on the questionnaire and also wrote many more daily logs than the two cases who relapsed. Their responses appeared to be more carefully thought out. Perhaps, they were more willing to communicate about their commitment to recovery.

Finally, successful treatment leading to real commitment to recovery is likely to take longer than 90 days. Treatment centers need to focus on developing personality structures that maintain self-esteem rather than impact on self-esteem directly. According to Skager & Kerst, (1989, p. 286).

> Pumping up a flat tire is an inappropriate analogy for recovery from addiction. Rather, an internalized capability to generate self-esteem gas needs to be developed. Recovery is no magic trick. It requires hard work in the service of significant personal development.

Implications for Communication

This chapter has looked at the results of this research project both quantitatively and qualitatively. What remains to be done is to interpret these results related to communication. Very recently Goldsmith, Burleson, Albrecht,

and Sarason, (Burleson, Albrecht, & Sarason, 1994, p. xviii) suggested that the communication approach to social support is

> studying the <u>messages</u> through which people both seek and express support; studying the <u>interactions</u> in which supportive messages are produced and interpreted; and studying the <u>relationships</u> that are created by and contextualized through the supportive interactions in which people engage.

For a variety of reasons discussed previously this research dealt less with the interpersonal transactions of messages, interactions, and relationships than with the intrapersonal perception of supportive networks, messages, and self-esteem.

Although I was disappointed in the lack of clear cut results for received support due to the low return from patients on the daily logs, this result is consistent with previous findings. Measures of perceived support have often yielded "the strongest positive association between support scores and health outcomes" (Sarason, Sarason & Pierce, 1994 p. 95).

I still believe that network support and uncertainty reduction have a strong impact upon the desire to change, commitment to recovery in this instance, but it is difficult to detect early in the process. In fact, there are many different directions in which messages can be received. For

example, in recovery from addiction, when the old support system stays in place, old behaviors (in this case drinking) are reinforced. It stands to reason that old drinking buddies would indeed send messages to reduce uncertainty about recovering behaviors that lead to picking up a drink. Messages from people further along in the recovery process would reinforce recovery behaviors. Once out of the treatment setting if the subject elects to change support systems and continue to attend AA or NA meetings on a regular basis, then messages received and perceived may indeed result in stronger commitment to recovery and uncertainty reduction messages would reinforce recovery behaviors. In addition, many messages also are received that do not lead directly to commitment to recovery. It may be important to monitor or somehow impact the network that provides supportive communication after the completion of treatment. Uncertainty reduction reframes cognitive processes to improve skill levels, gives tangible assistance, and emotional support.

The impact of self-esteem on commitment to change has been examined many times in almost every field of research. However, the latest research views self-esteem as a part of the self concept. Summaries of the research in self-esteem (Mecca, Smelser, & Vasconcellos, 1989; Skager & Kerst 1989; Marcus & Wurf 1987;) suggest that high self concept leads to change. Marcus and Wurf (1987) see self-esteem as a piece of self-concept. They define self-concept as a "dynamic

interpretive structure" which mediates both intrapersonal processes such as information processing, affect, and motivation and interpersonal processes such as choice of social partner and situation, interaction strategy, and reaction to evaluation from others" (p. 251). The results of this study imply that developing self-esteem leading to a more positive self-concept is a very important part of developing a commitment to change. Professionals training people for change need to be aware that their clients may not initially understand the importance of self-esteem, and may, as the subjects in this study did, tend to label esteem support as emotional support.

Directions for Future Research

This research was conducted with a small number of patients in two treatment centers. The results are limited to those populations. However, I do believe that further study with a broader based population and several hundred subjects would confirm these results and, perhaps, go further to confirm, at least, network support as a predictor of commitment to recovery.

The time is right to begin building a cadre of research related specifically to perception and reception of messages of social support in the therapeutic situation both for communication scholars and treatment center researchers. This study will hopefully become a piece of a growing body of literature on perception of supportive messages.

Future message research related to behavior change during specific stressful situations, such as treatment for addiction, will provide counselors with specific understanding useful for future interventions. In addition, further message research will provide communication scholars with concrete information about how messages are perceived and received as supportive communication by people in specific stressful settings.

A major problem encountered in this study related to patient confidentiality. The treatment centers were very concerned that it be honored. Some patients in early recovery tended to be almost paranoid about who will find out that they are in treatment. Others were willing to talk very freely about their addiction and their supportive others. Confidentiality is a primary issue in recovery research and it must be honored. However, it is also important to interview significant others to hear their viewpoint.

More research on specific messages is needed in the communication field to determine how both participants see the communication as supportive. Future research should look more closely at enacted as well as received support and, perhaps, view both sides of the communication transaction. Perhaps, audio tapes could be used to tape discussions with both the patient and their most significant other. Some people would not be willing to participate, but some very valuable information could be gathered from those who would be willing.

Finally, more communication scholars should conduct research related to the communication of social support in the field of addictions to bring new paradigms to that body of research. At the beginning of this doctoral program, I attended the Rutgers School of Alcohol Studies and I was urged by many of the instructors there to bring my communications knowledge to the addictions field as quickly as possible. Mark Keller (personal conversation, June, 1983), who wrote one of the definitive definitions of alcoholism, told me "Your research is needed in the addictions field; perhaps, more than any other scholarship, because we do not know how to really communicate with the newly recovering person."

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Appendix A
PRE-TEST

This questionnaire is designed to look at the network of family, friends, and associates in your life RIGHT NOW. Please answer the questions as honestly as possible.

1. FIRST NAME _____ 2. Social Security Number_____

3. Hometown and state _____

4. Days since your last drink or drug_____ 5. Today's Date_____

6. Please list the most important people in your life at this moment in time, especially those you consider to be a major part of your social network. Identify these people by first name and write an identifying label (ex. Jean, wife; Joe, best friend; John, work friend; Beth, drinking buddy; Jack, favorite bartender). On a scale of 1-10, decide how available each person has been to you in the past few weeks. If the person's support has not been available, use 1. If the person has been extremely available, use 9 or 10. (Ex. Jean, wife, 5 would show an average amount of support).

NAME	RELATIONSHIP	EXTENT OF SUPPORT (choose # 1 - 10)

7. Why did you decide to come to treatment at this time? Was there a specific event or communicated message that prompted you to seek treatment now?

8. Give the name of a person or persons who helped you to decide to come into treatment? Please state relationship to you.

9. Can you remember any specific messages given to you that encouraged you to come into treatment? If so, please write them down here.

Think about the idea of getting clean and sober. Now think about the next few days and weeks you will be spending in treatment. Place an X in the space that best indicates how you feel about the time you will be spending here and the process of recovery at this moment. An X on the middle line means that neither choice fits.

10. Clear ___:___:___:___:___:___:___ Not clear

11. Simple ___:___:___:___:___:___:___ Complex

12. Predictable ___:___:___:___:___:___:___ Unpredictable

13. Informative ___:___:___:___:___:___:___ Not informative

The next set of questions asks you to **strongly agree (SA), agree (A), disagree (D), or strongly disagree (SD).** Please circle the responses that fit for you, right here, right now.

14.	On the whole I am satisfied with myself.	SA	A	D	SD
15.	At times I think I am no good at all.	SA	A	D	SD
16.	I feel I have a number of good qualities.	SA	A	D	SD
17.	I am able to do things as well as most people.	SA	A	D	SD
18.	I feel I do not have much to be proud of.	SA	A	D	SD
19.	I certainly feel useless at times.	SA	A	D	SD
20.	I feel that I am a person of worth, at least on an equal plane with others.	SA	A	D	SD
21.	I wish I could have more respect for myself.	SA	A	D	SD
22.	All in all, I am inclines to feel that I am a failure.	SA	A	D	SD
23.	I take a positive attitude toward myself.	SA	A	D	SD

24. ☐ Using the numbers 1 (lowest) to 100 (best) where would you place your commitment to recovery at this moment? EXPLAIN

In answering the next set of questions, please think about your current relationships with the people closest to you, including your friends, family and work associates. If you feel a question accurately describes your relationships you would say "YES." If the question is correct for some relationships, but not others, you would say "SOMETIMES." If the question does not describe your relationships, you would say "NO." If you cannot decide whether the question describes your relationships with your friends, you may write "NOT SURE" in the space.

1) NO
2) SOMETIMES
3) YES

1. Are there people you can depend on to help you if you really need them? _____

2. Do you feel you could <u>not</u> turn to these people for guidance in times of stress? _____

3. Are there friends or family members who enjoy the same social activities you do? _____

4. Do you feel personally responsible for the well-being of your friends and/or family? _____

5. Do you feel your friends or family <u>do not</u> respect your skills and abilities? _____

6. If something went wrong, do you feel that <u>no one</u> would come to your assistance? _____

7. Do your relationships provide you with a sense of emotional security and well-being? _____

8. Do you feel your competence and skill are recognized by your friends and family? _____

9. Do you feel <u>none</u> of your friends or family share your interests and concerns? _____

10. Do you feel <u>none</u> of your friends or family really rely on you for their well-being? _____

11. Is there a trustworthy person you can turn to for advice if you were having a problem? _____

12. Do you feel you <u>lack</u> emotional closeness with your friends and family? _____

Appendix B
Daily Communication Log

INSTRUCTIONS: THINK BACK OVER YOUR COMMUNICATION TODAY. WERE THERE SPECIFIC MESSAGES THAT YOU REMEMBER AS **HELPFUL AND SUPPORTIVE** TO YOUR DESIRE TO BE CLEAN AND SOBER? AT LEAST ONE MEMORABLE MESSAGE EACH DAY SHOULD BE USED TO ANSWER THE QUESTIONS. PLEASE, DO NOT TALK ABOUT YOUR ANSWERS WITH ANYONE UNTIL AFTER YOU HAVE COMPLETED THE FORM.

1. Your First Name _____

2. Date _____

3. Social Security Number _____

4. Male Female (circle one)

5. RECORD A SPECIFIC MEMORABLE MESSAGE AS YOU HEARD IT. Please give the exact message using quote marks (") if at all possible.

6. Place a NUMBER in the space that best indicates how you would describe the message stated above. 1 = not at all; 2 = somewhat; 3 = a lot; 4 = very much; 5 = most of all).

_____ increased my self-esteem

_____ helped solve a problem

_____ provided emotional support

_____ provided information/ feedback

_____ other (explain briefly)

7. Give Conversational Partner's First Name_____

8. Relationship (circle one) significant other (spouse/mate) parent friend counselor fellow client Other _____

9. What type of communication: (circle one) one-on-one telephone group letter Other _____

10. ☐ Choose a number from 1 (lowest) to 100 (highest) to indicate the level of support the message provided to you. Place that number in the box.

11. ☐ Using the numbers 1 (lowest) to 100 (best) where would you place your commitment to recovery at this moment? Place that number in the box.

Appendix C
POST-TEST

This questionnaire is designed to look at the network of family, friends, and associates in your life RIGHT NOW. Please answer the questions as honestly as possible.

1. FIRST NAME _____ 2. Social Security Number _____

3. Hometown and state _____ 4. Today's date _____

5. Dry date_____

6. Please list the most important people you consider to be a major part of your support network today. Identify these people by first name and write an identifying label (ex. Jean, wife; Joe, best friend; John, boyfriend; Beth, roommate at Treatment; Joanne, counselor at Treatment). On a scale of 1 -10, decide how available each person has been to you while you have been in treatment. If the person's support has not been available, use 1. If the person has been extremely available, use 9 or 10. (ex. Jean, wife, 5 would show an average amount of support).

NAME	RELATIONSHIP	EXTENT OF SUPPORT choose # 1 - 10

7. Has this list changed for you while you have been in treatment? Explain how and why.

8. Think back over your time in treatment. Think of specific messages that you heard that were THE MOST HELPFUL to you in increasing your desire to stay clean and sober? Please list UP TO FIVE of those messages from the time you entered treatment two and give the source, if you can remember.

9. Which kinds of messages were the most helpful to you overall? Place an X in the **ONE** space that best indicates how you would describe the messages that were most helpful. **It is important that you check only one.**

____ increased my self-esteem

____ helped solve a problem

____ provided emotional support

____ provided information/ feedback

_____ other (explain briefly)

Think about the idea of getting clean and sober. Now think about the time you have been in treatment. Place an X in the space that best indicates how you feel right now about the idea of staying clean and sober. An X on the middle line means that neither choice fits.

10. Clear ___:___:___:___:___:___:___ Not clear

11. Simple ___:___:___:___:___:___:___ Complex

12. Predictable ___:___:___:___:___:___:___ Unpredictable

13. Informative ___:___:___:___:___:___:___ Not informative

The next set of questions asks you to **strongly agree (SA), agree (A), disagree (D), or strongly disagree (SD)**. Please circle the responses that fit for you, right here, right now.

14.	On the whole I am satisfied with myself.	SA	A	D	SD
15.	At times I think I am no good at all.	SA	A	D	SD
16.	I feel I have a number of good qualities.	SA	A	D	SD
17.	I am able to do things as well as most people.	SA	A	D	SD
18.	I feel I do not have much to be proud of.	SA	A	D	SD
19.	I certainly feel useless at times.	SA	A	D	SD
20.	I feel that I am a person of worth, at least on an equal plane with others.	SA	A	D	SD
21.	I wish I could have more respect for myself.	SA	A	D	SD
22.	All in all, I am inclines to feel that I am a failure.	SA	A	D	SD
23.	I take a positive attitude toward myself.	SA	A	D	SD

24. ☐ Using the numbers 1 (lowest) to 100 (best) where would you place your commitment to recovery at this moment? EXPLAIN

25. Write a paragraph explaining your motivation and commitment for recovery as you leave treatment. Where and from whom do you expect to get the most helpful support for remaining clean and sober?

In answering the next set of questions, please think about your current relationships with the people closest to you, including your friends, family and work associates. If you feel a question accurately describes your relationships you would say "YES." If the question is correct for some relationships, but not others, you would say "SOMETIMES." If the question does not describe your relationships, you would say "NO." If you cannot decide whether the question describes your relationships with your friends, you may write "NOT SURE" in the space.

1) NO
2) SOMETIMES
3) YES

1. Are there people you can depend on to help you if you really need them? _____

2. Do you feel you could <u>not</u> turn to these people for guidance in times of stress? _____

3. Are there friends or family members who enjoy the same social activities you do? _____

4. Do you feel personally responsible for the well-being of your friends and/or family? _____

5. Do you feel your friends or family <u>do not</u> respect your skills and abilities? _____

6. If something went wrong, do you feel that <u>no one</u> would come to your assistance? _____

7. Do your relationships provide you with a sense of emotional security and well-being? _____

8. Do you feel your competence and skill are recognized by your friends and family? _____

9. Do you feel <u>none</u> of your friends or family share your interests and concerns? _____

10. Do you feel <u>none</u> of your friends or family really rely on you for their well-being? _____

11. Is there a trustworthy person you can turn to for advice if you were having a problem? _____

12. Do you feel you <u>lack</u> emotional closeness with your friends and family? _____