AN ECOLOGICAL ASSESSMENT OF THE EFFICACY OF INDIVIDUAL AND COUPLES TREATMENT FORMATS OF EXPERIENTIAL SYSTEMIC THERAPY FOR ALCOHOL DEPENDENCY

by

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ABSTRACT

This study investigates the differential treatment efficacy of Experiential Systemic Therapy (ExST) with a comparison treatment called Supported Feedback Therapy (SFT) as it is applied to the problem of alcohol dependency. The inquiry also compares the treatment effectiveness of ExST when offered to the individual alcoholic (ExST-I) and when provided in couples therapy conjoint treatment (ExST-C).

An ecological approach to assessment was developed for the investigation. Self-report questionnaires tapping an array of areas including indices of alcohol use, intrapersonal functioning, couples adjustment, and family characteristics were employed to measure treatment effects from the perspectives of father, mother, and eldest child. Participating families met inclusion criteria including an alcoholic dependent father and a non-alcohol abusing mother in a state of marital distress residing in an intact family situation with at least one child living at home.

One hundred and fourteen families were randomly assigned to participating therapists and one of three treatment conditions including ExST-I, ExST-C, or SFT. Therapy was conducted at two out-patient clinics, one located in an urban setting and the other operating in a rural context. Data were collected from all participating families before and after treatment. Data were also gathered at a three month follow-up from participants in the ExST-I and ExST-C treatment conditions.

The results of the mixed model multivariate analyses indicated that there were no significant differences between ExST and SFT evident at post-treatment; however, both treatments were found to have promoted highly significant improvements on measures of drinking behavior, intrapersonal symptomology, marital adjustment and family satisfaction. When ExST-I and ExST-C were compared, the results revealed no significant differences between the treatment formats although both parents reported highly significant post-treatment changes on all instruments. Additionally, the significant changes associated with
ExST-I and ExST-C which were reported by both parents at post-treatment were found to be equally durable at the end of a three month follow-up. The results of the analyses based on the eldest child's perspective showed that the assessments of family satisfaction were unaffected by the treatment conditions and remained consistent across all measurement occasions.

Within system analyses which provided detailed examination of the magnitude of changes reported by both parents at post-treatment were performed. The within system results based on measures probing the assessment domains of alcohol, intrapersonal, couple and family from the father and mother perspectives, revealed that the improvements achieved by the treatments were far reaching and touched a wide array of areas in statistically significant and clinically relevant fashions.
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CHAPTER 1: INTRODUCTION

Context of the Problem

The images of burnt out souls living on skid-row are haunting reminders of the results of long term heavy alcohol dependency. With these people relegated to trash bins and dark corners, it is all too easy to dismiss them as fringe members of the population and marginalize the problem of alcohol dependency at the same time. Yet the territory of alcohol problems extends well beyond skid-row. In fact, estimates suggest that only 5% of the people struggling with serious alcohol dependency sink to the isolation of the streets (Steinglass, Bennett, Wolin, & Reiss, 1987). The remainder continue to live in homes in some form of family unit. Consequently, for every individual with an alcohol problem, there are many others whose lives are directly affected by the drinking behaviour and who would benefit from the amelioration of the drinking problem.

The relationship between alcohol dependency and the interpersonal contexts in which the drinking behaviour is embedded is of considerable interest to theorists, researchers and clinicians alike. Indeed, many see the connection between the two to be so interwoven that terms such as "Alcoholic Marriage" and "Alcoholic Family" have become popular (e.g., Bradshaw, 1988; Steinglass et al., 1987; Wegscheider, 1981). These terms are meant to denote networks of relationship in which patterns of abusive drinking are so integrated into the structures of the interpersonal contexts, that they become the dominant central organizing features of the relational nets. (Lawson, Peterson, Lawson, 1983; Steinglass, 1980; Steinglass et al., 1987).

Early systemic models of alcoholism view the association between problem drinking and relational fields to be interactive, reciprocal, and homeostatic (Finney, Moos, Cronkite, & Gamble, 1983). Steinglass (1981) articulated this position with regards to the stabilizing
influence or "adaptive consequences" of continued alcohol use to a family system's balance when he wrote that:

...in some families, equilibrium is restored by increasing interactional distance (the drinker goes off to drink in the basement), or diminished physical contact (the non alcoholic spouse refuses to have sex with someone who is drunk), or reducing tension in the family (family members' usual patterns of behavior are less tension provoking than unique patterns); whereas in other families, alcohol might be associated with closer interactional distance (the non alcoholic makes contact by fighting after the alcoholic spouse has been drinking), disinhibition (the use of alcohol permits ritualized sexual behavior), or maintaining distance from the social environment (the alcoholic fights with neighbors when drunk). (p. 301)

From this perspective, every part of a system is so related to its fellow parts that a change in one part implies a change in all and in the entire system. The family is seen as a network of relationships that does not behave as a simple composite of independent elements but rather coherently, as an inseparable whole (Watzlawick, Beavin, & Jackson, 1961). Consequently, first-order cybernetic models postulate that it is unwise and perhaps dangerous to attempt to change aspects of a system without due consideration being given to the meaning such changes might have for both the sub-system members and the system as a whole (Auerswald, 1985; Keeney, 1983).

Applied to the treatment of alcoholism, the first-order systemic models challenged the conventional notion that the "problem" resided in the individual alcoholic. These treatment approaches asserted that the social contexts in which behaviors are embedded were intrinsically connected to problem drinking. Consequently, a change in an alcoholic's drinking pattern necessarily implied a change in the dynamics and the quality of the relational context. In addition, a corollary of this perspective hypothesized that contextual systems will become unsettled when an individual member attempts to change some important behavior. Importantly, this position maintained that marital or family systems may struggle against improvements in an alcoholic's consumption pattern in an effort to preserve the family system's stability and identity (Jacobson, Munroe, & Schmaling, 1989;
Steinglass et al., 1987; Usher, Jay, & Glass, 1982). As a result, family system models of treatment for alcoholism which were grounded in first-order cybernetic thought, focused attention on the families' interactive process and addressed changes in the family context as a way to assist the recovery process (Davis, 1987; Kaufman & Kaufman, 1979; Kaufman & Pattison, 1981; Lawson, Peterson, & Lawson, 1983).

The alcoholism literature has had a long history of seemingly unbridled speculation about the role of the non-drinking spouse and the family in both the development and persistence of alcohol dependency. Much of this early work portrayed the social contexts of marriage and family as negative influences in an alcoholic's life and as problematic obstacles which must be overcome (Bailey, 1961; Edwards, Harvey, & Whitehead, 1973; Paolino & McCrady, 1977; Steiner, 1969). A troubling example in this regard was provided by Whalen (1953) in which the author concerns himself with the unconscious motivations which cause a woman to marry an alcoholic man. In this article, four pejorative categories were offered including "Suffering Susan"; "Controlling Catherine"; "Wavering Winifred" and "Punitive Polly," all of whom were thought to play a causal role in the alcoholics' suffering.

The negative view of the families and, in particular, the wives of alcoholics slowly gave way to a more empathic and complex understanding of the connection between context and problem. The introduction of family systems theories to the field of alcoholism occurred in the late 1960's and early 1970's. Spurred on by the "adaptive consequences" model (Davis, Berenson, Steinglass, & Davis, 1974), considerable effort was made to explore the ways in which alcoholism came to be gradually incorporated into family life over time. Findings from family interaction research (Billings, Kessler, & Gomberg, 1979; Frankenstein, Hay, & Nathan, 1985; Hersen, Miller, & Eisler, 1973) supported the notion that families with an alcoholic member are, as Steinglass et al. (1987) noted:
highly complex behavioral systems with remarkable tolerance for stress as well as occasional bursts of adaptive behavioral inventiveness that provoke wonder and admiration in observers. (p. 8)

The development of treatment approaches to alcoholism based on a family perspective lag behind theorizing about the problem of alcohol dependency (Davis, 1987; Kaufman & Pattison 1981). While elegant first-order systemic hypothesizing (e.g., Bateson, 1979) about alcoholics proceeded and gained empirical support from some research efforts (e.g., Jacob, Dunn, & Leonard, 1983), family treatment models designed specifically for alcoholism were slower to emerge. However, over time there was an impressive generation of family treatment models focused on alcohol dependency problems (Davis, 1987; Gaeic, 1986; Kaufman & Kaufman, 1979; Lawson et al., 1983; Steinglass et al., 1987; Treadway, 1989).

The relational formulations of first-order cybernetic theory held a measure of appeal to practitioners in the field and consequently gained wide acceptance. Indeed, it is now commonly assumed that therapeutic efforts with alcoholics should include treating significant people in the alcoholic’s life (Whittingham, 1987). Nonetheless, a lack of widespread availability of marital and family therapy in treatment facilities has been documented (Camacho-Salinas, O’Farrell, Jones, & Cutter, 1984; Regan, Connors, O’Farrell, & Jones, 1985), and a dearth of efficacy studies testing the clinical implementation of these first-order family systems models has been highlighted (McCrady, 1989; O’Farrell, 1992).

Research probing the efficacy of the first-order systemic treatment approaches to alcoholism that were articulated has been sadly lacking. None of the systemic therapy approaches detailed by Davis (1987), Kaufman and Kaufman (1979), Lawson et al. (1983), Steinglass et al. (1987), Treadway (1989), Thomas and Santa (1982), or Gaeic (1986) have been formally evaluated in well designed studies, or subjected to widespread testing in clinical settings. The empirical studies which have been conducted on the effectiveness of
couple or family treatments of alcoholism (reviewed in a later section) have predominantly focused on behavioural approaches. This disturbing fact was spelled out by Jacobson, Munroe, and Schmaling (1989) who noted:

The discrepancy between the predominance of systemic notions leading us to believe in the promise of marital treatments and the dearth of research on the efficacy of systemic approaches is striking. (p. 9)

Systemic theory continued to develop even as the first-order cybernetic treatment models of alcoholism noted above were articulated. The second-order cybernetic perspective (Hoffman, 1986; Sluzki, 1985) which no longer viewed systems as objective homeostatic units outside the observer, began to challenge earlier family formulations (Dell, 1985; Keeney, 1983). Since 1985, the field of marital and family therapy has moved to embrace second-order systemic thought and rejected an objectivist epistemology (Simon, 1992). Perspectives such as post-modernism (Anderson & Goolishan, 1988; Gergen, 1991) have taken family therapy well beyond its first-order cybernetic beginnings (Cecchin, Lane, & Ray, 1993). New treatment approaches such as the popular narrative approach (White & Epston, 1990) concern themselves with the role that observers play in constructing the reality being observed and seek new ways to understand and speak about problems that allow for the difficulties to be resolved. The generation of these new viewpoints in the field of family therapy reflects an important shift away from how families and their problems were understood (Hoffman, 1990). In particular, constructs such as homeostasis, resistance, boundaries and family rules have been for the most part abandoned (Cecchin et al., 1993; Goolishan & Anderson, 1992).

The important developments in systemic treatments noted above have not been widely reflected in the area of alcoholism treatment. Indeed, the marital and family approaches which at present dominate the field of alcoholism treatment continue to be rooted in first-order cybernetic thought (e.g., Steinglass et al., 1987). Nonetheless, second-
order systemic models applied to alcoholic problems have recently emerged (e.g., Friesen, Grigg, Peel, & Newman, 1989) and are being applied to alcoholism treatment.

The need for innovation in treatment approaches to alcoholism continues to be pressing with many of the currently practiced models proving to result in efficacy rates which are not as impressive as would have been hoped (Miller & Hester, 1986; Nathan & Skinstad, 1987). Jacobson, Munroe, and Schmaling (1989) recently issued a call for the development of therapeutic approaches to alcoholism noting that:

... the need for clinical innovation in alcoholism treatment is most acute because no treatment has emerged as consistently effective to a clinically significant degree. (p. 8)

Marital and family approaches to treatment and interventions which include broad-spectrum strategies and relapse prevention procedures have been identified as promising directions (Institute of Medicine, 1992). However, well designed empirical evaluations of developments in treatment are necessary to promote the careful advancement of the treatment field.

The Problem

Experiential Systemic Therapy (ExST) (Friesen et al., 1989) is an integrative approach to the treatment of adult alcoholism. Recently generated at the University of British Columbia, the model has reached the point where empirical examination in a field-based study is required prior to further development and wider implementation. The approach is introduced below.

Experiential Systemic Therapy (ExST) is a treatment method that was designed specifically for alcohol dependency problems (Friesen, Grigg, Peel, & Newman, 1989). Generated in a rich clinical environment, ExST is a response to the call for further development of treatment approaches for alcoholism noted earlier. ExST is a second-order
cybernetic systemic therapy that focuses on problems within the interactions between multiple layers of human relations. The ExST approach emphasizes the role of the observer in developing solutions to problems and enables the systemic potential to address and transform disturbed patterns of relationship between parts of self as well as between significant others, objects, symbols and other contexts in the outer world of the individual. The model exemplifies a broad spectrum approach to alcoholism and includes relapse prevention within the treatment protocol. The ExST model integrates individual and family therapy concepts and techniques in such a way that a unified set of assumptions, concepts and techniques can equally be applied to individual, couple and family treatment formats. Accordingly, the model's versatility is an asset in meeting the changing needs of clients engaged in the recovery process.

ExST evolved out of an effort to train alcohol and drug treatment clinicians employed by the Government of British Columbia in the practice of couples and family therapy. The dialogue between trainers and trainees gave rise to the generation of an approach to treatment that emphasized the physiological, intrapersonal, interpersonal and spiritual concerns of those struggling with the multifaceted problems connected to alcohol dependency and a model of supervision which focused on theoretical development, technical refinement, and personal growth (Newman, Friesen, & Grigg, 1991).

The ExST model gained wide support from counsellors who were trained in the treatment over the years of 1987 - 1989. A copy of the ExST training events schedule and a listing of therapist comments drawn from workshop evaluations is presented in Appendix A. The therapists’ comments aptly reflect the enthusiasm with which the therapy was received by clinicians in the field. Informal reports from therapists employing the model subsequent to the training further supported the development of ExST.
The popularity of ExST led to continued requests for training and it became clear that the treatment held much promise for the field of alcohol treatment. Yet despite the appreciation and encouraging comments made by previously trained therapists, the efficacy of the model in terms of its measurable effectiveness had not been evaluated. In addition, the issue regarding the comparability and/or the utility of the individual and couples treatment formats of ExST remained an empirical question. Consequently, widespread training activities were suspended pending the results of a treatment outcome study that would probe the efficacy of the model in both its individual and couples form.

**Purpose of the Study**

This study is one of a series of studies connected to a large-scale research project entitled *The Alcohol Recovery Project* (TARP). Carried out over a period of five years, TARP has received funding from the British Columbia Alcohol and Drug Program (now part of the provincial Ministry of Health and formerly in the Ministry of Labour and consumer services) and from the British Columbia Health Research Foundation (Health Services Research Programme). Other assistance has been extended to TARP by the University of British Columbia and the Humanities and Social Sciences Research Services. These funds and other forms of assistance have enabled the completion of this study, as well as others resulting from TARP activities. This body of research has been conducted under the general direction of the Principal Investigator, John D. Friesen, Ph.D., co-investigator Robert F. Conry, Ph.D., and project coordinator and clinical supervisor, Darryl N. Grigg. While preliminary results of TARP have recently been presented (Grigg, Friesen, & Conry, 1993), additional information regarding TARP and other specific studies related to it may be obtained from Professor John Friesen, Department of Counselling Psychology, University of British Columbia, 5780 Toronto Road, Vancouver, B.C., V6T 1L2, Canada.

This study was designed to investigate the efficacy of ExST in the treatment of alcohol dependency. In addition, the inquiry also evaluates the effectiveness of both
individual and couples treatment formats of ExST as they are implemented with alcohol dependent clients.

The intentions of the inquiry are reflected in the following research questions.

(1) Does the delivery of the ExST result in significant change when compared to a contrast treatment group on indices of alcohol dependency, individual functioning, and measures of marital dynamics and family qualities in the treatment of alcohol dependency problems?

(2) Does the delivery of individual or marital treatment formats of ExST differentially affect alcohol dependency, individual functioning, marital dynamics and family qualities to a significant degree when applied to the treatment of alcohol dependency problems?

Definitions

Operational definitions of terms used in this study are as follows:

Alcoholism: For the purposes of this study the terms alcoholism and alcohol dependency will be used synonymously. All alcoholics in the investigation satisfied the DSM-III-R (1987) diagnostic criteria for severe Psychoactive Substance Dependence as detailed below:

Diagnostic Criteria for Psychoactive Substance Dependence

A. At least three of the following:
   1. substance often taken in larger amounts or over a longer period than the person intended
   2. persistent desire or one or more unsuccessful efforts to cut down or control substance abuse
   3. a great deal of time spent in activities necessary to get the substance (e.g., theft), taking the substance (e.g., chain smoking), or recovering from its effects
   4. frequent intoxication or withdrawal symptoms when expected to fulfill major role (obligations at work, "high," intoxicated while taking care of his or her children), or when substance use is physically hazardous (e.g., drives when intoxicated)
important social, occupational, or recreational activities given up or reduced because of substance use

continued substance use despite knowledge of having a persistent or recurrent social, psychological, or physical problem that is caused or exacerbated by the use of the substance (e.g., keeps using heroin despite family arguments about it, cocaine-induced depression, or having an ulcer made worse by drinking)

marked tolerance: need for markedly increased amounts of the substance (i.e., at least a 50% increase) in order to achieve intoxication or desired effect, or markedly diminished effect with continued use of the same amount

Note: The following items may not apply to cannabis, hallucinogens, or phencyclidine (PCP):

characteristic withdrawal symptoms (see specific withdrawal syndromes under Psychoactive Substance-induced Organic Mental Disorders)

substance symptoms of the disturbance have persisted for at least one month, or have occurred repeatedly over a longer period of time

B: Some symptoms of the disturbance have persisted for at least one month, or have occurred repeatedly over a longer period of time.

Criteria for Severity of Psychoactive Substance Dependence:

Mild: Few, if any, symptoms in excess of those required to make the diagnosis, and the symptoms result in no more than mild impairment in occupational functioning or in usual social activities or relationships with others.

Moderate: Symptoms or functional impairment between "mild" and "severe".

Severe: Many symptoms in excess of those required to make the diagnosis, and the symptoms markedly interfere with occupational functioning or with usual social activities or relationships with others.

In this investigation, all alcoholics are male. Consequently, the pronoun "he" will be used in reference to the alcoholics participating in the study.

System: A system has been defined as a complex of elements (subsystems) standing in interaction (Von Bertalanffy, 1968). While distinctions have been made between open and closed systems, recent systemic thought recognizes these distinctions as punctuations arising out of a participant observer's point of view as "true" qualities of the system under observation (Dell, 1985; Keeney, 1983). Consequently, a system and the subsystems which constitute it are determined by the level of observation established by the observer. For example, just as the respiratory system in an individual can be studied as a system unto itself being comprised of several interacting elements or subsystems (i.e., diaphragm, lungs,
windpipe), so too can the respiratory system be viewed as one subsystem along with others such as the digestive, circulating and neural elements that work in concert to enable the system of the individual to maintain his/her physical existence. In this study, systems will be identified at different levels of abstraction (e.g., intrapersonal, marital, and family). It is understood that some systems may be viewed as subsystems of another system at a higher level of observation.

A systemic perspective is a point of view that focuses on relationships among elements while maintaining an appreciation for the whole system in which the relationships are manifest. This effort seeks to derive a synthesis, and thereby, as Banathy (1987) notes; "capture and define whatever is emerging from our synthesis at a higher level of understanding" (p. 127). A systemic lens is one which particularly attends to the deep interconnected and interactive essence of things and understands phenomena as inseparable from the ecological contexts in which they exist.

Experiential Systemic Therapy: In this study, ExST is defined as the systemically based experiential and symbolic treatment model specified in manual form which is available upon request. An overview of the model (Friesen, Grigg, & Newman, 1991) is presented in Appendix B. The therapy is designed to address problematic relationships through a process of intensification which generates relationally novel patterns of interaction and a deeper awareness of interconnection (Friesen et al., 1989).

Supported Feedback Therapy: This refers to the comparative treatment condition generated for and employed in this investigation. The Supported Feedback Therapy model (SFT) (Grigg, Friesen, Weir, & Bate, 1991) is a procedure that accents client's responsibility and capacity to change. SFT has been articulated in the manual form and is available upon request. SFT is a therapeutic procedure that employs charts as visual aids to provide feedback to clients about a variety of areas of life that are of concern to alcoholics and are
monitored on a weekly basis. The SFT weekly monitoring forms and photo-reduced versions of the feedback charts are provided in Appendix C.

Treatment Format: In this study the term treatment format is used to describe the constituents of the therapeutic system. Format is defined as: the style or manner of an arrangement or procedure (Allen, 1990) and consequently treatment format refers to the composition of a given therapeutic system (e.g., individual, couple, family).
CHAPTER 2: LITERATURE REVIEW

This section reviews the literature salient to the investigation. To begin the review, issues regarding the definition of alcoholism are addressed before the biopsychosocial view of alcoholism is presented. A brief overview of the family systems perspective is then offered and followed by a consideration of systemic models which integrate individual treatment into their formulations. A careful examination of studies focused on the systemic treatment of adult alcoholism is made and subsequently, a look at the research on therapeutic formats is undertaken. A brief overview of the ExST treatment and the rationale for its development are presented, followed by a summary of the literature reviewed. A statement of the research hypothesis being tested in the investigation concludes the second chapter.

Alcoholism

A difficulty in the conceptualization of alcoholism involves defining what constitutes the problem. There is considerable controversy in the literature regarding the make-up of the essential features of the addictive process (Donovan, 1986; Shaffer & Milkman, 1985). Alcoholism has been broadly defined by Keller, McCormick, and Efron (1982) as:

the repetitive intake of alcoholic beverages to a degree that harms the drinker in health or socially, or economically, with indication of inability consistently to control the occasion or amount of drinking. (p. 20)

The difficulty with this definition is that it is not as precise as needed. Terms such as "harm" or "inability to control" lack the specificity that would allow investigators to agree on individual cases and, consequently, confusion has often characterized the field.

The definition of alcoholism has long been a troublesome issue. Christie and Bruun (1969) characterized the result of efforts to define alcoholism as "a conceptual mess" in as much as different things were being discussed under the same label and the same things...
were being talked about under different labels. Many definitions and sets of clinical criteria of alcoholism have been published over the years including a core syndrome of alcohol dependency (Edwards & Gross, 1976), and a culturally sensitive view proposed by the World Health Organization (Edwards, Gross, Keller, & Moser, 1976). Other definitions based on assessing the amount of harm caused by the drinking (American Psychiatric Association, 1980; Feigher, Robins, Guze, Woodruff, Winokur, & Munoz, 1972) and perspectives based on the quantity and quality of alcohol problems (Calahan, 1970) and the loss of the ability to control alcohol drinking (Jellinek, 1960) have also been proposed.

Each of these definitions has placed a different emphasis on the aspects of physiological, behavioural and social functioning in their descriptions. Consequently, concerns have been expressed regarding the reliability of diagnostic classifications based on these models (Jolly, Fleece, Galanos, Milby, & Ritter, 1983; Pattison, 1981). Noting that the incidence of alcoholism diagnosed depends on the definition employed, Boyd, Weissman, Thompson, and Myers (1983) demonstrated that by using the seven prominent clinical and research criteria, as little as 47% of subjects diagnosed by one set of criteria as alcoholic would be diagnosed in a similar way by another diagnostic system.

The most current diagnostic system has been presented in the Diagnostic and Statistical Manual of Mental Disorders revised edition (DSM-III-R) by the American Psychiatric Association (1987). The chief advantage of this system is that it is based principally on observable behaviour. Helzer (1987) praises the DSM-III-R system describing it as "a robust definition, having both high inter-rater reliability and considerable predictive utility" (p. 284). In this sense, the present DSM-III-R classification is a substantial improvement and consequently has been employed in this study. Accordingly, participants in this investigation all conform to the criteria of severe psychoactive substance dependence as defined by the American Psychiatric Association (1987).
Biopsychosocial Model of Alcoholism

The field of alcoholism has been complicated by a wide array of models and conflicting theories often linked to different academic disciplines. With proponents of these varying perspectives convinced of the validity of their positions, there has been relatively little effort to integrate them into a single unified approach (Kissin, 1983). In the last 10 years, there has been a growing appreciation for the need to synthesize the various perspectives and levels of analysis in order to develop a comprehensive view of this problem (Chiuzzi, 1991; Donovan, 1988; Galizio & Maisto, 1985). Such an integrative perspective on alcoholism fits aptly with an integrative treatment model like ExST.

The prevailing integrative model of alcoholism has been that adapted from a generic perspective articulated by Schwartz (1982) and has been called the biopsychosocial model (Donovan, 1988). This model has become popular in a wide variety of medical and psychological domains and it is particularly useful in the addictions field since it recognizes that such a problem has multiple determinants and that a combination of biological (more accurately physiological), psychological and social factors are required for their development (Zucher & Gomberg, 1986). Accordingly, alcoholism is seen as a manifestation of an interactive process of physiological, psychological and social-environmental factors that progress in such a way over time that at some point the dependent condition of alcoholism becomes evident. Schwartz (1982) has described the biopsychosocial model as organistic and systemic:

The essence of systems thinking is that the functioning of a system as a whole emerges out of the dynamic interactions of its parts (subsystems) and the system's interaction with its environment (the supra system of which the system is a part). In terms of medicine, examples of organistic thinking include the belief that specific diseases (constellations of symptoms) represent the complex interaction of specific environmental stresses (including germs) and the organism in question (including its genetic and experiential history) and that biological and behavioral stresses always interact with each other to produce particular constellations of signs and symptoms in particular individuals. (p. 1042)
A biopsychosocial model of alcohol dependency bridged the conflicts and differences of previously mutually exclusive models and a more complex and holistic view of the problem has emerged (Galizio & Maisto, 1985). This shift in perspective has had a profound effect upon aspects of the clinical endeavor, including assessment and treatment. Assessment and treatment activities are intrinsically connected to a perspective of the problem. In the past, assessment and treatment have tended to be relatively specific and narrow in definition. The result (from a biopsychosocial perspective) has led assessment and treatment efforts to ignore entire aspects of the problem and to focus on only a limited portion of the entire problem.

The biopsychosocial model offers a vehicle for a reproachment of previously divided views. Offered as a comprehensive view of the etiology of alcoholism (Kissin & Hanan, 1982; Zucher & Gumberg, 1986), it has been employed to predict the onset of problem drinking (Wallace, 1985) and to assess the multiple layers of human existence involved in alcohol dependency (Donovan, 1988; Wanberg & Horn, 1983). The application of a biopsychosocial model in treatment is a recent phenomenon and is reflected in the development and endorsement of broad spectrum treatment approaches (Institute of Medicine, 1992; Miller & Hester, 1986) and relapse prevention programs (Chiauzzi, 1991). However, treatment models that assume a biopsychosocial perspective of alcohol dependency remain in an early state of development. Nonetheless, it is now clear that each alcohol dependent person struggles with a blend of biological, psychological and social factors and that treatment efforts must be individually tailored to meet the specific therapeutic demands of each recovering person. As Kissin and Hanson (1983) noted:

As the alcohol dynamic emerges, mechanisms at all three levels appear to operate sequentially and simultaneously so as to influence the development and course of the syndrome. (p. 2)

Clearly, therapeutic efforts must address all three levels in order to be maximally helpful in interrupting the perpetuation of the dependent condition and the eventual degeneration of
the alcoholic individual. The ExST treatment used in this study is informed by the biopsychosocial perspective on alcohol and assumes this point of view in approaching the needs of clients.

**Family Systems Theory Overview**

The family therapy movement with its systemic theoretical perspective had its origins in numerous independent places (Broderick & Schrader, 1981; Guerin, 1979; Olson, 1970), yet by the end of the 1950's the diverse origins had coalesced into a unified field. Growing out of a disenchantment with the conventional psychotherapeutic treatment of individuals, founders of family therapy laid claim to a treatment procedure which was promoted as both more efficient and potent (Bowen, 1976; Jackson, 1959). By 1962, family therapy as a psychotherapy had differentiated itself from the field of psychiatry and psychology and had formed its own professional associations and published its own journal (Nichols, 1984).

The systemic theory which connected the diverse elements of the family therapy field was closely associated with general systems theory (Von Bertalanffy, 1968) which borrowed from the biological field and assumed that the system being observed could be objectively considered as separate from the observer, and cybernetics (Weiner, 1948) which asserted that all systems share certain attributes such as homeostasis, rules of conduct, and organization. Consequently, a view of the family evolved that included viewing it as a living biological system and at the same time governed by the rules of a machine. This first-order cybernetic perspective breathed life and vitality into the treatment of the family. The family, when seen as a single system composed of interacting subsystems (individuals), combined in such a way that the whole was greater than the sum of its parts and created problems to serve some important function for the entire family unit.

In this theoretical frame, the family was construed as being governed by rules which regulate deviation from established patterns or codes of conduct and thus preserve the
integrity of the family or maintain the family homeostasis. Family member problems, once
the focus of intense individual psychological probing were recast as symptomatic problems
which communicated something about the entire family. The individual with the problem or
"identified patient" was understood as the symptom bearer and it was assumed that the
symptom was generated and maintained by the family as a necessary behaviour to its
equilibrium. Brown (1974) notes that:

    Systems theory assumes that all important people in the family unit play a part
in the way family members function in relation to each other and in the way
the symptom finally erupts ... In systems theory the focus is on the functional
facts of relationship - on what happened, how it happened, and where and
when it happened. (p. 30)

In this way, the burden of responsibility for symptoms was shifted from the individual
into the relational domain of the family with particular attention being paid to the
communicative rules, boundaries, organization, roles and control or regulating mechanisms
which operate to maintain the family as it satisfied its needs. This is to say that although an
individual family member's behaviour might indeed have chaotic and destructive qualities,
the family was seen to nevertheless rely on the undesirable behaviour as a functional aspect
in the patterns and processes in the family system (Hoffman, 1981).

The therapeutic implication of this early systems model was to render the family as a
thing that was broken and in need of fixing (Keeney, 1983). Consequently, models were
developed that out-maneuvered or out-strategized the resistant character of families in order
to help them change (Cecchin et al., 1993).

The field of family therapy has grown to expand upon its systemic theory. While
current innovations have moved the family therapy field away from its organismic and
mechanistic formulations of the family in order to explore such notions as the family
narrative (White & Epston, 1990), the family epistemology (Dell, 1985; Keeney, 1983), and
family ecology (Auerswald, 1985; Bogdan, 1984), the original appreciation for the
importance of the dynamic relationships among family members has continued. For
example, Bodgan (1984) refuted the homeostatic view which reified the family into a thing, but asserted that:

the behaviour of family members shows order, pattern, organization or redundancy because the behaviour of each individual is in a sense cognitively consistent with the behaviour of every other individual in the system. More exactly, the ideas of each family member lead him to behave in ways that confirm or support the ideas of every other family member. (p. 376)

The movement away from first-order systemic thinking was nonetheless an important development (Anderson & Goolishian, 1993). Disenchanted with many of the practices that evolved out of a first-order view of the family, theorists branched into two directions: second-order cybernetics and narrative epistemology (Cecchin et al., 1993).

The second-order systems view of the family is based upon a deep appreciation for the cognitive subjectivity of the observer (Sluzki, 1985). From this perspective, the family was not a thing, but rather a process. The family was an expression of an ecology of individuals with various perspectives sharing living experiences which were mediated through language. Through shared experience, family members come to have a profound influence upon one another. Maturana (1978) noted:

If the medium is also a structurally plastic system, then the two plastic systems may become reciprocally structurally coupled through their reciprocal selection of plastic structural changes during their history of interactions. In such a case, the structurally plastic changes of state of one system become perturbations for the other and vice-versa, in a manner that establishes an interlocked, mutually selecting, mutually triggering domain of state trajectories. (p. 36)

This kind of thinking shifted the position of the therapist. No longer was the therapist seen as an expert, outside of the family, with a job to fix the dysfunctional machine, but rather a participant observer who was co-constructing relational realities in a linguistic domain (Keeney, 1983; Maturana & Varela, 1980). In addition, the feminist work of Goldner (1988) and others, challenged the limitations of first-order cybernetics in explaining gender-related issues and argued that "reality" was the result of a socially constructed process. As a result, therapists were urged to consider the unequal social differences
between men and women and to strive to amplify the marginalized voices of women (Taggart, 1985).

The post-modern epistemological branch of family therapy moved even farther away from the cybernetic metaphor (Cecchin et al., 1993). This social constructionist perspective emerged out of the hermeneutic tradition and asserts that understanding and meaning are cultural, public and inter-subjective (Gergen, 1991). The family is not viewed as a thing from this perspective but rather the family is thought of as a linguistic process or story. Human beings are seen as immersed in a narrative in which everyone participates and create problems as well as dissolve them (Goolishian & Anderson, 1992). Thus, the therapist’s task is to participate as a conversation artist in therapeutic discussions with clients in an effort to co-develop new meanings, new realities and new narratives (Anderson & Goolishian, 1988).

The lively debates regarding epistemology and practice continue in the field of family therapy (e.g., Cecchin et al., 1993; Goolishian & Anderson, 1992; Simon, 1992), however, it seems clear that for the most part, first-order systems view of family and therapy is a thing of the past. Presently, even strategic therapy models of treatment traditionally built on the first-order cybernetic metaphor and fashioned after the Mental Research Institute formulations have distanced them from the first-order systems view. As Eron and Lund (1993) state:

In line with constructivist thinking, problems are not seen as caused by defective family systems, and problems are not seen as serving some sort of family function, that is, preserving stability, regulating boundaries or hierarchies. (p. 294)

Despite its development, the field of family therapy continues its tradition of understanding individual problems with a contextual appreciation. All behaviours are still understood as occurring within a relational field and consequently the meaning of a given behaviour (as communication) can only be fully appreciated within the relational setting that it occurs. In this way, an individual’s behaviour (i.e., symptom) is seen as part of an
interactive dynamic process or discourse involving others and not seen as a decontextualized isolated individual statement.

**Systemic Theory and Individual Treatment**

The history of family therapy included a break from the mainstream individual treatments of psychiatry and psychology. Family systems therapy initially worked exclusively with family and marital units (i.e., two or more people) and this helped build a separate identity for systemic therapists that was easily distinguished from individual treatment models (Becvar & Becvar, 1988). In this way, theory (i.e., systemic) and format (i.e., conjoint family) were initially fused and spoken of as synonyms. Consequently, from a historical perspective individual and family psychotherapeutic formats have been conceptualized as competing orientations and mutually exclusive forms of treatment (Pinsof, 1983). While many, such as Whitaker (personal communication, 1990), maintain firm convictions to the belief that in order to work systemically one must work with the entire family system, recent positions have been asserted regarding the possibility of working systemically with individuals (Friesen, et al., 1989; Pinsof, 1992; Steinglass, 1991; Schwartz, 1987a, 1989).

With the advent of second-cybernetic models (Sluzki, 1985) and the recognition of the importance of the observer (Varela, 1979), therapists were no longer seen as objective parties making true observations of reality. Rather, therapists were viewed as participants to the observation. Since the therapist’s perspective and propensity to make distinctions was understood as having very much to do with what was eventually observed (Dell, 1985), it was logical to question what constituted a legitimate system for a systemic therapist to work with in treatment.

Some recent texts on family therapy (e.g., Becvar & Becvar, 1988) have suggested that systemic treatment can be done with individuals so long as the therapist continues to
consider the individual to be a part of a larger system. Despite such assertions, very few models are currently in existence which strive to bridge systemic theory with an individual treatment format and attempt to negotiate the integrative task required in so doing (Friesen, Grigg, Peel, Newman, 1989; Pinsof, 1983; Schwartz, 1988). The following section reviews the integrative family therapy models of treatment noted above.

**Integrative Problem-Centered Therapy**

Pinsof (1983) articulated Integrative Problem-Centered Therapy (IPCT) as an integrative and comprehensive framework therapeutic practice. IPCT was described as a model of psychotherapy that not only combined individual and family treatment modalities, but also linked behavioural, communication and psychodynamic theories of therapy. Described by Pinsof (1983) as a "systemically eclectic and comprehensive model" (p. 20), IPCT construes problems to be the result of unsuccessful problem solving that stem from "blocks" in healthy problem solving processes within the patient system. IPCT is built upon the assumption that each of the various theories of therapy and their corresponding modes of implementation (individual, couples, family), have their own domains of expertise as well as limitations. Since it is asserted that no single treatment format or orientation is comprehensive enough to meet the demands of problems brought to treatment, the IPCT model strives to provide a theoretical framework through which a therapist can determine which model of treatment and which format of therapy would be the most appropriate to modify the patient system's block to successful problem solving. This is to say that IPCT provides a set of principles for applying different treatment formats, theoretical models, and techniques in order to maximize both efficiency and effectiveness.

Pinsof (1983) introduced the concept of "the patient system" in order to resolve the problem of defining the patient. In individual therapy, the individual is the patient. Similarly, in marital therapy the patient is the couple, and in family therapy the patient is
seen as the entire family system. Pinsof defined the "patient system" as consisting of "all the human systems (biological, individual-psychological, familial-interpersonal, socio-occupational etc.) that are or may be involved in the maintenance or resolution of the presenting problem" (p. 20). The task of the therapist in treating the patient system is not to choose between these levels of system but rather to identify and address the relative contribution of each to both problem maintenance and resolution.

The IPTC model is ambitious in its undertaking. By suggesting a problem solving supra-theory, it strives to link a variety of otherwise self contained theories and therapy formats to treatment. The model seems to recognize that there is a time and a place to employ various treatment formats and procedures and strives to provide a blueprint to aid in determining when to employ a particular approach.

A difficulty in the implementation of the model may be the demands it places on the therapist. An IPCT therapist would need to be competent and comfortable in moving from one therapeutic role and style to another, including behavioural, structural, interpersonal, and psychodynamic. An IPTC therapist would have to be further versed in working effectively in individual, couple and family treatment formats. Such a therapist would obviously require considerable training; however this is not an impossible task. A second concern revolves around the process of moving from one guiding theory to another as treatment progressed. This altering of therapeutic position could be bewildering to clients. Since clients learn what is required of them in therapy, it seems possible that an IPTC client might be unsure of what is expected of them from one moment to another, as a new set of expectations and demands were presented to them as the therapist shifted models.

Although IPTC strives to integrate the various treatment models, it can be questioned as to the degree to which it bridges the theoretical distances between them. While it clearly
provides a more systematic way of being theoretically and technically eclectic, the model fails to explain the relationships between the various levels of system except to note that they may (or may not) be involved in problem maintenance and resolution. Embedded in the model is the notion that the more resilient the problem the more likely one will end up employing individual treatment formats. This is to say that the model proposes working within a family and/or marital treatment contexts first before finally resorting to "the type of work associated with long-term individual psychotherapy" (p. 31).

The IPCT model is in its early stages of development and without empirical support or widespread clinical demonstration. Until such work is conducted, the model is perhaps best viewed as one step towards the reconciliation of individual and family treatment theories.

Internal Family Systems

The Internal Family Systems model (IFS) developed by Schwartz (1987a, 1987b, 1988, 1989) provides a theoretical framework which more specifically establishes integrative linkages between individual formats of treatment and family systems therapeutic approaches. Schwartz (1989) asserted that:

it is possible to intervene at either level using the same systemic paradigm and techniques, rather than having to shift from a systemic at the family level to, for example, a psychodynamic or cognitive/behavioural paradigm at the internal level. (p. 91)

In contrast to Pinsof's (1983) IPTC approach, the IFS model provides a theoretical framework which enables therapists to move from individual to marital and family treatment formats while maintaining the same theoretical model.

Schwartz (1988) recognized the contribution family therapy has made in viewing behaviour as intricately related to the social context in which it is embedded. It is clear that it has been helpful to relate symptoms to patterns of interaction and to evoke concepts like triangulation, boundaries and hierarchies. However, Schwartz (1987b) also noted that family
systems paradigms can become restrictive and narrow themselves when they imply that therapists should not consider the individual's intrapersonal process in their assessment and treatment because the internal territory has been portrayed as distracting, unimportant or intrinsically non-systemic.

The integrative synthesis of the IFS model is made possible by the recognition that the individual can be seen as being composed of by a variety of "parts" which exist in interaction with one another. Drawing on the neuro-psychological works of Gazzaniga (1985) and Ornstein (1986), Schwartz (1987a) established the notion of the multiplicity of mind. That is, the intrapersonal domain of existence is viewed as a community, family of parts, or a tribe of mental systems that reside in each individual. The sub-personalities, like members of an "external" family struggle for influence, interact sequentially and form a variety of alliances and organizations. The parts may exist in peaceful co-existence or they may have conflictual or even contemptuous relationships. Each part is viewed as being organized around a particular premise or set of premises about the world and how to exist within it.

Through his work with bulimics, Schwartz (1989) came to the conclusion that one could work with the external family and get it working well and still have the symptom continue to be exhibited. He also became aware that the internal relations of his individual clients closely resemble the relationships in the external family prior to treatment. With this insight, Schwartz (1987a) began to explore the "inner" family network of parts and to recapitulate the therapeutic work of the external family within the intrapersonal domain. The view of the individual as being composed by many parts or sub-personalities is not an entirely novel idea. Nonetheless, the IFS model clearly establishes a bridge between the systemic thinking of family therapy and established individual therapy approaches. Schwartz (1987a) recognized that there are some clear similarities between the IFS model and object
relations theory. He also noted theoretical overlap with Gestalt Therapy (Perls, 1951), Psychosynthesis (Assagioli, 1973), Voice Dialogue (Stone & Winkelman, 1985), and Neuro Linguistic Programming (Grindler & Bandler, 1982).

The relationship between the intrapersonal and interpersonal processes has been identified as the most interesting and underdeveloped aspect of the IFS model (Schwartz, 1987a). There are clear parallels between these internal and external families, however their linkage is yet to be articulated. Interpersonal patterns observable in the family have also been observed in the relationships between parts. For example, in abusive systems, denial at the family level is also replicated at the internal level. Interventions at one level are hypothesized to effect parallel relations at another level, however this assumption would seem to contradict the very history of the model in which changes in the external family system did not necessarily transfer into changes in the internal family level.

Clearly more work is required to understand the connection between the levels of system in order to assist in guiding therapeutic intervention. By providing a much needed theoretical bridge between family therapy practice and individual treatment modalities, the IFS model has made a valuable contribution to the rapprochement of individual and family systems models. The model is the theoretical product of clinical work which has provided it with a sense or practical credibility. Nonetheless, no outcome studies have been conducted which empirically test the model's application. This would seem the obvious next step in the development of the approach. Finally, it should be noted that Schwartz (1987b) employed a structural-strategic model of clinical intervention in implementing the IFS model. One must assume that other models of family therapy can be introduced into the intrapersonal domain through the door that the IFS model provides and in fact such examples are beginning to appear in the literature (e.g., Bryant, Kossler, & Shirar, 1992). Consequently, the IFS model
may best be viewed as providing an integrative theoretical bridge which allows for the
application of a variety of modes of family therapy in the treatment of individuals.

**Experiential Systemic Therapy**

The Experiential Systemic Therapy (ExST) model (Friesen et al., 1989) was
developed as an integrative treatment approach that synthesized individual and family
therapy concepts and techniques. Meant to provide a unified set of assumptions and
concepts that could be equally applied to individuals, couples, and families, the ExST
approach attends to the multiple layers of human experience and affirms their
interconnectedness.

Built upon the notion that existence is a relational phenomenon (Friesen, Grigg, &
Like the IFS model, ExST recognizes the intrapersonal system as being a unity comprised of
a variety of parts that are in a dynamic state of relationship just as the interpersonal system
of the family is made up of a variety of people interacting with one another. However, the
ExST model extends this kind of thinking further than does the IFS model by including the
physical and biophysiological levels of system at one end of its systemic perspective and
international and global systems at the other (Newman, 1990).

Noting that the experiences that arise from the interactive process between a child
and his/her caregivers are influential in a child's way of being in the world, ExST employs
the work of Maturana (1978) to explain how two or more interactive systems come to
establish patterns over time. While Maturana (1978) is chiefly concerned with the
development of interpersonal relations, Newman (1990) argued that his formulations could
be applied to any number of interacting systems including those within the intrapersonal
domain.
Friesen et al. (1989) introduced the descriptive term "substantive relational theme" as a notion to represent the underlying essence of clients relationally based stories such as unlovableness, abandonment, rejection, and unworthiness. Similar to IFS, ExST theorists recognized relational parallels shared between the patterns of relationship manifest in the various levels of systemic existence. The substantive relational theme concept is meant to address the central relational current which runs consistently through the intrapersonal and interpersonal domains. As a result, the substantive relational themes of clients are the foci of treatment efforts regardless of treatment format in ExST.

Similar to Pinsof (1983), ExST theory asserts that it is important to assess which level of the client system is most amenable to change and suggests that therapists begin at the level of system with the most available resources for transformation. The ExST model assumes that various formats of treatment will be employed as they are required to address the various contributions made by the interactive processes at each level of the system to the continuation of the repetitive, restrictive and rigid relational theme. In this way, the substantive relational theme construct links the physiological, intrapersonal and interpersonal systems of marriage and family asserting that the systems will tend to be isomorphic to one another as they share the same relational story.

ExST is an experiential form of treatment; however like the IFS model, the theoretical formulations which enable ExST to be applied in individual, marital and family treatment formats can also enable other treatment models to be implemented in a similar trans-systemic fashion. ExST is the product of therapeutic experience, and as such it is grounded in clinical practice. It is currently being empirically tested in a large outcome and process study.
Couples and Family Therapy of Adult Alcoholism: Treatment Outcome Research

The following section is restricted to research probing the treatment of adult alcoholics using couples and family therapy. In the interest of brevity and precision, treatment research on substance abusing adolescents using family therapy approaches (e.g., Joanning, Quinn, Thomas, & Mullen, 1992; Lewis, Piercy, Sprenkle, & Trepper, 1991; Liddle, Dakof, Parker, Garcia, Diamond, & Barrett, 1993; Stanton & Todd, 1982) has been excluded from the literature review.

1956 - 1973

The application of therapeutic procedures that expanded the individual treatment scope and recognized the need to treat both the alcoholic and his spouse occurred in the mid 1950's. The approach at this time was to offer concurrent but separate group psychotherapy meetings to alcoholics and their wives (Ewing, Long, & Wenzel, 1961; Gliedman, 1957; Gliedman, Rosenthal, Frank, & Nash, 1956; Macdonald, 1958; Vogel, 1957). These papers, which were focused on the conduct of what was identified as the traditional manner of psychoanalytically oriented psychotherapy, were not research studies. Rather, these publications reported on experimental efforts with a new tact in alcoholism treatment. While none of these early studies employed outcome measures, the impressions of outcome by the authors were favourable and supported the further development of "family treatment."

Mention of working with alcoholics and their wives together in couples groups appeared at the end of the 1950's (Gliedman, 1957). However, it is not until the early 1960's and later that couples group treatment gained momentum (Burton, 1962; Burton & Kaplan, 1968a, 1968b; Ewing & Long, 1961; Gallant, Rick, Bay, & Terranova, 1970; Sands & Hanson, 1971).
Reports of family therapy methods applied to the problem of alcoholism appear in the literature in the late 1960's (Esser, 1968; Ewing & Fox, 1968). The conjoint therapy model of Satir (1964) was employed in the early 1970's (Esser, 1970, 1971; Meeks & Kelly, 1970) with some favourable trends in outcome being noted.

By today's standards, these early studies suffered from methodological shortcomings including reports on unspecified treatment procedures, small unrepresentative sample sizes and poorly defined impressionistic outcome indices. However, these initial reports were descriptive of new approaches and not meant as definitive research efforts. The couples and family theoretical frames implicit in many of these works were in formative stages of development. Nonetheless, taken together the enthusiasm of many testimonials and case reports offered a measure of credibility which was later supported by the preliminary empirical efforts of Cadogan (1973) and Corder, Corder, and Laidlaw (1972).

These early articles have been reviewed by others (e.g., Miller & Hester, 1980; Steinglass, 1976) and will not be examined further in this document. This cursory review is offered to provide a historical account of the pioneer work which substantiated the positive evaluation of systemic approaches to alcoholism that was noted in the day. In particular, the pivotal review of alcohol treatments made by Keller (1974) praised marital and family therapy approaches as "the most notable current advance in the area of psychotherapy" (p. 116). Consequently, a call for controlled outcome studies to evaluate this promising direction in treatment was issued at this time.

1974 - 1980

Between the years of 1974 to 1980 several studies probing the utility of a variety of family systems oriented treatment approaches were reported (Janzen, 1977). In keeping
with earlier trends, the studies had limitations due to methodological difficulties, however their results were nonetheless favourable and enthusiastic.

Davis, Berenson, Steinglass, and Davis (1974) articulated the "adaptive consequences" model of alcoholism. Davis et al. (1974) clearly detailed a link between alcohol consumption and the social conditions which surround the behaviour by use of four case examples. The central thesis of this position was that alcohol consumption was associated with behaviours which were clearly adaptive in social situations, but which were somehow excluded from alcoholics repertoire of behaviour when not drinking (e.g., assertiveness, expressiveness, problem resolution, etc.). While the argument put forward by the authors was compelling and the treatment implications were clear, there were no results of treatment presented which employed the adaptive consequence formulation reported.

Some empirical support for family models of treatment was offered by Hedberg and Campbell (1974). In a study comparing behavioural family therapy with other individually oriented behavioural treatments including systematic desensitization, covert sensitization and shock presentation, the family approach was found to be the most effective method of therapy. The design included assigning 49 subjects to treatment groups and employed a goal attainment measure of success in which improvement was apparently ascertained through an interview with the patient, the patient's spouse and the patient's therapist. No statistical analyses were used to test for significant differences between treatment groups and it is not clear from the report how conflicting estimates of improvement between parties was handled. Results were based on a percentage of subjects either attaining their goals or improving substantially in relation to their goals. Trends in both outcome categories revealed that the family counselling treatment group was the most effective of the four treatments offered at the 6 month follow up assessment point.
Building on an earlier pilot work by Hunt and Azrin (1973), Azrin (1976) conducted a study comparing a community reinforcement procedure with an intensive inpatient hospital treatment program. The community reinforcement program was based on a social learning theory and included marital and family counselling as principal aspects of treatment. Described in some detail by Azrin, Naster, and Jones (1973), the marital therapy portion of treatment addressed all areas of the marriage. Built on the work of Stuart (1969), the procedure included maximizing things which were satisfying to each member of the partnership. This maximizing of satisfactions was done in the context of reciprocal satisfactions being received from a partner in a kind of "you scratch my back and I'll scratch yours" fashion.

Twenty men admitted to a hospital for treatment for alcoholism participated in the study. The men were matched into 10 pairs and each pair was randomly assigned to either the experimental community reinforcement or the individually oriented inpatient hospital treatment control group.

Standardized outcome measures were not used and procedures were difficult to follow. Apparently, interviews were employed at post-treatment and at a 2 year follow-up to ascertain drinking related criteria including how much drinking participants were engaged in, how much work they had engaged in, how much work they had missed and how much they were absent from home. However, there is no indication of pre-treatment assessment on these variables reported. Results were provided in terms of percentage comparisons and no statistical procedures were employed. Nonetheless, the results strongly supported the use of this procedure even at the 2 year follow-up when compared to the regular individual hospital treatment which was, unfortunately, only minimally described in the study.

The provision of marital treatment was an aspect of the treatment procedures employed in a study by Edwards, Orford, Egert, Guthrie, Hawker, Hensman, Mitcheson, Oppenheimer, and Taylor (1977). In this study 100 alcoholic married men were randomly
assigned to either a "minimal" or "maximal" treatment condition. While the minimal treatment group received a single session of advice, the maximal treatment group received an array of treatments which included conjoint sessions with husband and wife when appropriate. Unfortunately, the clinical aspects of the treatments were not detailed and therefore a clear understanding of what was done in the treatment is impossible. It seems clear that the maximal treatment was not particularly effective since there were no statistically significant differences between the groups observed at 12 month follow-up data collection occasion. An interesting feature which emerged from this research effort that seems to have relevancy to treatment was reported by Oppenheimer, Egert, Hensman, and Guthrie (1976) who concluded that regardless of treatment condition, marital cohesiveness was found to be the central variable which predicted positive treatment outcome.

Marital and family treatment for alcoholism was also reported in a clinical report conducted in Israel (Amir & Elder, 1978). Regrettfully, as in Edwards et al. (1977) it is impossible to discern from the report what the therapeutic procedures entailed. However, unlike Edwards et al. (1977), the outcome results of this treatment, which focused on the family and the community, appeared positive, though limited by a small sample size and poorly defined outcome criteria.

Steinglass, Davis, and Berenson (1977) and Steinglass (1979) reported on an innovative marital treatment study that built on the adaptive consequence model which was previously presented by Davis et al. (1974). The approach taken in this experiment was particularly innovative and controversial to many in the field because it included the provision of alcohol in an inpatient treatment setting. Recognizing that families of alcoholics were entirely organized around alcohol consumption, Steinglass et al. (1977) coined the terms "alcoholic systems" to describe the participants in the study.
While the original design of the study called for 40 to 50 couples and included a wait-list control group, clients proved to be difficult to recruit. Only 10 couples were eventually recruited for the study and all were desperate for a solution to their problems having long histories of previous treatment failure. Thus, the study was recast from a treatment outcome study into a clinical pilot project. The authors cited political difficulties with the Alcoholic Anonymous lobby, who took exception to the experimentally induced intoxication aspect of the treatment program, as the chief reason for the departure from the original study design. The treatment procedures included daily 90 minute multiple-couples groups led by two psychiatrists trained in family therapy. It is noteworthy that the two therapists varied in unspecified ways in their treatment approaches. The main consistent element of the therapy offered by these therapists was a common systemic theoretical approach that viewed alcohol intoxication as a functional aspect of couple interaction. Both therapists assumed that the drinking problem could best be understood by contrasting the drinking behaviour with "dry" phases of the couples' relationship. The ten subjects were divided into four groups because the treatment facility maximum was three couples. The research protocol was divided into three phases: an initial two week out-patient phase in which participants met for three sessions per week; a 10 week in-patient phase; and finally, a post-hospitalization three week out-patient phase consisting of two group meetings per week. Following these procedures groups continued to meet at six week intervals for a six month period.

Therapists observed the couples' interaction throughout the day and assessed their interactional patterns. Couples were encouraged to go about their normal routines being unrestricted by hospital demands including shopping and cooking meals, arranging recreational activities and determining sleeping arrangements.

A laudable design feature of the study was to employ standardized state of the art research instruments as outcome indices. This aspect of the research broadened the scope of outcome assessment to include individual symptomology and couple functioning as well as drinking behaviour.
The treatment effects were rather muted. Results indicated that one of the therapists seemed to be correlated with more improved functioning. Statistical analyses were not reported, but Steinglass (1979) noted that treatment effects were slight and nonsignificant. The nonsignificant treatment result was softened by the authors who pointed to the chronicity of the subjects' drinking problems. Nonetheless, the study offered compelling observations which lent support to an interactional view of alcoholism with clear treatment implications.

Paolino and McCrady (1976) provided a case report of an innovation in treatment that included the joint admission into hospital of both alcoholics and their spouses. This treatment approach was the topic of a pilot study reported by McCrady, Paolino, Longabough, and Rossi (1979). The study, which represented the first controlled study of joint admission, reportedly assigned 33 patients to one of three experimental groups. The reader is left confused as to how the random assignment resulted in a substantially uneven subject assignment to treatment groups. The 3 treatment groups were: (1) joint admission, in which the alcoholic's spouse lived in the hospital with the alcoholic. The couple attended couples group therapy conjointly and both attended individual therapy groups separately, (2) couple involvement, in which the therapeutic procedures were the same as the joint admission group except the spouse did not live in the hospital, and (3) individual involvement in which the alcoholic attended individual therapy groups but the spouse was not included in the treatment protocol. Like Steinglass (1979), this study included standard instruments measuring alcohol involvement, psychological disturbance and marital adjustment.

Despite a relatively small sample size and a corresponding lack of statistical power, the results of parametric and nonparametric statistics on the pretest and follow-up showed superior and comparable outcomes for the two groups which included the alcoholic and his spouse. Unfortunately, the treatment procedures of the groups employed in this study were
not made very clear however care was taken to provide regular supervision of the therapists. These results clearly supported the notion that marital and family approaches to the problem seem to be more effective than treatments that do not attend to these contexts.

As the 1970's drew to a close, family oriented treatment approaches to alcoholism seemed to be building a measure of empirical support for their application. However, there remained a clear need for further substantiation. Having documented and reviewed the many treatments available to alcoholics, Miller and Hester (1980) somewhat cautiously state that "systemic family treatment approaches seem to be a method deserving of further exploration in the treatment of problem drinkers" (p. 61).

1980 - 1986

The assessment of marital and family therapy as a treatment for alcohol dependency improved by the time Miller and Hester (1986) wrote their second major review of alcohol treatment studies. At the time of the second review, these authors had refined their assessment to include only marital therapy which was viewed as having been found to promote the maintenance of sobriety. Miller and Hester (1986) conclude that the "consistency of positive findings at short follow-up certainly warrants further investigation, and indicates that marital therapy is a worthwhile modality to consider for inclusion in alcoholism treatment" (p. 139). This improvement in the reviewers' assessment would seem to have been based upon the addition of two more well designed studies that added additional weight to the literature that had been accumulating steadily since the earliest studies first appeared.

O'Farrell, Cutter, and Floyd (1985) reported on a well designed study that compared individual outpatient counselling with two treatment groups that in addition to receiving individual treatment also participated in either behavioural marital therapy or an
interactional couples group therapy. Thirty-four subjects were randomly assigned to three
treatment groups. Established self report indices of marital functioning as well as
videotaped interactional tasks were employed as outcome measures in this study. Post-
treatment data were collected 12 to 14 weeks after treatment was initiated. No follow-up
data were reported at this time. The results supported the hypothesis that the behavioural
marital therapy was more effective on some of the marital measures than the interactional
couples therapy and the individual counselling treatment alone. No significant differences
between the interactional couples treatment and the individual counselling were reported.
However, the interactional treatment couples did improve in terms of their desired
relationship and positive communication while the individual clients in the control group did not.

The study results must be considered with some degree of caution. The sample size
was quite small (i.e., $n = 10$ to 12 per group) which limits the statistical power to identify
difference (Kasdin, 1986). In addition, the delivery of the interactional couples group
treatment was interrupted by a change in therapist two-thirds of the way through the study.
While the treatment procedures for the behavioural treatment were clearly spelled out
(O'Farrell & Cutter, 1984), the interactional marital treatment and the individual
counselling procedures of the comparison group were not specified in the report making
interpretation difficult.

The second important study in this time period was presented by McCrady, Moreau,
Paolino, and Longabough (1982) who reported the results of a four year follow-up of the
McCrady et al. (1979) study reviewed earlier. After reviewing the data collected four years
after the therapy had been completed, the authors concluded that the superior treatment
effects of the two versions of behavioural marital therapy (joint admission or outpatient)
over the individual counselling treatment control group in the earlier study had not been
sustained. This result was interpreted as indicating that marital therapy has an important short-term impact but not necessarily an enduring advantage over individual treatment.

The remaining studies reported prior to Miller and Hester's (1986) review did not contribute substantially to an understanding of the efficacy of treatment. A single case study of Relationship Enhancement therapy as specified by Guerney (1977) was reported by Waldo and Guerney (1983). The results were anecdotal with the authors reporting favourable outcomes of continued abstinence and improved marital relationship at a six month follow-up.

The remaining two studies published prior to 1986 reported on studies in progress. Zweben and Perlman (1983) described their research project design but had no results to report at the time of the article. Bennun (1985) provided case examples which supported both family problem solving and systems therapy, however these data were anecdotal in nature.

1986 - 1993

Several studies have been published after the 1986 review by Miller and Hester that contribute to the body of literature regarding family and couples treatment of alcohol dependency.

Extending the pilot work and case study published earlier (McCready, 1982; McCready et al., 1979), McCready, Noel, Abrams, Stout, Nelson, and Hay (1986) conducted a study in which 45 alcoholics and their spouses were randomly assigned to one of three outpatient behavioural treatments: (1) minimal spouse involvement (MSI) that required spouses to attend and observe the alcoholic's individual therapy, (2) alcohol-focused spouse involvement (AFSI) which included the teaching of skills to the spouse aimed at enabling better handling of drinking situations in addition to the treatment offered in the MSI.
condition, and (3) alcohol behavioural marital therapy (ABMT) that incorporated all the
skills taught in the MSI and AFSI conditions with specific behavioural marital therapy
interventions. Unfortunately, while brief synopses of the treatments are provided in the
report, there is no mention of them being specified in manual form. Recognized indices of
alcohol consumption and marital functioning were employed as outcome measures. While
all three groups improved to a statistically significant level, results showed few statistically
significant differences between the groups. The differences that did exist provided some
support for the view that the marital benefits of ABMT were more stable than the other
treatment groups in that they decayed at a slower rate and to a lesser degree. Again, a
relatively small sample size limited the statistical power of the study. Nonetheless, these
results suggest that a treatment built upon the premise that there is a reciprocal relationship
between drinking and family functioning results in a more lasting positive change than
treatments which do not recognize the salience of the familial context to recovery.

The results of the research presented by Bennun (1986) completed the study first
reported in Bennun (1985). While the study had sought to test the efficacy of the Milan and
systemic problem solving approaches in treating alcoholism, the focus on alcohol treatment
had been lost by the time of the 1986 report. Over the course of the study, a number of
subjects were included that were not experiencing alcohol problems. No reason for this
change in research procedures was provided. Methodological problems concerning
treatment implementation and standardization and the use of only a single index of alcohol
dependency and no measures of marital or familial functioning limit the utility of this
research. Consequently, while the study offered some support for the two systemic
approaches that were being investigated, lamentably their application in the alcohol field
was not advanced in any substantive way.
Zweben, Pearlman, and Li (1988) reported on the outcomes of a large comparative treatment project that contrasted a systemic marital treatment approach with a single session of advice counselling. Similar to the Edwards et al. (1977) study of "minimal" and "maximal" treatment reviewed earlier, alcoholics and their spouses were randomly assigned to one of the treatment groups. While a sample size of 218 couples began the study, 116 couples completed the ambitious project which included a pre, mid, and post treatment design, as well as 6, 12, and 18 month follow-up data collecting occasions.

The marital therapy in this study was not operationalized in manual form and only scant descriptions of the treatment is provided. The authors do note that the marital therapy was fashioned upon the adaptive consequence model of alcoholism (Davis et al., 1974; Steinglass et al., 1989), and that the advice counselling was patterned after the work of Edwards et al. (1977). An array of recognized alcohol measures and indices of marital functioning were employed to test whether eight sessions of marital treatment were more effective than a single meeting of advice counselling. Both groups improved to a statistically significant degree on the main marital measure over the course of the study, however, the clinical significance of the improvement is questionable and no substantive between group differences emerged.

Again methodological limitations of the study influence the interpretation. The chief concern regarding the treatment implementation expressed by the authors centered on the relatively short duration of the marital treatment. In this regard, Zweben et al. (1988) hypothesized that the treatment period may have been simply too short and consequently the treatment was too weak to actually make a difference. A second difficulty with the study was the fact that couples that entered the study scored in the satisfied range on the marital measures at pretest and consequently a ceiling effect on the measure likely precluded any possibility of positive treatment outcomes on the independent measure of marital functioning. In addition, the authors recognized the possibility of a placebo effect associated with the extensive researcher contact required by the data collection procedures.
Notwithstanding these issues, the results were essentially consistent with the study by Edwards et al. (1977) suggesting that a single one hour meeting of advice counselling was very effective and that marital treatment benefits could not be differentiated from the minimal contact group.

Chapman and Juggens (1988) reported on an experimental study of three treatment programs conducted in New Zealand. In this research, 113 alcoholics were randomly assigned to a six week inpatient program, a six week outpatient program or a single confrontational interview. Although the treatments were clearly oriented to the individual, spouses apparently participated in all the treatments in an unspecified manner. The treatment approaches were not put in manual form or standardized and were described as "eclectic." Outcome measures administered at pre-treatment and 6 month and 18 month follow-ups included alcohol indices as well as some psycho-social measures. While no statistical results of the psycho-social tests were included, it appeared that once again no significant difference emerged between the three treatment programs. The description of the study is somewhat scant. It is impossible to ascertain what role marital or family therapy played in the treatments by reading the report and it is unclear what the actual treatment procedures involved. In terms of treatment description, the authors noted that all treatments relied on suggestion, verbal persuasion, and "careful coercion" (p. 76).

The anecdotal results of a psychodynamically oriented married couples group were presented by Davenport and Mathiason (1988). The study did not include a comparison group nor recognized measurement indices. Consequently, while the research contributed by identifying the typical psychodynamic issues which emerged through the group process, the report did not extend the evaluation of the efficacy of this treatment approach beyond previous efforts (e.g., Burton, 1961; Cadogan, 1973; Corder et al., 1972; Ewing et al., 1961; Gallant et al., 1970).
A study that provided support for the viewpoint that important changes in interpersonal relationships are possible when working with individuals was reported by Sisson and Azrin (1986). In this investigation, two different treatments were offered to twelve women who were suffering negative consequences as a result of the alcohol abuse of a loved one. Nine of these women were concerned about their husbands, two were worried about male siblings and one was focused on her father. The procedures included the random assignment of the women to either a traditional program that included the provision of information regarding the disease concept of alcoholism and supportive counselling, or to a reinforcement training program that was aimed at teaching skills that would enable the subject to help get the individual they were concerned about into treatment. While the traditional treatment program stressed the view that alcoholism was the alcoholics' problem and counselled the women to distance themselves and emotionally withdraw from the relationship, the reinforcement training emphasized ways for the participants to maintain their emotional connection. The women were instructed in ways to motivate their loved one to treatment. The reinforcement training program employed experiential activities aimed at preparing these women to enact new behaviors with their husbands, brothers or fathers that help instill an interest in treatment. Unfortunately, the treatment procedures employed in this study were not detailed in manuals and only brief descriptions of the treatments involved are provided. Results were based on the women’s assessment of the drinking behaviours of the alcoholics and a simple accounting of how many of the alcoholics ended up in counselling.

The results of this study supported the reinforcement procedures. While none of the alcoholics whose partners attended the traditional program ever attended treatment, all but one of the alcoholics associated with the reinforcement procedures came for therapy. Additionally, the reinforcement group seemed to affect the alcoholics drinking behaviour in
a positive way, while the traditional group had no meaningful effect on the alcoholics' behaviours.

The study is tempered by methodological issues that include no articulation of treatment manuals, a small sample size, questionable random assignment procedures, and no recognized outcome indices particularly those focused on the effects of two treatments on the women who participated. The therapists were not described and the treatment procedure used in the traditional treatment group was not standardized or described. Finally, there was no mention of supervision or checks on therapist competency and adherence to treatment protocols. Despite these substantial methodological problems the study offers empirical evidence that the partners of alcoholics have some impact over their partners' drinking behaviour. As a result of this study, it appears that spouses can be more influential in promoting treatment for alcohol dependent family members than traditional approaches have assumed.

Support for the use of marital and family treatments for adult alcoholism was provided by Bowers and Al-Redha (1990). In this recent study, 16 couples, in which one member was alcoholic, were randomly assigned to either couples group therapy or to standard individual treatment condition. Couples were assessed prior to treatment and on 1 month, 6 month and 1 year follow-up occasions. The standard treatment was offered on an open-ended basis and included the formation of a therapeutic bond and an examination of areas in the client's life in need of change. The mean number of sessions was 7.43 and the average amount of time an individual spent in the treatment was 11.15 hours. The couples treatment began with an eight hour day long session which was followed by 8 sessions lasting 90 minutes each. The average amount of time for a couple in treatment was 19 hours. The couples treatment included role playing of life situations, communication training and experiential activities aimed at enabling the expression of feeling and assertiveness. Both conditions of treatment were administered by the same 2 therapists. Although the
treatments do not appear to have been put into manual form, a description of the couples treatment is apparently available from the authors.

Bowers and Al-Redha (1990) used indices of alcohol consumption, the marital relationship and social and employment functioning to measure the effectiveness of the treatment procedures. Regretfully only one of the marital measures employed was a recognized research tool and the remaining elements of the measurement battery were questionnaires developed for the study. The results showed that both treatment conditions had a significant positive impact on the drinking behaviour, but only the couples group maintained the changes on the later follow-up occasions. The same pattern of result was found with the marital measures. Significant treatment effects for both groups were noted at post-treatment for both treatments but these changes were retained by the couples group only at later data collection points. No significant differences were found with regards to the social and employment measures. The methodological limits to the study include a small sample size as well as the omission of treatment manuals and treatment implementation checks. Thus, it is difficult to be certain as to what occurred in either treatment. It appears that the treatment was not a behavioural marital treatment but beyond this, it is difficult to ascertain what theoretical model of therapy informed the treatment. However, the results do appear to support the use of couples treatment indicating strong treatment effects resulting from 8 sessions of couples group therapy.

The final piece of research reviewed in this section was provided by O'Farrell, Cutter, Choquette, Floyd, and Bayog (1992). In this report, additional 2 year follow-up results are provided for the study originally conducted by O'Farrell et al. (1985). At the time of the earlier investigation, behavioural marital therapy (BMT) had been found to be superior to either individual counselling or interactive marital therapy (IMT). The present study of O'Farrell et al. (1992) tempers the original findings with less impressive results. For the most part, the differences between BMT and the individual therapy group had not been
sustained at follow-up measurement points. This is to say that there was no significant
difference found between BMT and the no marital therapy group on measures of drinking
adjustment, negative consequences of drinking or husbands' marital adjustment. However,
the wives who attended BMT reported significantly higher levels of marital adjustment than
the individual comparison treatment group. Moreover, differences between IMT treatment
group and BMT highlighted at post-treatment were not evident at any of the follow-up
measurement points on any of the measures employed in the research. The main consistent
significant finding of the follow-up investigation showed that both the BMT and IMT were
comparable and resulted in fewer number of days that the couples were separated over the
course of the study when compared to the individual treatment group. While the authors do
report on non-significant trends in the results which favor BMT, the substance of these
trends is questionable considering that the study suffers from important methodological
limitations, including small numbers of subjects (n = 10-12 per treatment group), issues
regarding pre-treatment group comparability (e.g., the husbands' mean pre-treatment scores
on the marital adjustment measure were more than one standard deviation greater than the
mean score for the BMT husbands on the same measure), and finally, treatment difference
confounds (the BMT alcoholics were all required to take Antabuse as part of the treatment
procedures while others were not) reports of trends in the data appear unwarranted.
Nevertheless, the present report is important because it suggests that the two marital
treatment groups were more similar in their performance than previously thought and,
furthermore, the results indicate that without additional treatment, the individual
counselling approach resulted in follow-up outcomes equivalent to the marital treatments for
husbands but less effective outcomes for wives. The study also found that regardless of
treatment, the alcoholics with the most severe marital and drinking problems prior to
treatment had the worst outcomes in the two years after treatment.
Summary of Family Therapy Alcoholism Treatment Outcome Research

The literature regarding the application of family and couples therapy to alcoholism is for the most part positive and encouraging. Several comparative studies have been conducted probing couples formats of treatment. However, with the notable exception of Hedberg and Campbell (1974) there are unfortunately few well designed studies that have examined treatment formats that include the entire family with the adult alcoholic population. Nonetheless, the literature which does exist is predominantly favourable, however it is by no means definitive. This fact is reflected in the recent review of research on the prevention and treatment of alcohol-related problems by the Institute of Medicine (1992). In this review, family therapeutic approaches to alcohol treatment were again recognized as promising directions for further research, and it is concluded that "interventions to improve the functioning of couples and families may enhance favourable outcomes" (p. 12). The caution reflected in this conclusion is also evident in other reviews that have recently been published (Collins, 1990; McCrady, 1989; O'Farrell, 1992; O'Farrell & Cowles, 1989; Orford, 1990). While these reviews agree that over the past 15 years research has generated controlled outcome studies that have become increasingly rigorous, a measure of tentativeness is exercised in assessing the strength of evidence supporting the effectiveness of the family treatments for alcohol problems.

A careful examination of the literature reveals that it is accurate to note that the majority of the studies in the area of couples and family treatments for alcoholism support the implementation of behavioural marital and family therapy. Several authors have recently expressed concern that the other forms of marital and family therapy which have never been formally tested are benefitting from the overgeneralization of the research accomplishments of the behaviourally oriented models (Jacobson et al., 1989; McCrady, 1989; O'Farrell, 1992). As Jacobson et al. (1989) lamented, the family concepts most common in clinical practices are not derived from the behavioural models which have
empirically legitimized their application. Consequently, it is not surprising that the behaviourally oriented researchers have called for evidence from their family therapy colleagues and challenged them to generate their own empirical support. McCrady (1989) made this abundantly clear when she wrote:

clinicians working with these ... perspectives should be challenged to evaluate their work or it will be difficult for them to justify the continued use of untested practices when carefully evaluated and articulated procedures are available. (p. 180)

Studies have been conducted that have compared other forms of couples treatment to behavioural forms of treatment most notably Johnson and Greenberg (1985) and Snyder and Wills (1989). In the Johnson and Greenberg project, a marital treatment approach known as Emotionally Focused Therapy was found to be more effective than behavioural marital therapy in bringing about the marital improvement in conflicted couples. In the Snyder and Wills study an insight oriented marital therapy treatment was found to be as effective as the behavioural marital therapy in bringing about individual and marital change in conflicted couples. While studies such as these may soften the complaints like those expressed by McCrady (1989), the call for other forms of couples and family treatments to be empirically tested with the alcoholic population remains a pressing matter.

Couples and Individual Therapeutic Format Research

This study was designed to examine the efficacy of ExST and to probe the relative effectiveness of the treatment provided in two different formats (individual and couples). While the ExST treatment conditions share the same underlying treatment philosophy and technical range, they differ with respect to format (who is attending the therapy sessions). Clearly, a variety of therapeutic options are both constrained and enabled by the different treatment formats. However, in the ExST treatment conditions, differences arise as artifacts of the format of the treatment delivery as opposed to distinctions arising from contrasting therapy approaches. In previous research comparing individual treatments and marital treatments, researchers have compared one kind of individual therapy with another kind of
marital or family therapy (e.g., Barlow, Mavissakalin, & Hay, 1981). Results from this kind of research strategy, although helpful, are ambiguous with respect to the understanding of differences in treatment outcomes that are attributable to different treatment formats.

Comparative therapy studies are established on the premise that by measuring the treatment outcomes of contrasting therapy models, the scientific community can understand which of the treatment options under study result in what kinds of changes in the clients. This research approach is helpful in establishing which of the treatments being compared works the best for the population being investigated. Consequently, such a research approach can be used to compare one individual form of therapy with a couples form of therapy and can result in information pertaining to the two treatments of concern, however this strategy of research is limited with respect to what it can say about differences between individual and marital therapy formats. This limitation arises because the individual and couples treatments differ substantially in matters of treatment philosophy, theory, and technique, as well as format.

Recently, efforts have been made to tease out the differences between individual and couples treatment formats (Foley, Rounsaville, Weissman, & Chevron, 1989; Jacobson, Dobson, Fruzzetti, Schmaling, & Salusby, 1991; O'Leary & Beach, 1990). This has been made possible by comparing individual and couples treatment that share the same theoretical orientations and differ only with respect to the format in which they are implemented. This research strategy allows for comparisons of treatment formats which are not confounded by theoretical and practical differences, as would be the case if one type of individual treatment was compared to another type of marital treatment (e.g., gestalt therapy vs. structural-strategic). The following section reviews the research on therapeutic format that has been conducted.
Foley et al. (1989) conducted a pilot study in which 18 depressed patients who concomitantly complained of marital disputes were randomly assigned to either individual interpersonal therapy or conjoint marital interpersonal therapy. Patients were given 16 weekly sessions of treatment and outcomes were based on pre-treatment and post-treatment assessments. The measurement procedures employed included recognized research indices of depression, intrapersonal functioning, marital relationship and social adjustment. Therapists were well trained, and the treatments were conducted in accordance with treatment manuals which specified the therapy protocols. Treatment adherence and therapist competency was verified by expert raters.

The results of this study indicated significant improvement for both treatment conditions on the depressive condition and social adjustment, however there was no between group difference on these variables. While there was no significant change on the intrapersonal measure for either treatment, the results of the marital measures indicated that the marital treatment condition had in fact resulted in significantly better treatment outcomes on both the Locke-Wallace Marital Adjustment Test and the Affectional sub-scale of The Dyadic Adjustment Scale. In particular, couples in the marital treatment condition reported significantly higher levels of affectional expression and also greater levels of overall marital adjustment than did their individual treatment couples counterparts. A measure of caution is warranted with respect to the study. The sample size was small and consequently statistical power to identify differences was an issue, and a comparative control treatment condition was not included. In addition, there is no mention of the kind of statistical procedures which were employed and pre-treatment differences on the marital measures which may have existed may well have played a statistically significant role in the outcomes reported. For example, in the pre-treatment means on the Dyadic Adjustment Scale which are provided, only the depressed clients in the couples treatment condition fall in the distressed range of the instrument. Finally, a follow-up testing occasion would have been helpful to establish whether the between group differences were sustained over time.
Nonetheless, the study is exemplary with respect to the treatment implementation procedures that were used in that they are representative of the state of the art in therapy outcome studies. The results are best viewed with tentativeness but nonetheless support the view that the marital format performed better on the important dimension of marital functioning than did the individual treatment format.

Two other recent investigations have been reported that approximate this research approach (Jacobson, Dobson, Fruzzetti, Schmaling, & Salusley, 1991; O'Leary & Beach, 1990). Both comparative studies contrasted cognitive behavioural therapy (individual format) with behavioural marital therapy (couples format) with a third experimental condition in the treatment of depressed women. O'Leary and Beach (1990) noted that the therapies differ in terms of the technical emphasis they place on bringing about change. For example, while behavioural marital therapy works to decrease negative interactions in order to increase feelings of closeness, open sharing of thoughts and concerns and increase positive interchanges and problem-solving, cognitive behavioural therapy works on decreasing negative cognitive distortions and selective memories for negative events and increasing positive beliefs about self, relationships and the future. Nonetheless, in many ways these technical elements are a result of the opportunities available to the therapist that are attributable to the different treatment format. The two treatments share in common the same philosophical underpinnings and cognitive-behavioural theoretical orientation. In addition, both treatments view the therapist role and positioning the same way and both strive to generate therapeutic alliances with clients in a manner similar to one another. Accordingly, while cognitive-behavioural and behavioural marital therapies can be construed as different treatments, it can be argued that these studies extend the research on treatment format.
O'Leary and Beach (1990) presented the results of a research project that furthered a pilot study reported earlier (Beach & O'Leary, 1986). In this project, 36 maritally discordant couples with depressed wives were randomly assigned to either cognitive therapy, behavioural marital therapy or a wait-list control group. The same therapists provided both the individual and the marital treatments and all therapists provided both the individual and the marital treatments and all therapists received regular supervision and were judged by experts to be competent in both treatment formats. The treatments were 16 weeks in duration and were punctuated by pre-treatment and a post-treatment data collection occasions. A one year follow-up was also conducted. A limited number of standard measures were employed in the study, including the Beck Depression Inventory and the Dyadic Adjustment Scale. The results of the study showed that both treatment formats were significantly effective in reducing level of depression at both post-treatment and follow-up. The marital index suggested that the individual treatment did not affect the marriage, however, the marital treatment significantly raised the level of marital satisfaction at post-test. Follow-up data affirmed that this important treatment difference was durable.

The study was limited by a small sample size. It also suffered from other methodological problems including no clear articulation of the treatments provided in manual form and a failure to implement a means of verifying levels of treatment adherence and therapist competency over the course of the project. Nonetheless, the results appear persuasive and closely resemble the kind of treatment format effects reported by Foley et al. (1989) and support the use of marital treatments when symptoms are associated with marital discord.

The last study conducted to date probing the treatment formats was conducted by Jacobson et al. (1991). In this investigation, 72 depressed women and their spouses served as subjects and were randomly assigned to either an individual treatment format (cognitive-behavioural therapy), a couples treatment format (behavioural marital therapy) or a
treatment condition that offered both individual and couples treatment sessions (combined therapy). Marital discord was not a prerequisite for subject participation in this investigation as it was in the projects of Foley et al. (1989) and O'Leary and Beach (1990).

Jacobson et al. (1991) exemplified a well-executed psychotherapeutic outcome study. Therapists were well trained and carefully selected by raters employing standard criteria. Therapy manuals were employed for the individual and marital treatments and the therapy was monitored throughout the inquiry to ensure both treatment manual adherence and therapist competency. The same therapists provided all three treatments which were 20 sessions in duration. Recognized research indices were employed to measure depression and marital satisfaction at both the pre-treatment and post-treatment occasions.

In Jacobson et al. (1991), the 3 treatment formats were contrasted in terms of how well they performed with maritally distressed and maritally non-distressed clients. As a consequence the results are somewhat complex. While all treatments led to significant reduction in depression severity regardless of pre-treatment levels of marital satisfaction, the couples treatment did not perform as well as the individual treatment format in cases where marital distress was not reported and this difference was statistically significant. In cases of marital discord the individual and couples treatment formats were comparable in their effectiveness in terms of the depression index and there was a trend for the combined treatment to fare more poorly than either the individuals or couples therapy.

The results derived from the marital measures were somewhat mixed. Two kinds of data were generated, one kind was based on a self report questionnaire, and the other used a marital interaction coding. The self report measure results indicated that all treatment groups evidenced improvement in marital satisfaction, however among the maritally distressed sub-sample only the marital treatment format led to statistically significant improvement. It is interesting to note that among the non-distressed sub-group the combined treatment format was the only treatment format offered that posted positive
statistically significant change. The quality of marital interaction, a direct observational source of data, failed to reflect any significant differences between treatment groups, however it is noteworthy that the combined treatment was the only treatment format that had any significant impact on the couples behaviour both reducing husband and wife aversive behaviour and significantly increasing wife's facilitative behaviour.

The authors of the study spent considerable time speculating about why the combined treatment format which was a mix of individual and couples sessions did not produce the largest treatment affects as they had anticipated. Several explanations were offered regarding dosage and therapist competency behaviour, however one is left wondering about the degree of continuity offered by this format. It appears that there was not a manual prepared for this treatment condition and is not clear as to how the individual and couples treatments were wed. Judging by the methods used in measuring treatment adherence, it appears that in fact the therapists were expected to keep the individual sessions distinctly different from the couples meeting. This procedure casts doubt regarding the level of technical synthesis and theoretical integration present in the combined treatment that is required to bridge the individual and couples treatment traditions.

The results of this study are, in many ways, similar to the previous two studies on therapy format and support the notion that a couples therapeutic context is the treatment format of choice in situations where marital distress is present. This, of course, makes intuitive sense since the couples problems can no doubt be seen as contributing to the maintenance of the problem, compounding the individual's difficulty and perhaps impeding therapeutic movement.

More research in this area is required. Interpersonal and cognitive-behavioural therapies have been investigated in this way, however the level of theoretical integration in both cases appears to leave room for improvement by other treatment approaches. All of the three studies conducted to date on treatment format have focused on the symptom of
depression. Additional work is necessary to explore whether or not these results are particular to this type of client or generalize to other problems. The present research initiative contributes to this literature by investigating an integrative experiential and systemic therapy in the treatment of alcoholics implementing the therapy in an individual and a couples treatment condition.

**Experiential Systemic Therapy Synopsis**

This section summarizes the ExST model employed in this research. A thorough overview of the treatment is beyond the scope of this report because this level of specification would cause the document to be prohibitively long. As mentioned earlier, a manual which articulates and operationalizes the therapy has been written and is available upon request. The following section is a brief review of the treatment which will enable a cursory understanding of the treatment.

In the domain of psychotherapeutic approaches, the ExST model of therapy is located at the confluence of the experiential and systemic streams of practice (Friesen et al., 1989). It is the infusion of the philosophical, theoretical and technical elements of these two rich traditions of treatment which gives rise to the uniqueness of the model.

From the time of its inception, the ExST model has sought to integrate as wide a breadth of methods of practice as possible. This has been done in order to provide as great a range of technical options to therapists while remaining consistent with the ExST theory. ExST assumes that the key to the therapeutic enterprise rests in the creativity, spontaneity and ingenuity of the therapist and consequently, the model empowers clinicians to trust themselves as the journey with clients unfolds.

ExST understands therapy as a culturally sanctioned change ritual or rite of passage (Koback & Walters, 1984). As such, "therapy" is seen as a symbol of healing and change and
the therapist is viewed as the symbolic facilitator of the ritual itself. Consequently, all action related to the treatment and all behaviours connected to it are views being imbued with symbolic significance related to constructs of healing and change.

In keeping with the underpinnings of other experiential forms of treatment, ExST assumes that clients require therapeutic experiences as opposed to a therapeutic explanations. Seeking to make the therapeutic experience as profound and meaningful as possible, ExST therapists attempt to generate with their clients a therapeutic environment that is warm, caring and respectful and also unique from normal everyday experiences.

Action-oriented therapeutic activities that engage the entire being of the client are evoked whenever possible in this treatment. As a result, the therapy takes on a quality which is much more than simply a verbal discourse about ideas, feelings and facts. Therapists seek to heighten client awareness of their ExST model using the condition in as intense a way as appropriate in order to perturb changes which spontaneously arise out of the client's wealth of previously untapped potential. In this way, moments of change and transformation are generated in this here and now therapy. Symbolic representations of troubled relationships are often evoked in ExST (Friesen et al., 1991). This procedure has been recognized as a potent way of approaching entrenched problems. Indeed, Selekman (1993) noted that symbolic evocation was:

... useful with families that have been oppressed by a symptom for a long time, have not responded well to the basic Solution-Oriented approach, and are in the same or worse categories. (p. 148)

In particular, the symbolic evocation of alcohol in the therapeutic context has been found to be an effective way of helping alcoholic and other family members transform their relationship to the addictive substance (Todtman, Friesen, Newman, & Grigg, 1993).
The ExST model views relationships as the bedrock of human existence and perceives individuals as inseparable from the webs of connection which contextualize behaviour. Problems are understood as relational difficulties which are characterized as rigid, repetitive, and restrictive patterns of interaction that dominate people's lives. The process of change is a process of emancipation from such dominating relationships, be they with "the bottle" or work, a partner or family member.

The therapeutic venture is conceived as a collaborative process shared mutually by therapists and clients. Therapists act as benevolent companions with knowledge of the territory being traversed. However, it is the client's experiences and needs which ultimately guide the therapeutic journey on the path which is taken and therapists put their trust in the developmental impetus which motivates client's participation in therapy.

As mentioned in an earlier section, ExST is an integrative model that can be applied in a variety of treatment contexts including individual, marital and family therapy. For the purposes of this study, the individual and marital formats of the therapy were employed and constitute different treatment conditions. The essential difference between the two formats of ExST is the constitution of the therapeutic system (i.e., the spouse either attends meetings in the marital format or does not attend meeting in the individual format). Process and content differences between the two formats arise as a consequence of the therapeutic system composition since the philosophy/theory and technical elements which drives the ExST treatment remains constant across both treatment condition.

Rationale for ExST Development

The need for an integrative model of clinical practice was the central reason for the development of the ExST model. In a survey of therapists conducted prior to the establishment of ExST, Geiss and O'Leary (1981) found that over 80% of the clinicians that
responded to their questionnaires reported that they were eclectic in their approaches to problems. It seemed that the theoretical models which guided practitioners were restraining clinicians and were not addressing the clinical requirements of most therapists. Accordingly, clinicians were going outside of their theoretical orientations in order to meet the needs of clients. ExST aimed to provide an integrative theoretical framework which would embrace as wide a spectrum of technique as possible and thereby provide a theory of practice which would not restrict therapist efforts.

At the time that ExST was being generated, the alcoholism treatment field seemed fragmented. Many models of therapy had been introduced which viewed the problem of alcohol dependency from a particular point of view (see Biopsychosocial section pg. 15). The developers of ExST sought to provide a model of therapy which would bridge the various perspectives by employing a biopsychosocial model of alcoholism as a foundational aspect of its formulations. Consequently, a systemic perspective which included an appreciation of the physiological and bio-chemical issues of alcoholism as well as an understanding of intrapersonal, marital, family and social factors came to be a crucial aspect of ExST.

Another area of fragmentation addressed by the ExST model pertains to therapeutic modality specialization. Traditionally, those who did individual therapy did not do group therapy or marital and family therapy. Indeed, the training contracts which provided the clinical environment for the generation of ExST were geared towards this kind of specialization. However, it soon became evident that for practical reasons, the specialist model of treatment delivery was not appropriate for the treatment milieu in which many of the therapists in training performed their duties. A model which was versatile in terms of its application in a number of therapeutic situations including individual, couples and families was required to meet the clinical needs of the therapists. Consequently, the developers of ExST sought to integrate individual practice with a family systems theoretical orientation.
A final area of integration intrinsic to ExST is the model's flexible means of problem formulation and treatment planning. The spectrum of difficulties which confront recovering alcoholics include behavioral, affective, and cognitive problems. While many models of therapy address one or two of these problem areas directly, ExST concerns itself with all three domains of experience within its theoretical formulation. Accordingly, the model can be aptly applied to the wide array of changing problems which clients present as they move through the recovery process. Additionally, the readiness of alcoholics to address the many problems in their lives varies dramatically client to client. For some, breaking the behavioral pattern of alcohol consumption must be the main focus of the treatment. For others, moving swiftly to resolve issues of profound childhood trauma is the central concern. Accordingly, it appeared to the developers of ExST that a model of treatment was required that assessed the needs of each client and, imbued with considerable flexibility, addressed the unique problems of the client with an individualized treatment plan.

The integrative quality of ExST is the sine qua non of the therapeutic model. The impetus to synthesize fragmented aspects of clinical practice provides the model with a unique position in the alcohol treatment field. With its commitment to build bridges rather than fences and to regard matters of health in a holistic fashion, ExST has been developed to offer therapists a way of working effectively to help clients establish more harmonious relationships in the many domains of their lives.

It is important to acknowledge that the author of the present dissertation is one of the developers of the ExST approach. As a clinician, and the author is committed to working with clients using the ExST model as his guiding theoretical orientation. While every effort has been made to ensure that no researcher bias has resulted from the clinical allegiance of the author, it must be recognized the ExST treatment is dear to the author's heart.
Summary of Literature Review

This review has examined the outcome research pertaining to couples and family therapy approaches to alcohol. The majority of the well designed studies on marital and family treatments for adult alcoholics have investigated variations of behavioural couples therapy and the body of results has shown that effecting change at the level of the marital relationship is an important goal of treatment. Systemic treatments have for the most part not been placed under empirical scrutiny despite a proliferation of these models and a popularization of their perspectives. In addition, new couples and family treatments which have emerged since second-ordered cybernetic theory became the dominant perspective in the couples and family field are in need of empirical validation.

The literature review has also considered recent research focused on exploring the treatment efficacy of individual and couples formats of therapy. These studies seem to suggest that while the individual and couples formats perform comparably in terms of symptom reduction, the couples treatment format has the added benefit in bringing about positive relational change in distressed couples that is most pronounced at follow-up measurement occasions.

There remains a great deal of work to develop more effective means of helping alcoholics and their families negotiate the many obstructions on the road to recovery. In this connection, Jacobson et al. (1989) called for therapeutic innovation in the area of alcoholism treatment sighting the lack of consistent results demonstrating the superiority of one treatment over another. For some, the search for a single approach to the problem of alcohol dependency seems a misguided venture. Miller and Hester (1986, 1989) essentially agree with Jacobson et al. (1989) and put forward an argument for the need to match clients with appropriate treatments based on careful assessments.
The matching argument asserts that particular treatments may be more effective than other approaches given the particular client needs at any moment in time and that treatment potency can be optimized by carefully matching client needs with the application of the appropriate treatment. This thinking is similar to the notions that underlie the IPTC model of Pinsof (1983). The main difference in the thinking however, is that unlike Miller and Hester (1986, 1989), Pinsof (1983) believes that the same therapist can match the client's needs with different treatments when the therapy is based on both an assessment of the problem and the therapeutic model which is most appropriate at the time. Similarly, the ExST model, with its emphasis on therapist creativity, assumes that the therapist can individualize the treatment procedures to match the unique needs of each client.

The ExST model presently under investigation is a response to Jacobson's (1989) call for new treatments. Because of the integrative qualities of ExST, treatment can be offered in a variety of ways including individual, couples, family and group formats. ExST also allows for the utility of a broad spectrum of techniques from which therapist may choose to meet the changing needs of each client. Consequently, ExST is meant to be a flexible approach to treatment that can be adapted to fit the requirements of different clients.

The need for further research in the area of alcohol dependency that examines the efficacy of a new approach to treatment and explores the effects of individual and marital formats of this approach has been highlighted. The following section articulates the hypotheses which have been formulated for empirical scrutiny.

**Research Hypotheses**

The following research hypotheses have been formulated to reflect the intent of the research as articulated in the research questions that appeared earlier in this document. The hypotheses are focused on the differential treatment efficacy of ExST and SFT, and the
differential treatment format efficacy of ExST-I and ExST-C. The hypotheses are stated in directional terms that favor ExST and the couples format.

**Hypothesis 1**

The first hypothesis of this study is focused on the differential treatment effects of the therapies under study and it is: When compared to the families in which the alcoholic father completed SFT, the families in which the alcoholic father completed ExST will report significantly greater improvement at post-test on measures contained in the ecological assessment package employed in the study.

**Hypothesis 2**

The second hypothesis of the study centers on the post-treatment and follow-up differential treatment effects of the two formats (individual and couple) of ExST under study and is: When compared to the families in which the father completed ExST-I, the families in which both father and mother completed ExST-C will report significantly greater improvement at post-test and/or follow-up as measured by selected instruments in the ecological assessment package used in the study.

The two hypotheses will be then broken into sub-hypotheses related to the different family members and operationalized in terms of the specific instruments in the ecological assessment package used for the analysis at the conclusion of the following chapter.
CHAPTER 3: METHODOLOGY

Research Design

The investigation used a mixed model experimental design: three groups by three occasions. The design is presented below in Table 1 using the notation given by Stanley and Campbell (1963).

Table 1.

Schematic Design of the Study

<table>
<thead>
<tr>
<th>Randomized Groups</th>
<th>Pre-test</th>
<th>Treatment</th>
<th>Post-test</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>R₁</td>
<td>0₁</td>
<td>X₁</td>
<td>0₂</td>
<td></td>
</tr>
<tr>
<td>R₂</td>
<td>0₃</td>
<td>X₂</td>
<td>0₄</td>
<td>0₅</td>
</tr>
<tr>
<td>R₃</td>
<td>0₆</td>
<td>X₃</td>
<td>0₇</td>
<td>0₈</td>
</tr>
</tbody>
</table>

R₁ = Experimental Group 1  X₁ = SFT
R₂ = Experimental Group 2  X₂ = ExST-I (Individual format)
R₃ = Experimental Group 3  X₃ = ExST-C (Couples format)

As revealed in Table 1, participants were randomly assigned to one of the three levels of the independent variable, treatment. Two of the three treatment groups provide forms of Experiential Systemic Therapy (X₂, X₃), with the third group implementing the Supported Feedback Therapy (X₁). Participants were also randomly assigned to one of the cadre of therapists that were involved in the provision of the treatments. The dependent measurement variable occurred on three occasions: pre-test, post-test, and follow-up.

In the original design of this investigation, an ExST family treatment group and a wait-list control group were included as treatment conditions. In the early stages of the
project, the family treatment group was dropped from the design in the early stages of the project when the difficulty of executing the design was realized. However, the wait-list control group was replaced by the SFT comparison treatment group at the last possible moment. Just prior to data collection, it became evident that the wait-list control group was not a viable option. Clinic discomfort with the wait-list group, and anticipated client reluctance to accept this treatment option necessitated the implementation of a comparison treatment. While the wait-list control group would have been preferable from the perspective of determining the efficacy of ExST and its treatment formats by controlling for testing variables, the pragmatic alternative of a comparison treatment group was the only available alternative. Although the implementation of a known comparison treatment group such as BMT would have been the preferred option, time constraints precluded this choice. Accordingly, the SFT model was generated, operationalized in manual form and instituted as the comparison treatment condition in this study.

Supported Feedback Therapy

This treatment condition was developed after it became clear that a wait-list control group was not a practical alternative for the research study. The SFT treatment condition generated and operationalized in manual form by Grigg et al. (1989), was meant to be a quasi-treatment and control group. In order to be suitable for implementation, the treatment had to offer enough therapeutic qualities that it would be acceptable to the participants, and at the same time control for some of the variables that would have been controlled for by a wait-list group. Accordingly, SFT coupled the process of weekly self-monitoring on alcoholics that was to be done by all research participants with regular (weekly or bi-weekly) meetings with a therapist. A number of wall charts were devised which transferred the weekly monitored behaviour contained in the Weekly Situations Diaries (WSD) onto a series of graphs (a copy of the WSDs completed by fathers and mothers in this study and samples of the charts can be found in Appendix C). In this way,
the behaviour monitoring information recorded each week by the alcoholic was shifted onto charts which revealed the alcoholic's life process and provided a focus for the therapists and clients. The areas of concern covered in the self-monitoring process included alcohol, self, marriage, family, friends and work.

The SFT model is built on a caring, warm, non-judgemental and supportive therapeutic relationship based on the work of Rogers (1951, 1961). The focus of the therapy was on charting the previous week(s) and examining and learning from the feedback that was available in the charts. As a result, the therapy was oriented in time to the present and the near past and the future was meant to be de-emphasized. Therapy meetings were expected to accent the client's personal responsibility for recovery and whenever possible, were designed to be conducted on a bi-weekly basis.

With this treatment protocol, the SFT condition was conceived of as an elaborate quasi-control group at the time of its inception. By offering contact time with therapists, SFT was thought of as controlling for the portion of therapeutic improvement attributable to the participants' involvement in therapy. In addition, the SFT treatment condition was meant to control for changes in clients associated with the increased attention connected to their involvement in a research study. Thus, it was hoped that the SFT comparison group would control for bias engendered by the measurement of participants with the extensive set of questionnaires included in the ecological assessment battery used in this study.

The SFT treatment was designed to systematically contrast ExST in a number of critical therapeutic dimensions. While ExST takes an unstructured creative approach to each session, SFT follows a predictable structured session procedure. Accordingly, ExST treatments are highly individualized and tailored to fit each client's particular needs and SFT treatments are relatively uniform and consistent regardless of specific client differences. The two therapies differ with respect to their temporal orientation and intensity level. Unlike ExST, which is a very intense here-and-now focused treatment, SFT maintains a low level of intensity and largely aims at learning from the there-and-then events of the recent
past. The ExST model is an experiential form of therapy which is deeply symbolic in its implementation, and built upon professionally intimate therapeutic relationships with clients. In contrast, the SFT model is a cognitive-behavioural form of therapy which is very literal and concrete in its procedures, and oriented to more distant therapist and client relationships. Consequently, SFT can be seen as a carefully crafted comparison treatment which differs from ExST in a variety of salient therapeutic features which allows for the testing of important components of the ExST approach.

Family Inclusion Characteristics

One hundred and fourteen families were screened for participation in this study. The families were recruited for the project from a number of sources. Many clients were identified through the normal client intake procedures at the participating alcohol and drug treatment agencies. Other clients responded to presentations at in-patient residential treatment programs or were sent to the project by a network of referral sources. Still other participants were self-referred to the project, responding to the media attention in newspapers and on radio and television that the project received. In order for families to be screened for the research, they had to meet the following inclusion criteria:

(1) the fathers had to be struggling with alcohol dependency problems and had to have consumed alcohol within the last 3 months to be considered eligible,
(2) mothers had to have no reported dependency problems within the last 5 years,
(3) the couple had to be complaining of marital distress but still living together and stating that they valued the preservation of the relationship,
(4) the couple had to have been living together in either a marriage or common-law situation for a minimum of 1 year,
(5) The couple had to be willing and able to participate in marital therapy should they be assigned to this treatment condition,
Families had to include at least one child either living at home or in regular contact with the family and all children above 9 years of age were asked to participate in the project.

Remarried or blended families were welcomed into the project and the children in the present families could be the offspring of either parent.

Participating families that met the inclusion criteria above were excluded from the study at the point of screening if one of the following exclusion criteria were evident:

1. The father's alcohol problems was not severe enough and scored below the critical cut-off score of 5 on the Michigan Alcoholism Screening Test (MAST) developed by Selzer (1971),
2. The mother's alcohol use was too severe and she scored greater than the critical cut-off score of 4 on the MAST,
3. The couple's level of marital distress was negligible with both members of the relationship scoring above the value of 99 on the Dyadic Adjustment Scale (Spanier, 1976),
4. A severe psychiatric disturbance was evident in the screening interview and the father or mother scored exceptionally high on either the psychiatric or depression sub-scales of the Symptom Checklist-90 Revised (Derogatis, 1983).

Family Description

Considerable information about the 114 families that entered the study was generated at the time of screening. The following section describes the families in terms of profiles of the family, alcohol consumption, and past treatment.
Family Profile

The participating families ranged in size from families with one child to families with five children. Fifteen families or 13.16% of the sample had only one child. The largest number of families of the participants had two children \( (n = 56 \text{ or } 49.12\%) \); however, a sizable portion of the sample had three children \( (n = 33 \text{ or } 28.95\%) \). Only a small number of families had four children \( (n = 7 \text{ or } 6.14\%) \) and even a smaller proportion of participants had five children \( (n = 3 \text{ or } 2.6\%) \).

The fathers were, on average, in the middle years of their lives \( (\bar{x} = 39.69 \text{ yrs., } SD = 8.73 \text{ yrs.}) \) however, the ages of the fathers ranged from as high as 70 in some cases to as low as 26 in others. As a group, the mean age of the mothers was in the late thirties \( (\bar{x} = 37.58 \text{ yrs., } SD = 8.87 \text{ yrs.}) \) and like their male partners, ranged considerably in age with the oldest wife being in her 66th year of life and the youngest being 21 years of age.

The average ages of the children in these families have been calculated in terms of birth order. The average age of the 114 first born children in this study is in the early teen years \( (\bar{x} = 13.86 \text{ yrs., } SD = 8.22 \text{ yrs.}) \), and their ages ranged from 37 years to only 6 months of age. The 99 second born children were living in the participating families and were on average just shy of the teen years \( (\bar{x} = 10.82 \text{ yrs., } SD = 7.59 \text{ yrs.}) \), again the range of ages was considerable (31 yrs. - 6 months). The 43 third born children living in the participating families were averaged as a group in the 9th year of life \( (\bar{x} = 9.44 \text{ yrs., } SD = 7.78 \text{ yrs.}) \), but varied considerably in years of age with the youngest again only half a year old and the eldest being 31 years of age. As a group, the 10 fourth born children were somewhat older than the third born children owing to the fact that fewer younger families participated with this number of children \( (\bar{x} = 11.1 \text{ yrs., } SD = 8.28 \text{ yrs.}) \). Only three families in the study had five children and were somewhat mature in age. The fifth born children group were on average
the oldest (\( \bar{x} = 15.0 \text{ yrs.}, \ SD = 7.81 \text{ yrs.} \)) with a somewhat reduced range of ages, with the oldest fifth born child being 20 and the youngest being 6 years old.

In 79.8% of the families, the parents were legally married (\( n = 91 \)). In the remaining 23 families or 20.2% of the sample, the parents were living in a common-law situation. For 67% of the husbands and 69.4% of the wives, this marriage was their first and only marital relationship. Another 24.1% of the men and 23.4% of the women in this study had divorced and now remarried their present partner. In terms of previous marital relationships, 22.8% of the husbands and 23.7% of the wives had been married only once before. However, 7.0% of both husbands and wives had been married twice before the present relationship and a small fraction, .9% of the spouses, reported three previous marriages. The average number of years that the couples had been living together was considerable (\( \bar{x} = 11.83 \text{ yrs.}, \ SD = 7.94 \text{ yrs.} \)) and ranged from as short a duration of 6 months to as long a duration of 31 years together.

The majority of fathers in this study had some form of employment with 65.7% of the fathers reported having full employment and another 5.6% of the participating fathers employed on a part-time basis. Nonetheless, almost one quarter (24.1%) of the fathers in this study reported being unemployed at the time of their involvement in the project.

The employment status record of the mothers in the study again showed that the majority of the women were working. Almost half of the women (46.9%) reporting having full-time jobs and close to another third (29.2%) reported being involved in part-time work. Unfortunately, many of the wives (17.7%) reported that they were unemployed and were presently seeking work.
With respect to total family income, the majority of the participating families would seem to have been earning amounts that would place them in the middle class. Of the families, 64.3% indicated making a joint family income ranging from $20,000.00 to $59,000.00 yearly; however, some families in the study were clearly struggling financially with 17.6% of the sample earning below $19,000.00 per year. A smaller percentage reported family incomes were considerable with 15.2% of the participating families earning over $60,000.00 per year.

Finally, it should be reported that the majority of the participating families were predominantly white. Ninety-seven percent of the fathers and mothers were Caucasian. Of the remaining sample, 2.7% of the husbands and .9% of the wives were from the first nations and .9% of the fathers and 1.8% of the mothers were of Asian descent.

Alcohol Consumption Profile

Of the 114 alcohol dependent men participating in this research, 92.1% believed themselves to be dependent on alcohol and 83.3% were convinced they could not drink alcohol in a controlled fashion. Alcohol had been a problem for a considerable length of time and 78% of the men indicated that drinking had been of difficulty for more than eight years. All but 9.9% of the men had tried but failed to stop drinking in the past. In fact, 35% of the men in this study reported having tried to stop drinking on more than 10 occasions. Of the father participants, 53% reported marked signs of tolerance to alcohol and 72.3% indicated that they frequently drank until they were intoxicated.

Alcohol played a major role in the lives of the fathers in this investigation. In fact, almost half (45.6%) reported that the longest duration of time they had gone without consuming alcohol was less than one week. Only 3.5% of the men in the sample reported having successfully stopped drinking for more than one year. Of the men in the study, all but
1.8% had been engaged in alcohol dependent drinking within the last 3 months and in these few cases, the period of abstinence had been imposed on the participants as a consequence of incarceration.

In terms of drinking pattern, 59 of the fathers or 51.75% consumed about the same amount of alcohol on steady daily basis. The remaining 55 fathers or 48.25% of the sample, had a pattern of alcohol misuse which was less predictable, occurring on a binge basis. In this pattern, periods of relative little or light alcohol use would be broken up by episodic bouts of very heavy alcohol use.

The context of the fathers' drinking varied. Many of the alcoholics in this study preferred to drink at home (48.5%) and frequently alone (60.0%). Others, however, drank outside of the house in bars, cars and other places (51.5%) with a variety of other people (40.0%). These other people were typically friends (77.2%) and rarely their spouses (45.5%). In fact, 29.7% of the men reported that they never drank with their wives and only 6.9% indicated that they frequently consume alcohol with their partners.

Despite efforts to keep alcohol out of their places of employment, alcohol use had a deleterious effect on the occupational lives of the participants (62.5%). Over half of the sample (52.5%) reported having missed work due to alcohol use and only 44.6% felt certain that they had not lost a job due to alcohol problems.

With respect to their involvement with medical facilities as a result of their alcohol problems, over half the sample (51.5%) had gone to see a doctor in this connection. In addition, 46.5% of the fathers in this study had caused themselves bodily harm as a result of drinking. A total of 13.9% of the sample had been hospitalized due to alcohol consumption, and another 12.9% had gone to emergency wards with alcohol related medical concerns.
Ambulance services had been provided to 5.9% of the sample at one time or another due to their problem with alcohol dependency.

Legal problems and contact with the police are often associated with drinking problems and the present sample was consistent with this relationship. One third of the fathers in this study (33.7%) had been arrested for drunken and disorderly conduct. Half of the sample (50.5%) had been arrested for driving while intoxicated. Only one third of the men in this study had never been arrested, and only 36.6% had never been convicted of a crime related to their drinking. In point of fact, 11.9% of the men had been convicted for their drunken and disorderly conduct and 46.5% had been criminally convicted of driving while under the influence of alcohol. Additionally, 22.8% of the sample reported that they had been convicted of some offense that was directly connected to their alcohol problems.

Interpersonal conflict which escalates to levels of verbal and/or physical abuse is often a problem in which alcohol abuse is implicated. The vast majority of the men in this study reported heated verbal fighting with their spouses and 35.8% of the alcoholics reporting having physically fought with their partners while intoxicated. Over half the men (55.7%) said they had been in verbal quarrels with relatives (sons, daughters, partners, etc.) but this had deteriorated to physical abuse for only 15.5% of the sample.

Verbal fights with friends were noted by 55.9% of the men in this research and actual physical conflict with friends occurred for almost one quarter of the men (24.7%). In addition to friends, over half (56.8%) reported verbal fighting with other people and these conflicts deteriorated into physical fights for 37.8% of the men participating in this study.

Many of the alcoholic participants in this study came from family lineage's that had alcohol problems running through them. For the alcoholic participants, 9.1% reported that their maternal grandmothers had alcohol problems and 23.7% indicated the same for their
maternal grandfathers. With respect to paternal grandmothers, 14.9% of the men noted theirs had a drinking problem and 22.8% reported that their paternal grandfathers also struggled with alcoholism. The parents of the alcoholics in the study often seem to have had their own difficulties with alcohol. Close to a third (28.7%) indicated that their mothers had a drinking problem and well over half (62.2%) identified their fathers as having been alcohol dependent. The uncles and aunts of the men in this study were also identified as frequently having alcohol problems. Alcohol dependency was noted by participants’ mothers’ sister (15.2%) and for fathers’ sisters (15.1%). Even more pronounced, the participating alcoholics noted many alcohol problems in their mothers’ brothers (44.3%) and their fathers’ brothers (33.0%). With respect to their own siblings, over one quarter of the alcoholic subjects (26.7%) recognized their sisters’ alcohol problems, and almost half (49.1%) felt their own brothers had significant troubles with alcohol.

Previous Treatment Profile

The final piece of information pertaining to the alcoholics participating in this study pertains to treatment. Fathers were asked to provide an accounting of their past therapeutic efforts and to specify their goals for the therapy they were about to commence. The majority of men had previous treatment histories, with only 27.4% of the participants having reported that they had never received treatment. Over one quarter of the sample had attended counselling sessions for emotional and/or personal problems and 61.9% of the men had been to treatment for their alcohol problem prior to their involvement with the present investigation. Regarding the past treatments that the participants had received, 25.4% of the men had used detox services, 34.2% had spent time in residential, in-patient treatment centers, and another 35.1% had tried out-patient counselling.

The treatment goals that the men maintained for themselves with respect to alcohol use varied somewhat, however, most (78.4%) were committed to trying to establish lives
characterized by total sobriety. Of the total sample, 15.3% hoped to stop drinking completely for at least six months, 3.6% wanted to be able to enjoy the occasional social drink, and a small fraction, .9% aimed at being moderate social drinkers.

Family Involvement in the Study

The families that were screened into the investigation may be broken into four groups which include pre-treatment drop-outs who received no treatment, incomplete treatment drop-outs who received some treatment, complete treatment participants, and complete treatment participants with missing data. The four groups are presented graphically below in Figure 1.

![Pie chart](image)

Figure 1. Family involvement sub-groups.

As Figure 1 reveals, the largest group of participants completed their involvement with the study; however, an appreciable percent did not complete treatment. The four groups are discussed below.
Drop Out Families

A number of families who met the recruitment criteria and were accepted into the project after an extensive 2 to 3 hour screening interview did not complete treatment. Of the 114 families who entered the study, a total of 44 families or 38.60% of the total sample dropped out of the study before completing treatment. A total of 20 families or 17.54% of the total sample (45.45% of the total drop-out cases) failed to attend a single therapy session. Of these 20 families, 10 had been randomly assigned to SFT, 7 had been randomly placed in the individual ExST treatment condition, and 3 had been randomly assigned to receive the couples version of ExST.

The number of families who attended at least one therapy session but did not complete the treatment was 24. This category of family represented 21.05% of the total sample (54.56 of the total drop-out sub-sample). The rate of families who dropped out without finishing the treatment they started for the three treatment groups was approximately equal. For the SFT treatment, 8 families that started treatment did not complete the course of therapy. Comparably, 7 individual format ExST families and 9 couples format ExST families decided to discontinue therapy before the treatment was completed. The mean number of meetings that families in this group of drop-out participants completed was 3.46 sessions with a standard deviation of 2.35. The reasons provided for withdrawing from treatment centered on marital dissolution of one kind or another. In some instances, husbands’ relapses to drinking triggered marital separations; in others, failing health and criminal incarceration were the causes of the premature termination of treatment.

Complete Treatment Families

A total of 60 of the 114 families or 52.63% of those originally screened into the study completed treatment and were included in the outcome analyses. In terms of treatment
groups, the complete treatment group sub-divided evenly in three with 20 participants receiving SFT, ExST-I and ExST-C.

**Complete Treatment Families with Missing Data**

In this study, 10 families, or 8.77%, of the initial sample of 114 families completed treatment but were omitted from the analyses because of missing data. In all of these cases, entire sets of data were either missing (i.e., post-test) or invalid (response sets). Consequently, the family had to be dropped from the data analytic procedures. In four of the cases, the data were expected by TARP, however, in these cases the post-test data had not been received at the time that the analyses for the present research were performed.

A second form of family with incomplete data sets is not included in the estimate above. This second group represent those who had yet to return follow-up questionnaires. As this study was parcellled out of an ongoing research project, a number of families included in the present inquiry had not completed the follow-up wait period at the time that data collection closure was determined. Consequently, data from four of the families in the ExST-I and seven of the families in the ExST-C treatment conditions were unfortunately not available for the follow-up analyses.

**Family Participant Involvement**

Although the percentage of those who completed treatment and were not missing data does not appear as high as would be preferred, the percentages of the groups are greatly affected by the inclusion of the pre-treatment drop-out group in the calculations. The 20 families that dropped out without ever presenting themselves to a single session of therapy are best not viewed as therapy drop-outs. Figure 2 presents a recalculation of the participating family groups percentages, excluding the pre-treatment drop-out group from the calculations.
As revealed in Figure 2, 63.8% of the participants that actually started therapy were in fact in the complete treatment group. Only 25.5% of the participants that entered treatment failed to complete their course of therapy. Finally, just 10.6% of the sub-sample that started therapy were not included in the outcome analyses due to missing data sets.

Data Collection

An overview of the TARP research protocol is presented below in Figure 3. As displayed in the figure, prospective participants attended an initial screening interview (T1)
and received a battery of tests to verify their suitability for inclusion in the study. The composition of the screening test battery is provided in the instruments section of this document. The screening interview, which included both the husband and wife of the potential participating family, was conducted at the treatment clinics and extended approximately 2 hours in duration.

The one hundred and fourteen male alcoholic husbands and their partners that passed through the screening procedures were randomly assigned to one of the three treatment groups and to one of the therapists providing the treatment. A pre-established random walk generated through the use of a random numbers table was used to assign participants into a treatment condition in successive order of inclusion into the study. Although it could be assumed that the randomization procedures were adequate to balance out pre-treatment group differences, a series of preliminary analysis of pre-treatment data were conducted (see Results section, pg. 137) and verified treatment group comparability prior to the provision of therapy. These analyses were based on data collected at screening (T₁) and pre-treatment (T₂). Families, including fathers, mothers and children over the age of 9, were required to complete the pre-treatment questionnaire package before they were permitted to commence treatment. The following is a description of the remaining data collection procedures involved for each treatment group once screening was completed.

**SFT Treatment Group**

This treatment group involved fathers attending regular weekly or biweekly sessions of individual treatment with a therapist over a maximum 16 week period. The mean number of sessions was 7.6, SD = .87. As part of this treatment, both father and mother carefully monitored aspects of their lives on a weekly basis using Weekly Situation Diaries (WSD) provided by the study. Father was asked to answer a short post-session review form after each meeting with his therapist. In addition to completing the pre-treatment questionnaire
families in this group were asked to complete a short mid-treatment (T3) (not included in this study) and post-treatment (T4) questionnaire booklets. The mid-treatment questionnaires were completed after seven weeks of therapy while the post-treatment questionnaires were completed at the conclusion of therapy after 16 weeks of treatment had elapsed. Since the SFT group was functioning as a quasi-control group, SFT families were not asked to participate in the follow-up portion of the study and were informed at screening that further treatment would be available once the post-treatment questionnaires had been collected.

**ExST Individual Treatment Group**

In this treatment group fathers attended regular sessions of individual treatment with a therapist over a maximum twenty week period. The mean number of sessions was 12.8, SD = 2.56. In addition to the pre-treatment questionnaire booklets (T2), families in this group were asked to complete a short mid-treatment (T3), post-treatment (T4) and follow-up (T5) test batteries. Data from the mid-treatment questionnaires were collected after the fifth session but are not employed in the present study. Participants in this group were required to wait 15 weeks after the treatment had concluded before undertaking any additional therapy. The follow-up questionnaires were collected at the end of this wait period. Father was asked to answer a short post-session review after each therapy meeting and both father and mother were asked to monitor aspects of their lives on a weekly basis using WSD forms at the end of each week.

**ExST Couples Treatment Group**

This treatment involved fathers and mothers attending regular sessions of marital treatment with a therapist for a maximum of 15 sessions over a 20 week treatment period. The mean number of sessions was 13.3, SD = 2.40. Like the ExST individual treatment group, participating families in this treatment condition were asked to complete mid-treatment (T3), post-treatment (T4), and follow-up (T5) questionnaire booklets in addition
to the pre-treatment questionnaires (T2) they completed before entering therapy. Brief mid-
treatment questionnaires were completed after the fifth therapy session or tenth week of
treatment, however, none of the information from this data collection occasion is included in
this research. Post-treatment questionnaires were collected at the conclusion of treatment.
Participants in this group were also asked to wait 15 weeks after the treatment had finished
before undertaking any further therapy. Once this 15 week period had passed, these families
completed the follow-up questionnaires. Father and mother were both asked to fill out short
post-session reviews after each therapy meeting and also requested to monitor their lives on
a weekly basis using the WSD forms at the end of each week.

It should be noted that none of the data collected at mid-treatment has been used in
the present inquiry. The inclusion of the mid-treatment data collection occasion in this
section's description is for the purpose of procedural clarity with respect to the research
activities that participants completed.

All therapy sessions conducted as part of this study were videotaped with the consent
of the participants. The consent form may be found in Appendix D. Clients and
participating therapists routinely responded to the post-session reviews after each therapy
meeting. Participants were not discouraged from attending support groups such as
Alcoholics Anonymous over the course of their involvement with the project.

The questionnaire booklets completed at pre-treatment, mid-treatment, post-
treatment, and follow-up were extensive (see Instrument section, pg. 90) and required
considerable commitment on the part of participating families. In order to recognize the
time and effort involved in completing each test battery and to help minimize attrition,
participants received an honorarium of up to $200.00 over the course of the study which was
distributed on an established incremental pay schedule after each test battery was received
by the investigation. The payment schedules employed by the study are provided in Appendix E.

**Clinical Context**

The present investigation was conducted at multiple sites. The research was done in cooperation with two alcohol and drug treatment centers funded by the British Columbia Provincial Government. The Surrey Alcohol and Drug Programs Clinic (Surrey Clinic) and Summit Clinical and Consulting Services in Duncan (Summit) were selected as treatment sites. While the Surrey Clinic operated in a busy, expanding urban context, Summit offered services in a much smaller, more stable rural setting. Consequently, Surrey Clinic had a larger treatment and support staff to meet the greater demand for services than did the Duncan operation and clinic procedures reflected the different demands of an urban and rural clinical context.

Despite these kinds of differences, both clinical sites shared important qualities that made them suitable clinical sites including administrations that were supportive of research, access to clients appropriate for the study, facilities enabling the project such as, research office spaces, large therapy rooms, one way mirrors and videotaping capacities and teams of qualified and enthusiastic therapists.

**Therapists**

A total of 12 therapists participated in the delivery of the treatment under investigation. All therapists had completed studies at the Master's level or more in Psychology, Social Work or a related field in order to participate in the study, and all had to have a minimum of 3 years direct work experience providing therapeutic services to alcohol dependent individuals and their families. Of the 12 participating therapists, 5 were involved in providing the individual and marital forms of ExST and the remaining 7 delivered the SFT
treatment. The average age of the therapists was in the late thirties ($\bar{x} = 38.75$ yrs., $SD = 6.58$ yrs.). The therapists providing ExST made up a somewhat older group ($\bar{x} = 42.40$ yrs., $SD = 7.80$ yrs.) than the therapists delivering the SFT treatment ($\bar{x} = 36.14$ yrs., $SD = 4.45$ yrs.). The average number of years of therapists practicing psychotherapy was considerable ($\bar{x} = 8.17$ yrs., $SD = 4.37$ yrs.) and the number of years working with alcoholics indicates that all therapists were well established in this work ($\bar{x} = 5.70$ yrs., $SD = 3.25$ yrs.). The comparison between the two groups of therapists is in keeping with their differences in age. The ExST therapist group had practiced psychotherapy a little longer ($\bar{x} = 9.2$ yrs., $SD = 4.55$ yrs.) than their SFT counterparts ($\bar{x} = 7.4$ yrs., $SD = 4.43$ yrs.). Similarly, the ExST therapist had worked in the alcohol field slightly longer ($\bar{x} = 6.10$ yrs., $SD = 2.46$ yrs.) than the SFT practitioners ($\bar{x} = 5.43$ yrs., $SD = 3.74$ yrs.).

**Treatment Implementation**

In order to ensure treatment fidelity, Kasdin (1986) proposed 3 principal steps. To establish treatment integrity (the extent to which treatments have been conducted as intended), the first step is to systematically train the therapists to implement the treatment. The second step is to establish that therapists adhere to the treatment procedures through the course of treatment delivery. The third and final step is to assess the extent to which treatment procedures were in fact followed.

In this study, the treatments have been implemented in a manner that was in keeping with Kasdin's principles. This is to say that therapists were: (1) systematically trained to provide SFT and ExST and , (2) supervised on a regular basis over the course of the study. The formal assessment of the therapists at the conclusion of the investigation in terms of the extensiveness to which they adhered to treatment protocols and the degree to which they emulated a competent therapist in the therapy they were providing has not been included in
this study. A rationale for this omission is provided in this section. The procedures followed in implementing the SFT and ExST therapies are presented below.

**SFT Therapist Training and Selection**

Therapists in this treatment condition volunteered to participate in the study. A total of nine therapists from the participating clinics expressed an interest in providing this treatment. All but one of the SFT therapists had previous training in ExST. Each therapist was provided with a copy of the SFT treatment manual which was thoroughly read prior to participating in a series of training meetings conducted at the clinics. The SFT training was conducted over a 6 week period and lasted 20 hours in duration. The training focused on therapist mastery of the treatment as specified in the manual. Training procedures included didactic presentations, discussion groups, role plays, video tape presentations and video taped therapy rehearsals. Seven therapists completed the training and were able to satisfactorily demonstrate competent treatment implementation in role play situations to the trainers and developers of the treatment approach and were consequently selected for the study.

**SFT Supervision**

Supervision of the SFT therapists was conducted in a group setting on a regular biweekly basis by developers of the treatment approach. Group supervision procedures included case management and planning, as well as videotaped reviews of sessions and didactic presentations regarding the principles of the therapy and the implementation of the model. In addition to the group supervision meetings, individual supervision was available on a case by case basis to the therapists who requested more in-depth supervision and also at the request of the supervisor in those instances where further supervision appeared necessary in order to maintain a high level of treatment adherence.
ExST Therapist Training and Selection

A total of 14 therapists from the two clinics volunteered and received training in ExST. All therapists were provided with the ExST training manual which provided a foundation and a focus for a 12 day training workshop conducted over a 3 month period in three 4 day training events spaced one month apart. Since the treatment involved complex techniques and considerable clinical skill, each therapist received 10 hours of direct or videotape supervision sessions subsequent to the training. The supervision focused on various aspects of treatment implementation with individuals and couples.

In order to be selected for the investigations, each therapist was required to collect and submit 5 videotapes of individual and couples therapy sessions. From the pool of 10 tapes provided by prospective therapists, two individual and two couples therapy sessions were selected at random and reviewed independently by two trained adjudicators who determined the therapists capacity to implement the treatment in both individual and marital therapy conditions with a sufficient level of integrity and competency. Of the 14 therapists that received training, 5 were selected through this procedure and served as therapists delivering the individual and marital treatments of ExST.

ExST Supervision

Throughout the course of the research, therapists continued to receive supervision on a regular weekly basis. Group and individual supervision formats were employed by 2 trained supervisors who provided live and videotape consultation of both individual and marital therapy treatments to the ExST clinicians. These consultation meetings included reviews of theory and technique with particular attention focused on ensuring that the therapists treatment practices emulated the ExST model and minimized therapist drift from the model.
The ExST model of supervision (Newman, Friesen, & Grigg, 1991) guided the orientation of the consultation meetings. This model of supervision places emphasis on three domains of practice including theoretical development, technical refinement and personal growth. Supervision sessions often employed experiential activities which were consistent with the ExST therapy being implemented by the therapists in order to address the three domains of practice (e.g., role play, role reversal, enactment, artwork, sculpting, symbolic evocation, ritual conduct, and process recall). The focus of consultation tended to be on the here and now. The belief that therapists did not need to talk "about" the problems they were having with clients, but rather needed to experience the problems they were having with clients and work through them in a safe supervisory setting was shared by supervisors and therapists. Thus, supervision meeting provided a rich and generative space for therapists and supervisors to encounter the ExST model in a direct way in order to more fully appreciate its practical implementation and ensure model adherence and therapist competency.

Treatment Implementation Check

A therapist adherence and competency rating scale has been devised by TARP staff in consultation with some of the originators of the two treatment approaches. The Adherence Rating Scale (TARS) (Thompson, Friesen, Grigg, Weir, & Mitchell, 1993) was modeled after the Collaborative Study Psychotherapy Rating Scale developed by Hollon, Waskow, Evans, and Lowery (1984). TARS was designed to measure treatment adherence in terms of extensiveness of implementation competency, and emulation of the ideal therapist as described in the treatment manuals.

TARS is comprised of items which tap unique aspects of SFT and ExST, and items that measure areas shared by the treatments. There are a total of 15 ExST items, 15 SFT items and 15 overlap items that have been randomly ordered in the instrument. Each item is
scored in two parts. Both parts are concerned with some element of treatment (e.g., Therapeutic Rapport). The first part of the item asks raters to determine the extensiveness of the rapport between therapist and client and to rate this element in terms of a 5-point Likert scale ranging 0 = none at all to 4 = thoroughly. The second part of each item is termed "emulation" and is concerned with the competency of therapists' activities. The emulation portion of the item asks raters to determine how close to the ideal (as specified in the treatment manuals) the therapist came in the segment being assessed. Raters determine therapist emulation in terms of a 5-point Likert scale that ranges from 0 = not at all to 4 = very close.

Each item in TARS is carefully described and accompanied by examples and notes of clarification. Every effort was made in the generation of TARS to ensure that the qualities being measured were observable constructs. While a good working knowledge of the two treatments is important to the employment of TARS to rate videotapes of actual sessions, raters do not need to be experts in the conduct of either of the therapies. A copy of the TARS manual is available upon request; however, a copy of the rating form of the instrument appears in Appendix F.

The work of implementing TARS and quantifying the levels of treatment adherence and therapist competency is currently ongoing as part of the TARP research protocol. However, since the TARS study is currently in progress, the results pertinent to this investigation are unavailable at this time. Consequently, the measures of treatment implementation have not been included in the present investigation.

Notwithstanding the omission of the measure of implementation verification, a high level of treatment fidelity characterized this study. The salient components which contributed to the high level of therapist competency and treatment model adherence were
the operationalization of the treatments in manuals which clearly specified the parameters of the treatments, the thorough training of therapists to implement the treatments based on the manuals, the careful selection of the participating ExST and SFT therapists from the stable of therapists that had been trained based on their work implementing the models, and the regular weekly or bi-weekly supervision of all project therapists by qualified supervisors over the course of the entire study.

Ecological Assessment Model

In order to adequately answer the research questions posed in this investigation, a contextually sensitive assessment perspective was necessary. The approach to measurement had to reflect the complex systemic flavor of the inquiry, yet it had to be structured in such a way as to be clearly organized in a meaningful fashion.

It was argued that the adoption of an ecological perspective allows for a comprehensive appreciation of the process and outcome of change in terms of the contexts in which action is manifest. The pioneer work of psychologist Urie Bronfenbrenner (1977, 1979) construed human development as occurring in a series of hierarchically embedded contexts. From this point of view, individuals were viewed as growing entities who, while impacted by the environment, also affected and had impacts on the environment. This is to suggest that individuals and environment exist in a dynamic relationship with one another. Both individuals and environment are viewed as standing in a reciprocal fashion such that each has an influence on the other, and through a process of mutual accommodation, two-way interaction results. Articulating the definition of an "ecological experiment" Bronfenbrenner (1979) suggested that such an inquiry should be:

an effort to investigate the progressive accommodation between a growing human organism and its environment through a systematic contrast between 2 or more environmental systems or their structural components, with a careful attempt to control other sources of influence either by random assignment (planned experiment) or by matching (natural experiment). (p. 36)
While Bronfenbrenner (1979) was chiefly concerned with focusing on environmental impacts, the ecological approach was adapted by Conger (1981) to include the focus of individual development. Conger (1981) argued cogently that individual measurement must go hand in hand with ecological assessment in order to enable a comprehensive appreciation for change and development.

This kind of assessment is capable of reflecting change at a variety of levels of systemic observation. Thus, the ecological perspective aptly addressed the central measurement concerns of the present investigation. Consequently, an ecological model of assessment was adopted by the investigation to examine the differential treatment effects of both the two treatments (SFT and ExST) and individual and couples ExST treatment formats. The assessment model which was developed concerned itself with the measurement domains of alcohol dependency, individual functioning, marital relationship, and family functioning. The ecological assessment model assumed that each of the assessment domains would tap salient aspects of nested systems that interact in some way with one another.

From an ecological assessment perspective, change in the reference problem of alcohol consumption is contextualized and related to measurable changes in individual, marital and family levels of system. Treatments (ExST and SFT) and format (individual and couple) are to be evaluated in a number of systemic domains. The assessment model used in this study is in Figure 4.
Figure 4. Ecological assessment model.

There is consistency between the systemic questions of the investigation, the research design and the ecological assessment model that was used. It should be noted that the ecological approach to measurement addresses an important concern in the alcoholism treatment literature. It has been noted that treatment efficacy studies in the past have focussed primarily on alcohol related dimensions as indices of effectiveness (Nathan & Skinstad, 1987). The preoccupation with changes in alcohol consumption has left many important dimensions of recovery uncharted. Concerned by this tendency, Spicer (1980) stressed that:

One of the common mistakes in the area of defining treatment success is to use the abstinent/non abstinent criteria. Repeatedly researchers have found that although drinking can be an accurate indicator of program outcome, not all clients who are abstinent are doing well in other areas of their lives. (p. 47)
Clearly, the ecological assessment approach used in this study responds to the calls for broader scopes of evaluation (Billings & Moos, 1983; Emrick & Hansen, 1983; Friesen, 1983; Spicer, 1980) and offers a model for the rigorous evaluation of other treatment programs.

Implementation of Ecological Assessment Model

In this study, data regarding each assessment domain or level of system were not obtained from every family member. Children were not asked to comment on father's intrapersonal condition, or their parents' marriage. Rather, as members of the family system, children reported on the family domain only. Similarly, wives were not asked to assess their husbands' relationship with alcohol. The systemic assessment levels and family member perspectives that were tapped are presented below in Table 2.

As revealed in Table 2, perspective (response on questionnaire) was obtained by those directly connected and experiencing a particular systemic domain. Consequently, while fathers reported about their own alcohol consumption, their own intrapersonal condition, the marriage and the family, they were not asked to assess their wife's intrapsychic functioning. Similarly, mothers reported on themselves, their marriage and their family, but were not asked to focus on their husband's alcohol consumption or intrapersonal situation. In this study, the eldest child was chosen to report on his or her views of the family. This decision was made in order to avoid violating the assumption of independence and the data analytic difficulties related to uneven numbers of children responding about one family. The ecological assessment model represents a multidimensional, multiperspective measurement approach that enables a comprehensive evaluation of treatment efficacy when it is applied in a pre, post, and follow-up experimental design.
Table 2
Perspective of Respondent and Systemic Assessment Level

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Alcohol</th>
<th>Intrapersonal</th>
<th>Marriage</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Instrumentation

The instruments that were selected for the investigation tap important aspects of the systemic domains specified by the ecological assessment model. The array of instruments chosen to operationalize the ecological approach had to satisfy all of the following criteria: (1) The tests had to measure specific qualities, characteristics and/or behaviors that were central to the treatment of alcohol dependency at each level of ecological assessment, (2) Instruments considered for the study had to display adequate psychometric properties and had to be sensitive enough to measure change, (3) Instruments had to have been used in previous outcome studies and have demonstrated utility in them. In addition to the instruments used in the change assessment battery, several other instruments were selected for specific pragmatic purposes of the studies design (e.g., screening).

Preceding the assembly of the TARP instrument array, a large test battery was piloted and some instruments were dropped as a result of the pilot test analyses. The instruments included in this study are a sub-set of a larger test battery employed in TARP.
They were selected for the present investigation prior to any statistical analyses of the larger test battery.

The instrument package employed in this inquiry presented below has been subdivided in terms of the ecological assessment level to which the instrument belonged: (1) alcohol measures, (2) intrapersonal system measures, (3) couples systems measures, (4) family system measures. A description of all measures follows in the section below. A listing of the measures employed and the test occasion schedule followed in this investigation is provided in Appendix G. In the interest of brevity, a copy of the instrument package has not been included in this report, however a copy is available upon request. A description of each index used in the study follows. The descriptions have been presented in terms of the measurement domains of the ecological assessment. While the questionnaire batteries ordered the measures in terms of ecological assessment level (e.g., alcohol, intrapersonal, couple, family), the order of instrument presentation within each level was randomly determined for each measurement occasion.

1. Alcohol Measures Description

All of the instruments used in this study to measure alcohol use were self-report measures. Some researchers have expressed concern over the validity of self-report measures of alcohol consumption asserting that alcoholics may be prone to obscure and under report their consumption rates (Guze, Tuason, Stewart, & Picken, 1963; Midanik, 1982; Miller, Crawford, & Taylor, 1979). Research probing the question of the reliability of alcoholic self-report accuracy has, in the main, assuaged the controversy. Studies have demonstrated a high level of consistency of self reported alcohol use on collateral reports (Maisto, Sobell, & Sobell, 1979) and independent primary sources of information such as arrest records and similar accounts (Sobell & Sobell, 1975; Sobell, Sobell, & Samuels, 1974; Sobell, Sobell, Riley, Schuller, Pavan, Cancilla, Klajner, & Leo, 1987). These findings
support the use of self-reported alcohol measures as a reliable and valid method of ascertaining the clinical status of drinking pattern.

In this study, the alcohol dependent husbands were asked to report on their own alcohol use and their spouses were not asked to act as collaterals. The rationale for not asking wives to report on their partners' alcohol use was two-fold. Firstly, the activity was judged to be unnecessary. In a recent outcome study in which spouses were used to corroborate alcohol use estimates by their partners (Bowers & Al-Redha, 1990), a rate of over 90% agreement between spouses was observed at post-treatment and one year follow-up. With such a high level of agreement being observed between couples and the meaning of the differences in the remaining 10% of the estimates being ambiguous at best, the effort to collect such information was questionable. Secondly, the activity was in conflict with the treatment goals. An important treatment goal was to promote the alcohol dependent individual's ownership of the problem and to encourage the non-abusing spouse to focus on other important concerns in her life. In addition, by asking the spouse to also report on her husband's drinking, the research procedures would have in essence implied that the alcoholics could not be trusted to report this information reliably and thereby would have placed the spouses in awkward positions in terms of observing and recording their husband's drinking activities. Consequently, the research procedure of asking the non-drinking partners to estimate their husband's alcohol use for the purposes of research was at odds with the therapeutic efforts of the study and not employed.

The instruments used as a means of measuring the identified problem behavior of alcohol consumption were:

(I) Michigan Alcohol Screening Test (MAST) developed by Selzer (1971),
(II) Alcohol Dependency Data (ADD) developed by Raistrick, Dunbar, and Davidson (1983),
(III) Inventory of Drinking Situations (IDS-42) developed by Annis (1982),

(IV) Situations Confidence Questionnaire (SCQ-39) developed by Annis and Graham (1988).

While the MAST was employed for screening purposes, the ADD was selected from these alcohol indices as the marker variable to be used as the primary indicator of change in this domain in the ecosystem analyses (see Data Analysis section, p. 117). Details concerning the reliability and validity of each instrument follow.

I. Michigan Alcohol Screening Test (MAST)

The MAST was designed by Selzer (1971) to provide a consistent, quantifiable measure for the detection of alcoholism. The MAST is a 25 item questionnaire that uses a forced choice, yes/no response format. Items are weighted and total scores may range from 0 to 53. A score of 5 or greater indicates a diagnosis of alcoholism. In this study, the MAST was selected to identify alcoholics at screening and to detect any alcoholic drinking problems with which the spouses might have been struggling.

The author of the instrument reports that many of the items included in the instrument have been used by other surveys of alcoholism which may account for its popular acceptance as a measure of alcoholism among researchers and clinicians. The MAST has been used with many different subject groups including: alcoholics, persons convicted of driving while intoxicated, social and problem drinkers, drug abusers, psychiatric patients, general medical patients, pregnant women, college students, hospital personnel, and convicted felons (Hedlund & Viewag, 1984).

The instrument is constructed to provide a stable identification of a drinking problem. In fact, MAST scores are not affected by current drinking status to such a degree that an
individual who was once heavily dependent upon alcohol would score as an alcoholic on the MAST even after years of sobriety (Hedlund & Vieweg, 1984). Reliability evidence is somewhat scant considering the instrument's widespread use (Gibbs, 1983). Internal consistency estimates from 6 studies reviewed by Hedlund and Vieweg (1984), reported alpha coefficients for the MAST ranging from .83 to .95. Test-retest reliability coefficients has been reported as .97 for a 1 day test-retest interval, .86 for a 2 day interval, and .85 for a 3-day interval. Skinner and Sheu (1982) reported a reliability coefficient of .84 for an average 4.8 month test-retest interval for 91 acute psychiatric admissions.

In addition to the original validation studies, MAST total scores have been shown to be significantly correlated to a variety of related instruments including the General Alcoholism Factor of Alcohol Inventory (Skinner, 1979), the MacAndrews Alcoholism Scale (Friedrich & Loftsgard, 1978), the Alcohol Volume Index and the Alcohol Pattern Index (Sokal, Miller, & Debanne, 1981). Factor analytic studies probing the factor structure of the instrument reported by Zung (1980a, 1980b, 1982) found that one major factor accounted for 49 to 78 percent of all common variance which has been interpreted as "General Alcoholic Impairment". Other factors that have been noted as reasonably consistent across other studies (Hedlund & Vieweg 1984) include recognition of alcohol problem, help seeking, marital discord, and legal, work and social problems.

The validity of the instrument was originally assessed by searching the records of legal, social and medical agencies and reviewing respondent's driving and criminal records and linking these to MAST classification. Five different groups participated in the validation study. The groups included: hospitalized alcoholics, drivers convicted of driving under the influence of alcohol, persons convicted of drunk and disorderly conduct, drivers who had incurred 12 penalty points in 2 years for traffic violations and accidents and a control group.
This study established that the MAST could be used to classify alcoholics and nonalcoholics even when distortion or minimization of the problem was anticipated. In a second study, the MAST was given to hospitalized alcoholics who were instructed to lie about their drinking. Despite this instruction, the MAST apparently correctly identified 92% of these individuals using a cut-off score of 5 or greater.

II. Alcohol Dependence Data

The ADD was developed by Raistrick, Dunbar, and Davidson (1983) as an instrument to measure the severity of alcohol dependence as described by Edwards and Gross (1976). In designing the questionnaire, the authors sought to ensure the instrument was suitable for clients seeking help with drinking problems and measured the clients' alcohol dependence in its present state. In addition, the instrument was constructed to reflect the full range of dependence and to be sensitive to change in dependency level over time.

The ADD is comprised of 39 items which are assessed on a 4-point Likert type frequency scale ranging from never = 0 to nearly always = 3 and yielding a maximum dependence score of 117. The instrument generates a single dependency index score and ranges of dependency levels have been provided by the authors that stratify the index scores into no, mild, moderate and severe dependency groups. While a score of 0 indicates no dependency, a score ranging from 1-30 suggests mild dependence, 31-60 signals moderate dependence, and 61-117 indicates severe levels of alcohol dependency.

A 15 item shortened form of ADD has been generated with the correlation between the full questionnaire and the shortened form reported as highly significant (r = 0.92). The Split-half reliability estimates based on the shortened form was high (r = .87). Further evidence of internal consistency of the instrument is based on Spearman Rank correlations between items and total score with significance levels ranging from <0.03 to <0.001.
Studies probing the validity of the instrument have been based on the shortened version of the questionnaire (Davidson & Raistrick 1986; Davidson, Bunting, & Raistrick, 1990). The construct validity of the instrument is closely tied to the validity of the Edwards and Gross (1976) notion that dependence is a single unidimensional phenomenon. The results of 3 separate factor analytic studies confirmed that there is a strong commonality linking all items. With the exception of a single question, the items can be best represented in terms of one strong first factor. Attempts to identify a clear and consistent second factor which might underlie the instrument have proven to be impossible. Consequently, the authors assert that the validity of the dependency construct is supported by factor analysis.

Concurrent validity of the instrument has been assessed by comparing the test scores with a variety of other measures related to aspects of alcohol dependency including liver function tests, other recognized tests of alcohol dependency, and semi-structured clinical interviews. The results from 3 separate studies reported in Davidson and Raistrick (1986) support claims of concurrent validity.

III. Inventory of Drinking Situations (IDS)

Developed by Annis (1982), the IDS is a situation specific measure of drinking aimed at identifying an individual client's high risk situations with regards to heavy alcohol consumption. The drinking situations assessed by the questionnaire were based upon earlier work by Marlatt and his associates (Marlatt, 1978, 1979; Marlatt & Gordon, 1980) who found that high risk drinking situations could be categorized into 2 major classes, either Personal States or Situations Involving Other People. In the IDS, the Personal States class was further subdivided into 5 categories: Unpleasant Emotions, Physical Discomfort, Pleasant Emotions, Testing Personal Control and Urges and Temptations. The Situations Involving Other People was subdivided into 3 categories which include: Conflicts with Others, Social Pressure to Drink and Pleasant Times with Others.
The IDS generates Problem Index scores for each sub-scale which are derived by dividing the obtained score on the sub-scale by the maximum total possible on that sub-scale and then multiplying by 100. The manual provides interpretative ranges for problem index scores which are based on normative data from 202 male and 134 female subjects. A problem index score of 0 on any sub-scale indicates the participant has never consumed alcohol in a heavy fashion on the last 3 months and is in the "Low Risk" category and unlikely to develop alcohol problems in this area. The problem index range of 1-33 indicates Moderate Risk and indicates participant rarely drank heavily in these types of situations. When the problem index score is within the range of 34-60 on any sub-scale, the respondent is in the "High Risk" category and has heavily consumed alcohol frequently in these situations. Finally, scores in the range of 67-100 indicates the "Very High Risk" category and indicates that participants very frequently drank heavily in these types of situation.

The original IDS instrument was 100 items in length, however, a shortened 42 item form has been developed for research purposes (IDS-42). The present study selected the IDS-42 version because it provided the same kinds of information in a reliable fashion using less items. Annis, Graham, and Davis (1987) report that the relationship between the IDS-42 and the original 100 item form was found to be very strong with sub-scale correlations ranging between .93 and .78. The internal consistency reliability (alpha) estimates for the shortened sub-scales range from .80 to .92 which was only marginally lower from the original 100 item sub-scale alpha estimates which ranged from .87 to .96.

In terms of the validity of the instrument, Annis et al. (1987) reported that the measure demonstrates good content validity. Five expert clinicians were consulted to ensure item clarity and adequacy of item coverage of common relapse situations. In addition, when three trained raters were used to validate the classification system and asked to sort the 100 items into the 8 categories, a high inter-rate reliability of item placement was observed (92% to 99% agreement rate).
Estimates of the external validity of the IDS were made by correlating the sub-scale scores with measures of alcohol consumption and alcohol dependence. The estimates of total quantity of alcohol consumed during the past year were significantly correlated with each sub-scale (range of $r's = .27$ to $.43$) as was typical daily drinking quantity (range of $r's = .12$ to $.27$). This relationship indicates that clients reporting higher levels of drinking also received higher scores on the IDS. The IDS was also compared to the Alcohol Dependence Score (ADS), an instrument developed by pioneers in the area (Skinner & Horn, 1984) and moderate correlations with the IDS sub-scales (range of $r's = .23$ to $.52$) were found. This relationship established the connection that those who reported more frequent heavy drinking were also exhibiting more signs of alcohol dependency. In addition to these correlations, Annis et al. (1987) also correlated sub-scale scores with information regarding clients' social context of drinking and also numbers of years of problem drinking and reported significant relationships between these variables. The authors conclude that the convergent validity evidence supports the claim that the IDS not only measures frequency of drinking but also reflects situation specific patterns of heavy alcohol consumption.

IV. Situational Confidence Questionnaire (SCQ)

The SCQ was developed as a direct offshoot of the IDS by Annis and Graham (1988). The measure was created as a tool to assess the development of a client's self efficacy or confidence in relation to specific drinking situations over the course of treatment and as a index for the study of treatment outcomes. The SCQ shares the same conceptual tie with the work of Marlatt and his associates (Marlatt, 1978,1979; Marlatt & Gordon, 1980) as does the IDS, and is structured in the same fashion (8 sub-scales and 2 major classes). Accordingly, the SCQ, which is 39 items in length, offers a kind of mirror of the IDS. This is to say that while the IDS provides information regarding how much alcohol was consumed in which situations, the SCQ provides measures of the level of confidence that clients' feel regarding
their ability to avoid drinking heavily in the same personal (Unpleasant Emotions, Physical Discomfort, Pleasant Emotions, Testing Personal Control, and Urges and Temptations) and social situations (Conflict With Others, Social Pressure to Drink, and Pleasant Times With Others).

The internal structure of the SCQ was evaluated using a series of factor analytic procedures including an exploratory and confirmatory factor analysis. The latter procedure allows for the specification of hypothetical factor structures which are then tested with an observed data matrix to test the adequacy of fit between model and actual data. This procedure resulted in the authors dropping 3 of the original 42 items from the test and arriving at the 39 item measure.

The reliability of the SCQ was based on item-total correlations and internal consistency (alpha) estimates. While the item-total score correlations with each of the sub-scales were acceptable and ranged from .59 to .91, the internal consistency estimate for each sub-scale was high with alpha ranging from .81 to .97.

The SCQ allows for normative comparisons based on a group of men who were entering treatment for a variety of alcohol related problems. In addition, scores are interpreted as indicating the percentage of confidence an individual has regarding the possibility that he/she will not drink heavily in a particular situation (e.g., score 40 = 40% confident).

The SCQ is theoretically linked to the construct of self-efficacy as conceptualized by Bandura (1977). The measure is concerned with respondents' confidence in their abilities to resist the urge to drink and to subjectively identify situations in which they are confident they will not drink heavily. Estimates of construct validity for the instrument were made by
correlating sub-scale scores with measures of alcohol consumption, the social context of
drinking and other indices which reflect the construct of self-efficacy. With regards to actual
drinking, the relationship between SCQ sub-scales and consumption were found to be
generally low, but in the main, significant and in predicted directions. In addition,
correlational patterns with measures relevant to the self-efficacy construct conformed to
patterns predicted by theoretical association.

The SCQ has been shown to demonstrate good criterion-related validity. Miller,
Ross, Emmerson, and Todt (1987) showed that the instrument could correctly classify 92%
of long term abstainers and 65% of new clients entering an alcohol treatment center. The
measure has also demonstrated predictive validity with Solomon and Annis (1988) reporting
that SCQ scores obtained at intake to treatment predicted average consumption on drinking
days of clients who drank following treatment discharge. While the instrument failed to
predict both the occurrence and the frequency of drinking occasions during follow-up, it was
a strong predictor of the quantity of alcohol consumed when clients relapsed.

2. Intrapersonal Measures Description

The second assessment domain, intrapersonal functioning, was of great concern to the
study. Understanding how the individual system was affected by the treatment procedures
was seen as a critical assessment aim. Consequently, the following indices were selected to
tap this system. The intrapersonal measures schedule of administration is included in
Appendix G. In the study, both father and mother participants completed the intrapersonal
questionnaires despite the fact that 66% of the mothers in the investigation did not directly
participate in therapy sessions. Jacob et al. (1983) established an association between
nondrinking spouses intrapersonal functioning and their partners' alcohol consumption
patterns. Accordingly, it was important to assess the individual functioning of both parents
throughout the treatment process.
The following instruments were employed:

(I) Shipley Institute of Living Scale (SILS) developed by Zachary (1986),
(II) Symptom Checklist 90 Revised (SCL-90-R) developed by Derogatis (1983),
(III) Beck Depression Inventory (BDI) developed by Beck (1987).

In this investigation, the SILS was used as a descriptive tool and the marker variable selected for the eco-systems analyses was the global measure of the SCL-90-R. The BDI and SCL-90-R sub-scales were employed as more detailed measures and were included in within system analyses.

I. Shipley Institute of Living Scale (SILS)

The SILS is a measure designed to assess general intellectual functioning in adults and adolescents and to assist in the detection of cognitive impairments. For the purposes of this study, the SILS was used as a descriptive tool and to screen out potential participants whose English literacy level was too low to answer questionnaire batteries.

The instrument consists of two sub-tests including a vocabulary test of 40 items, and a 20 item test of abstract thinking. Both sub-tests are timed with 10 minutes allotted for each. The Vocabulary sub-test employs a multiple choice format in which respondents are asked to match a specified target word with one of the four possible words provided. The Abstraction sub-test uses a completion format. Individuals are provided a logical sequence and asked to respond with the number or letters that best complete the sequence. While the test generates 6 summary scores, only 2 concern the present study. These include the Vocabulary score and the Abstraction score both of which are obtained directly from the test and represent summary scores from the two sub-tests.
The SILS appears to be a reliable instrument. Split-half reliability corrected correlation coefficients were .87 for Vocabulary and .89 for Abstraction (Zachary 1986). The Test-retest reliability estimates across 7 studies reported by Zachary (1986) had an average of reliability coefficient of .60 for Vocabulary and .69 for Abstraction with a mean test-retest interval of 9.7 weeks.

The SILS has been found to be quite highly correlated with a number of other indices of intelligence. The various Wechsler intelligence tests have been of particular concern. The correlation between the Shipley and the Wechsler-Bellview ranged from .68 to .79. Similarly, correlations between the SILS and the WAIS and WAIS-R were high (.73 to .90 with the WAIS, and .74 with the WAIS-R) (Zachary, 1986). Construct validation work on the Shipley has also included correlating the instrument with measures of intelligence and academic achievement including the Army General Classification Test, the Slosson Intelligence Test, The Raven, The Quick Word Test, The Wide Range Vocabulary Test, and the California Short-Form Test of Mental Maturity. All correlations with these other instruments reached statistical levels of significance in the predicted direction.

II. Symptom Checklist 90 Revised (SCL-90-R)

The SCL-90-R is a 90 item self report symptom inventory designed principally to measure the psychological symptom patterns of disturbed clients. The instrument uses a 5-point Likert scale ranging from 0, "not at all" to "4, extremely". The checklist taps 9 primary symptom dimensions and generates an additional 3 global indices of distress. The 9 subscales include: (1) Somatization, (2) Obsessive/Compulsive, (3) Interpersonal Sensitivity, (4) Depression, (5) Anxiety, (6) Hostility, (7) Phobic Anxiety, (8) Paranoid Ideation, and (9) Psychoticism. The 3 global scores are: (1) Global Severity Index (GSI), (2) Positive Symptom Distress Index (PSDI), and (3) Positive Symptom Total (PST). The global scores provide an overall assessment of a respondent’s psychosymptomatic status. Derogatis (1983)
reported that the measure was well suited for pre-post treatment evaluations since he has been unable to detect any significant "practice" effects that might bias the profile on repeated administrations.

The SCL-90-R is a popular self report symptom inventory and has been widely used as a measure for clinical assessment and treatment outcomes across a wide number of areas including depression, sexual disorders, stress, heart disease, pregnancy, schizophrenia, and substance abuse.

The instrument has been successfully used as an index of change in medical, psychopharmacological, and psychotherapeutic studies. Efforts to demonstrate the SCL-90-R's concurrent validity have contrasted instrument scores with various scales of the MMPI, (Derogatis, Rickels, & Rock, 1976), the Hamilton Depression Scale, the Social Adjustment Scale (Weissman, Sholmskas, Pottenger, Prusoff, & Locke, 1977), the Maudsley Obsessional-Compulsive Inventory (Sternberger & Leonard, 1990), and the Cancer Inventory of Problem Situations (Schag, Heinrich, & Ganz, 1983). In all of these studies, the correlation patterns of the SCL-90-R sub-scales and the other instrument(s) were significant and in the theoretically predicted directions. The reliability measures of the SCL-90-R's 9 primary symptom dimensions are acceptable. Internal consistency alpha levels ranged from .77 to .90, and test-retest correlations for the symptom dimensions ranged from .78 to .90.

With regards to construct validity, a degree of ambiguity exists concerning the independence of 9 symptom dimensions of the SCL-90-R. The yield from factor analytic approaches to this question have been mixed. Cyr, Doxey, and Vigna (1988) reported finding only 4 of the 9 dimension reliably derived through an analysis of the data from 295 psychiatric inpatients and 177 industrially injured workers. In a second study, Brophy, Novell, and Kiluk (1988) reported identifying 6 of the 9 dimension as relatively stable and homogeneous factors. In addition, these researchers conducted a principle component
analysis which revealed that the first factor accounted for a large percentage of the variance which suggested that in the main, the instrument taps a general dimension of psychopathology. In contrast to these 2 studies, Derogatis and Cleary (1977) reported convincing factor analytic support for the 9 dimensions based on data from 1,002 psychiatric outpatients.

In this investigation, the global symptom index (GSI) was chosen for the eco-system analyses and the 9 dimension sub-scales were used in within system analyses.

**III. Beck Depression Inventory (BDI)**

The BDI is a 21 item questionnaire designed to measure the severity of depression. Each inventory item is a group of 4 statements that provide a varying range of responses pertaining to a particular aspect of depression. For example, item 7 reads:

<table>
<thead>
<tr>
<th>Score</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>I don’t feel disappointed in myself</td>
</tr>
<tr>
<td>1</td>
<td>I am disappointed in myself</td>
</tr>
<tr>
<td>2</td>
<td>I am disgusted with myself</td>
</tr>
<tr>
<td>3</td>
<td>I hate myself</td>
</tr>
</tbody>
</table>

Beck and Beamesderfer (1974) have provided cut-off scores to assist in interpretation. They suggest that scores from 0 to 9 are within the normal symptomatic range, scores of 10 to 18 signal a mild to moderate level of depression, scores of 19 to 29 suggest a moderate to severe depressive condition and scores of 30 to 63 indicate an extremely severe depressive state.

The BDI is one of the most widely accepted measures for assessing depression in both psychiatric patients (Piotrowski, Sherry, & Keller, 1985) and normal populations (Steer, Beck, & Garrison, 1985). In addition, it has been successfully used as a change index in
treatment outcome studies (Beck, Steer, & Garbin, 1988). The instrument has been translated into numerous languages including French, Spanish, Japanese, Chinese, and Dutch. Importantly, the BDI has been used to investigate and demonstrate the association between alcoholism and depression (Jacob, Dunn, & Leonard, 1984; McLellan & Thomas, 1985; Tamkin, Carson, Nixon, & Hyer, 1985).

The alpha coefficient for the BDI has been reported as .86. Accordingly, the instrument can be viewed as an internally consistent and reliable means of measuring the underlying dimension of depression (Beck & Steer, 1984).

3. Couples Measures Description

The marital system was the next assessment domain tapped in this research. Probing the ways in which the couple was affected by the different treatment procedures was of central concern to the study. Both members of the spousal dyad responded to questionnaires pertaining to the marriage. In most cases, husbands' and wives' scores were kept separate; however, in some situations the scores were combined to generate agreement estimates. In this study, 3 instruments were employed to quantify important aspects of the marital system according to the schedule of administration included in Appendix G. The marital relationship indices include:

(I) Edmonds Marital Conventionality Scale (EMCS) developed by Edmonds (1967),
(II) Dyadic Adjustment Scale (DAS) developed by Spanier (1976),
(III) Areas of Change (AC) developed by Weiss and Birchler (1975).

I. Edmonds Marital Conventionality Scale (EMCS)

This measure was employed in the study to ascertain the degree to which couples responded to questionnaires in a conventional fashion. Designed by Edmonds (1967) to determine an individual's tendency to respond with a socially desirable bias, this instrument asked couples to identify whether statements were true or false with regards to their views of
their marital relationship. For example, one item statement asserts: There are times when my mate does things that make me unhappy.

There are 15 items of the EMCS, however, the author suggests that the items are best mixed with other items that do not measure socially desirability in order to obfuscate the purpose of the instrument. Consequently, in this study the 15 items were interspersed with 5 items drawn from the Marital Status Inventory (Weiss, & Cerreto, 1980).

Developed in the late 1960's, the instrument was administered to 100 randomly selected married university students. This sample established a mean score of 34 and a standard deviation of 30. The original instrument was 50 items long and it was subsequently reduced to a 15 weighted item questionnaire through the selection of the top discriminatory items. The correlation between the short weighted version of the instrument and the original long form was very high ($r = .99$). The reported internal consistency reliability estimates range from 0.80 to 0.93 (Zweben, Pearlman, & Li, 1988). The 15 EMCS question weights range from 4 to 10 and the range of the weighted scores for the instrument is 0-89.

The instrument is built on the assumption that couples scoring higher in the EMCS are less likely to reveal accurate assessments of their marital relationship on other marital measures. In this study, this EMCS was used to gain an estimate of bias related to social desirability.

Marital Conventionality has been demonstrated to play a statistically significant role in the couples scores on both the Locke-Wallace Scale of Marital Adjustment (Edmonds, Withers, & Dibatista, 1972) and the Relationship Inventory (Schumm, Bollman, & Jurich, 1980). Marital Conventionality has also been suggested as an important factor in alcoholics' assessment of their marriages (Rychtarik, Tarnowski, & St. Lawrence, 1989).
It has been suggested that the EMCS could be used as a screening device to disallow those who evidence high scores on the instrument entrance into research studies. The cut-off value of 20 on the EMCS has been suggested as a possible critical value (Edmonds, 1967; Edmonds et al., 1972; Rychtarik et al., 1989). However, at this time, such a strategy does not seem warranted due to the fact that no work has been done on verifying the appropriateness of such a cut-off score.

There is no clear understanding as to the processes involved in social desirable response sets. Paulhus (1984) has proposed a two-component model that makes a distinction between self-deception (the individual actually believes his/her positive reports) and impression management (the individual consciously attempts to distort his/her true assessment). The need to screen out research participants or control for response sets of this kind would seem to depend largely on the motivation behind the set. Until a method of determining the underlying processes involved in marital conventionality has been found, it was judged most appropriate to add this aspect to the descriptive information regarding the sample and to temper interpretations accordingly.

II. Dyadic Adjustment Scale (DAS)

The DAS is a widely used self-report instrument for assessing marital satisfaction. The measure is a 32 item instrument that taps 4 dimensions of the marital relationship with a total score ranging from 0 to 151 (Spanier 1976). The sub-scales of the DAS include: (1) Dyadic Consensus (the degree to which couples agree on matters important to the relationship) consisting of 13 items, (2) Dyadic Satisfaction (the degree to which the couple is satisfied with the present state of the relationship and is committed to its continuance) with 10 constituent items, (3) Affectional Expression (the degree to which the couple is satisfied with the expression of affection and sex in the marriage) derived from 4 items, and (4) Dyadic Cohesion (the degree to which the couple experiences a sense of togetherness)
with 7 items. Along with generating 4 sub-scale scores, the DAS produces a total score which represents the overall marital adjustment of the couple (Spanier & Filsinger, 1983).

Spanier (1976) reported the internal consistency estimate (Cronbach's coefficient alpha) to be .96. The reliability of the sub-scales range from a low of .73 for the Affectional Expression sub-scale to a high of .94 on the Satisfaction sub-scale with Consensus and Cohesion having internal consistency estimates of .90 and .86 respectively.

The sub-scale structure was originally validated by factor analysis (Spanier 1976) and confirmatory studies on the instrument have provided additional support (Antill & Cotton, 1982; Spanier & Thompson, 1982). In addition to identifying a supporting sub-scale structure, factor analytic studies have identified a strong single principle factor of "adjustment" that underlies the entire instrument (Antill & Cotton, 1982; Kazak, Jarmas & Snitzer, 1988; Sharpley & Cross, 1982).

The concurrent validity of the DAS is based on the correlation of the instrument with an array of other instruments measuring similar qualities of marital relationship including the Marital Adjustment Scale, the Georgia Marriage Q-sort, the Intimate Relationship Scale, and the Marital Satisfaction Scale. In all cases, the DAS is significantly correlated in expected directions.

The instrument has been shown to have predictive validity with the measure being shown to reliability discriminate between married and divorced samples (Spanier, 1976; Spanier & Thompson, 1982). While Spanier (1976) reported norms for married and divorced couples based on mean total scores as 114.8 (SD = 17.8) and 70.7 (SD = 23.8) respectively, Spanier and Filsinger (1983) warned that the norm for divorced couples may be inaccurate and low.
Following the suggestion of Burger and Jacobson (1979), the DAS total score of 100 was used as a cut-off value for entry into the study. Accordingly, one member of the couples had to score under the critical value of 100 on the DAS to be included in the study. In this investigation, the total DAS score served as the marker variable at the marital system level and the sub-scales scores were used in the within system analyses.

III. Areas of Change (AC)

The AC is a self-report inventory designed by Weiss and Birchler (1975) to assess the desire for spousal change in their partner's marital behaviour and to measure each partner's perception of the changes their spouse desired from them.

The AC consists of 34 items that identify specific areas of concern e.g. have meals ready on time. The questionnaire is structured into two parts. In the first part, the 34 items follow the stem statement "I want my partner to...". In the second part of the instrument, the same 34 items follow the statement stem that reads "It would please my partner if I...". Responses are made on a 7-point Likert scale ranging from -3 "Much less" to +3 "Much More", with the mid point 0 indicating that no change is required.

The AC yields a number of score that can be calculated for husbands, wives and couples (Weiss & Birchler, 1975). The instrument has been scored in two different ways. One scoring procedure focuses on the overall numbers of items regardless of sign and the other focuses on the perceptual accuracy dimension of the AC. The first type of scoring requires a simple summation procedure that generates separate overall change scores for each part. Desired Change is the summary score derived from this process for the first part of the measure and Perceived Change is the summary score associated with the second part. A global Perceptual Accuracy measure is generated by comparing the Perceived Change score from one partner with the Desired Change score from the other.
The second scoring procedure takes into account the perceptual accuracy of the AC by identifying instances in which responses reflect either agreement or disagreement on the desirability of changing particular behaviours. Agreements are scored when partner A wants a change on an item and partner B is both aware of the desired change and correctly indicates the direction in which the change is requested. Disagreements are scored either when partner A wants a change and partner B does not recognize this, or when partner B thinks a change is desired when it is not identified by partner A.

The validity of the first scoring procedure has been supported by research (Margolin et al., 1983), however, the validity of the perceptually based scores (as indicated through the second scoring procedure) is less certain. Despite the fact that this method of scoring is very popular (Mead, Vatcher, Wyne, & Roberts, 1990), Margolin et al. (1983) were unable to demonstrate that perceptual scores could discriminate between distressed and nondistressed couples. Indeed, they concluded that there appeared to be virtually no association between perceptual and overall marital satisfaction. Nonetheless, the spouses’ agreement and disagreement scores allow for the computation of a Total Change scores which are generated by summing the two perceptual accuracy measures. A ratio of Agreement: Disagreement is the last score generated by AC and this is taken to be a measure of the extent to which spouses are aware of what behaviours to change and of the direction of the change desired (Margolin, Talovic, & Weinstein, 1983).

A number of studies have explored the validity of this instrument. It may be assumed that couples and individuals with greater numbers of complaints (as indicated through the first scoring procedures) would be less well adjusted in their marriage and this assumption has empirical support. The AC has been shown to discriminate well between distressed and non-distressed couples (Birchler & Webb, 1977; Margolin et al., 1983; Margolin & Wampold, 1981). The instrument has also been found to be moderately negatively correlate
with measures of marital adjustment as found by Weiss et al. (1973) \((r = -.71)\) and others (Margolin et al., 1983; Rabin et al., 1986). It has also been shown that the AC is not able to discriminate between couples in which the husband is an alcoholic and conflicted couples, but does discriminate both from nonconflicted couples (O'Farrell & Birchler, 1987). Limited normative information has been provided by Margolin et al. (1983).

Weiss et al. (1973) reported that the instrument has a high level of internal consistency \((r = .89)\). The AC has been found to be sensitive to change in therapy outcome studies (Bavcom, 1982; Margolin & Weiss, 1978), however, no stability studies exploring test-retest reliability have been reported to date. Both methods of scoring will be used in this study at the within system level of analyses.

4. Family Measures Description

A crucial aspect of the research is concerned with the functioning of the family and the ways in which the family may change as a result of one of three therapeutic efforts. This research took the perspective that each family member had a valid and important experience of the family. Consequently, the family was assessed from the points of view of father, mother, and child and no effort was made to aggregate these individual assessments into "family"data. The instruments listed below were employed to operationalize the family system in the ecological assessment package. Each instrument is reviewed in the following section. The family assessment instruments include:

(I) Family Information Form (FIF) developed by Epstein, Baldwin, and Bishop (1983),

(II) Family Satisfaction (FS) developed by Olson and Wilson (1982),

(III) Family Environment Scale (FES) developed by Moos and Moos (1981),

(IV) Family Adaptability and Cohesion Evaluation Scales III (FACES III) developed by Olson, Portner, and Lavee (1985).
I. Family Information Form (FIF)

The Family Information Form is part of a family questionnaire known as the McMaster Family Assessment Device (Epstein, Baldwin, & Bishop, 1983). The FIF gathers demographic information about families. It was selected for this research to provide a comprehensive range of family related information, including names, family roles, age, gender, and medical, school, or psychiatric problems of each person living in the household. In addition, the FIF enquires into the marital records of both parents, as well as the total family income and the ethnic and racial groups with which the family identifies. Finally, the FIF generates information regarding employment status, occupation for the heads of the household, and family income.

II. Family Satisfaction (FS)

The marker variable selected for the family level of assessment in this study was the FS scale reviewed below. Olson and Wilson (1982) developed this instrument as a direct method of assessing satisfaction with one's family. Sharing the same conceptual roots as FACES III (Olson, Porter, & Lavee, 1985), the FS was designed with an appreciation that if the normative expectations of family members supported extreme qualities of family interaction, then a particular family can function smoothly so long as all family members are satisfied with these expectations (Olson, 1986). Consequently, the FS taps level of satisfaction and generates sub-scales on the important dimensions of family cohesion and family adaptability in order to ascertain family members' comfort with these central family qualities.

The FS is a 14 item instrument that asks respondents to rate how satisfied they are with the family emotional bonds, coalitions, time, space, decision-making, interests and recreational activities (cohesion dimension items) and family assertiveness, control, discipline, negation, roles and rules (adaptability dimension items). Items are scored on a 5
point Likert scale ranging from 1 = dissatisfied to 5 = extremely satisfied. The mid-point of 3 indicates generally satisfied and divides the scale into satisfied and dissatisfied response fields.

The FS was designed to assess one's level of satisfaction in a valid and reliable manner. The final instrument was derived from a 28 item questionnaire which was piloted and later subjected to factor analysis using a varimax rotation of the principal axes. The reduction in items that followed, left the final 14 item scale with each item loading more than .50 on the first principal component.

As a method of establishing concurrent validity of the FS, Caron and Olson (1984) compared the discrepancy between two administrations of FACES II with the FS test. The discrepancy scores were derived from establishing difference of scores between two FACES II administration, the first measuring perceived family and the second assessing respondents' views of an ideal family. A high negative correlation between the FS and the ideal-perceived discrepancy was hypothesized and confirmed with the correlation on the cohesion dimension ($r = -.58$) and on the adaptability dimension ($r = -.64$) conforming to predicted relationships. Importantly, the FS has been shown to be a sensitive measure to therapeutic change. Bonk (1984) assessed 20 alcoholic families before and after treatment and found significant treatment effects on the FS scale.

With respect to internal consistency, the Cronbach alpha for the instrument is .92. The test-retest reliability estimate which was based on two administrations with a 5 week time interval separately, resulted in a Pearson correlation coefficient of .75.

Norms for the FS have been generated and are based on a national survey in the United States. The sample consisted of 1,026 couples ($n = 2,056$ individuals) drawn from
families spanning the family life cycle and 412 adolescent children. With scores potentially ranging from as low as 14 to as high as 70, the scores of 47.0 for parents and 45.0 for adolescents were established in the normative sample as the 50th percentile values. While the total FS value was used as a marker variable in this study, the sub-scales of cohesion and adaptability sub-scales were included in the within systems analyses.

III. Family Environment Scale (FES)

The FES (Moos & Moos, 1981) has been widely employed to study both treatment outcomes and families affected by alcoholism (Abbott, 1976; Bader, 1976; Barry & Fleming, 1990; Bromet & Moos, 1977; Christensen, 1977; Filstead, 1979; Filstead, Anderson, & McElfresh, 1989; Finney & Moos, 1979; Moos, Bromet, Tsu, & Moos, 1989). The FES is comprised of 10 sub-scales, however, for the purpose of this investigation, 6 sub-scales were chosen to measure salient qualities of the family environment. The sub-scales selected for this inquiry included all the sub-scales of both the relationship and system maintenance dimensions and one of the personal growth dimension sub-scales. More specifically, the sub-scales employed in this study tap:

1. **Cohesion** or the degree of commitment, help and support family members provide for one another,

2. **Expressiveness** or the extent to which family members are encouraged to act openly and to share their feelings in a direct fashion,

3. **Conflict** or the amount of tension or openly expressed anger, aggression and hostility among family members,

4. **Independence** or the extent to which family members are assertive or self-sufficient and empowered with the ability to make their own decisions,

5. **Organization** or the degree of importance of clear lines of authority and structure in planning family activities and responsibilities,
(6) *Control* or the extent to which set rules and procedures are adhered to and employed to direct family life.

Each sub-scale score is derived from responses on 9 items per sub-scale, bringing the total number of FES items used in this study to a total of 54.

The FES item development was carefully undertaken. The items on the FES were constructed from information gathered in structured interviews with members of different types of families. Additional items were adapted from other Social Climate Scales (Moos, 1974b). Several forms of the instrument were piloted and this procedure led to an initial 200 item form of the FES.

This initial form was then administered to over 1,000 people in 285 families that represented a wide variety of types of families. Subsequent item reduction was based on psychometric criteria. The overall item split needed to be close to 50-50 in order to avoid items that were characteristic of only unusual families. Items were required to correlate more closely with their own sub-scale than with any other sub-scale. In addition, the sub-scales were required to have low to moderate interactions and each item needed to discriminate among families. This item criteria was met for all items in a variety of sub samples, including Caucasian, ethnic minority, and distressed families. This development resulted in the generation of the 90 item FES instrument that asked a respondent to score yes or no as to whether or not the family statement in each item applied to their own family. Norms have been developed for both normal and distressed families. While the normal family norms were based on 1125 families from across the United States, the distressed family norms were established on the responses of 500 families involved in a variety of clinical settings, including psychiatric-oriented family clinics, probation and parole departments, alcoholic treatment centers, and psychiatric hospitals.

The internal consistency estimates for the 6 sub-scales employed in this study are all acceptable. The Cronbach’s Alpha levels ranged from moderate for Independence, Control,
and Expressiveness (.61, .67, and .69 respectively) to substantial for Cohesion, Conflict, and Organization (.78, .75, and .76 respectively). Test-retest reliability of the sub-scales were based on a sample of 47 family members in 9 families who completed the instrument twice at 8 week intervals. The 2 month test-retest reliability for the sub-scales were all acceptable, and ranged from .68 for the Independence sub-scale to .86 for the Cohesion sub-scale. The 4 month test-retest stability estimates were also acceptable and went from moderate ($r = .54$ for the Independence sub-scale) to very respectable ($r = .78$ for the Control sub-scale).

IV. Family Adaptability and Cohesion Evaluation III (FACES III)

This instrument is the third version in a series of FACES scales intended to assess the qualities of family cohesion and family adaptability. These two qualities are viewed as the core orthogonal constructs which underlie a circumplex model which provides the theoretical grounding of the instrument (Olson, 1986). The revisions of FACES have been undertaken in order to increase the measure's reliability, validity and clinical utility. Consequently, FACES III is an instrument that has resulted from considerable work in the area of family measurement.

Family cohesion is defined as the emotional bonding that family members have with one another (Olson, 1989) and the specific concepts that are employed in the instrument to reflect family togetherness include emotional bonding, boundaries, coalitions, time, space, friends, decision making, interests and recreation. The cohesion dimension can be subdivided into four levels or qualities of togetherness, namely, disengaged, separate, connected, and enmeshed. Originally, Olson et al. (1985) suggested that optimally functioning families would score in the separate and connected ranges of the dimension while disturbed families would report extreme levels of the cohesion dimension falling in either the disengaged or enmeshed range of the instrument.
Family adaptability has been defined by Olson (1989) as the ability of a family system to alter or change important aspects of its identity. The concepts tapped to measure this dimension are family power (assertiveness, control, discipline), negotiation styles, role relationships, and relational rules. The continuum of the adaptability dimension was originally conceived of as ranging from the extremes of rigid to chaotic with the adaptability qualities of structured and flexible falling in the middle ranges of the dimension. As with the cohesion dimension, Olson et al. (1985) postulated that the moderate levels of adaptability (structured and flexible) were more optimal or conducive to family functioning, while the two extreme levels of adaptability (chaotic and rigid) were associated with problematic family organizations.

Challenges to the postulated levels of the two dimensions by Green (1989) have led to a revision of interpretation of FACES III. Importantly, Olson (1991) recently clarified that on this instrument:

high scores really measure Balanced family types and low scores measure extreme family types. More specifically, high scores on cohesion are measuring "connected families" (Balanced) and high scores on adaptability are measuring "flexible" families (Balanced). (p. 75)

Accordingly, Olson (1991) directed users of the instrument to assume FACES III to be a simple linear measure and to interpret results in this fashion. Thus, high scores on cohesion are best interpreted as "very connected" rather than enmeshed and similarly, high scores on adaptability are best understood as "very flexible" rather than "chaotic".

FACES III is a 20 item scale containing 10 cohesion and 10 adaptability items. The correlation between the two core constructs is very low ($r = .03$), indicating that the two constructs are indeed orthogonal. Olson et al. (1983) reported that factor analysis of the items resulted in a two factor solution consistent with the underlying concepts of the instrument. Both the convergent and discriminated validity of FACES III have been
reported by Edman, Cole, and Howard (1990), and Perosa and Perosa (1990). With respect to alcohol dependent individuals and their families, the original FACES measure was shown to discriminate between these distressed families and a non-distressed family comparison group (Killorin & Olson, 1984; Olson & Killorin, 1985).

The internal consistency reliability of the instrument was established on a sample of over 2,000 respondents. The Cronbach Alpha estimate indicated that the measure was acceptably reliable ($r = .77$ on cohesion and $r = .62$ on adaptability). There are no test-retest reliability estimates provided for FACES III; however, the test-retest reliability for the earlier version of the instrument, FACES II, was very good. With a test-retest time interval of 5 weeks, the 50 item FACES II resulted in a test-retest reliability estimate of .83 for cohesion and .80 for adaptability.

**Phases of Data Analysis and Operationalization of Research Hypotheses**

The following section maps out the data analysis plan and operationalizes the two research hypotheses in terms of specific sub-hypotheses. There were four phases of data analysis required for this study and each phase built upon the results of the previous phase(s).

**Phase 1. Preliminary Analysis**

The first phase of analysis was concerned with generating means, standard deviations and reliability estimates (internal consistency coefficients - Cronbach's Alpha) for instruments used in the study. The pre-treatment descriptive information was considered in light of normative information in order to enable an appreciation of the clinical status of participants prior to treatment. In addition, the first phase of analysis focused on both the exploration of the pre-treatment equivalency of participants randomly assigned to the three treatment groups, and the comparability of the project participation subgroups detailed earlier in this document.
Phase 2. Eco-System Analysis

The second phase of data analysis centered on testing the research hypotheses by analysing data pertaining to various sub-hypotheses using the marker variables as dependent variables.

Marker Variables

In order to facilitate the testing of eco-systemic research questions in a clear and efficient fashion, particular instruments were selected prior to data analysis which would serve as representatives of the entire instrument package. These instruments or marker variables were culled from the entire array of measures on the basis of their capacity to reflect general or summary characteristics of the level of assessment which it represented. Accordingly, four instruments, one from each assessment domain (alcohol, intrapersonal, couple, and family) were identified as marker variables. Each of the measures could be summarized by a single score and each marker variable revealed a global characteristic of the assessment level which it represented. The marker variables were:

1. ADD which measured the level of alcohol dependency,
2. SCL-90-R's global symptomology index which measured the respondents' general level of intrapersonal distress,
3. DAS's total score which measured the level of marital adjustment,
4. FS which measured the level of family satisfaction.

These four marker variables were employed throughout tests which constituted the eco-system analysis phase of data analysis. For the analyses related to fathers', data all four marker variables were used; however, in the analyses pertaining to mothers', the alcohol measure was not applicable and therefore the remaining three marker variables were employed. Finally, in the eco-systems analyses regarding the eldest children's perspective, only the family marker variable was relevant and used in the analyses.
**Statistical Procedure**

The eco-systems analyses used a mixed model design with one between subjects independent factor (treatment) and one within subjects dependent factor (measurement occasion). The treatment factor had two levels related to hypothesis 1 (ExST and SFT) and two levels related to hypothesis 2 (ExST-I and ExST-C). The measurement occasion factor also had two levels regarding the first hypothesis (pre-test and post-test). To test the sub-hypotheses of the second hypothesis, two pairs of the measurement occasion factor were considered. The two pairs of the measurement occasion for this hypothesis were pre-test and post-test, and post-test and follow-up.

To test the two central hypotheses, all sub-hypotheses were analyzed separately. The SPSS multivariate analysis of variance (MANOVA) program was used to test the sub-hypotheses related to fathers and mothers. Each marker variable identified in the sub-hypotheses statements served as dependent variables for the MANOVA runs. The analyses of the sub-hypotheses related to the eldest child in the family was based on data from only one marker variable. Consequently, the SPSS analysis of variance (ANOVA) program was chosen to test the sub-hypotheses connected to the child's perspective. Thus, two separate MANOVA runs and one ANOVA run were required to test the first hypothesis and a total of four separate MANOVA runs and two separate ANOVA runs were needed to test the pre/post and post/follow-up comparisons related to the second hypothesis.

**Phase 3. Within System Analysis**

The third phase of data analysis probed for differences within assessment levels (alcohol, intrapersonal, marital, family) as indicated by significant differences in the initial MANOVA and ANOVA runs used to test the sub-hypotheses of the two research hypotheses. The MANOVA and ANOVA runs in the eco-systems analyses identified differences based on data from each of the assessment levels. Within systems analyses were
conducted to further explore and elaborate on changes in the levels of assessment that contributed to the significant differences in the eco-systems analyses using the same mixed model design.

A multivariate approach to analysis was taken at the within system analysis phase of the study. All instruments and their sub-scales for one level of assessment (as identified in the instrumentation section of this dissertation) were employed to serve as dependent variables for within system analyses. These MANOVA runs allowed for a more detailed examination of the system in which change had been identified as having occurred as a result of the experimental procedures. As a consequence of this approach to data analysis, this study is able to provide a more comprehensive understanding of the nature of the changes which occurred than would normally have been possible had only the marker variables been used as the dependent variables. It is important to stress that no within system analysis was undertaken unless significant differences were observed in the hypothesis testing phase of analysis.

Phase 4. Therapeutic Process Validation

The fourth and final phase of data analysis involved a series of MANOVA runs conducted to determine the role that treatment variables may have played in the treatment outcomes. This phase of analysis focuses on whether or not there were significant differences between the two clinical sites (Surrey and Duncan), the participating therapists and the gender of the therapists. Again the analyses were of mixed model design and fathers' and mothers' data were considered separately.

Operationalization of Research Hypothesis 1

The first hypothesis of this study states: When compared to the families in which the alcoholic father completed SFT, the families in which the alcoholic father completed ExST
will report greater improvement on measures contained in the ecological assessment package employed in the study.

This hypothesis will be either supported or disconfirmed on the basis of the acceptance or rejection of sub-hypotheses which separately concern themselves with treatment outcomes related to the father, mother and eldest child participants who constitute the families in this study. The following delineates the three sub-hypotheses of the first main hypothesis and operationalizes them in terms of statements that focus on each level of ecological measurement.

(1a) When compared to alcoholics who completed the SFT, alcoholics who completed ExST will report significantly greater improvement at post-test on measures contained in the ecological assessment package employed in the study. The operationalized statements are:

(i) The alcoholics who completed ExST will have improved with respect to alcohol to a significantly greater degree than the alcoholics who completed the SFT treatment as indicated by lower levels of alcohol dependency on the ADD at post-test.

(ii) The alcoholics who completed ExST will have improved with respect to their intrapersonal functioning to a significantly greater degree than the alcoholics who completed the SFT treatment as indicated by lower levels of psychological symptomology on the SCL-90-R at post-test.

(iii) The alcoholics who completed ExST will have improved with respect to their marital relationship to a significantly greater degree than alcoholics who
completed the SFT treatment as indicated by higher levels of marital adjustment on the DAS at post-test.

(iv) The alcoholics who completed ExST will have improved with respect to their family system to a significantly greater degree than alcoholics who completed the SFT treatment as indicated by higher levels of family satisfaction on the FS scale at post-test.

(1b) When compared to the wives whose husbands completed SFT, wives whose husband completed ExST will report significantly greater improvement at post-test on measures contained in the ecological assessment package employed in the study. This sub-hypothesis will be either supported or disconfirmed on the basis of the testing of the following operationalized statements:

(i) The wives whose alcoholic husbands completed ExST will have improved with respect to their intrapersonal functioning to a significantly greater degree than the wives whose alcoholic husbands completed the SFT treatment as indicated by lower levels of psychological symptomology on the SCL-90-R at post-test.

(ii) The wives whose alcoholic husbands completed ExST will have improved with respect to their marital relationship to a significantly greater degree than wives whose alcoholic husbands completed SFT as indicated by higher levels of marital adjustment on the DAS at post-test.

(iii) The wives whose husbands completed ExST will have improved with respect to their family system to a significantly greater degree than wives whose alcoholic
husbands completed SFT as indicated by higher levels of family satisfaction on the FS scale at post-test.

(1c) The children in families whose alcoholic fathers completed ExST will have improved with respect to their family system to a significantly greater degree than children whose alcoholic fathers completed SFT as indicated by higher levels of family satisfaction on the FS scale at post-test.

Operationalization of Research Hypothesis 2

The second hypothesis in this study is: When compared to the families in which the father completed ExST-I, the families in which both father and mother completed ExST-C will report significantly greater improvement at post-test and/or follow-up as measured by selected instruments in the ecological assessment package used in the study.

The second hypothesis will either be supported or disconfirmed on the basis of the acceptance or rejection of a series of sub-hypotheses which separately address the treatment outcomes related to the fathers, mothers and eldest children at post-test and follow-up measurement occasions. The following delineates the three sub-hypotheses for the pre/post comparison and the three sub-hypotheses for the post-/follow-up contrast of the second main hypothesis and expresses them in terms of operationalized statements that focus on each level of ecological assessment.

(2a) When compared to the alcoholics who completed ExST-I, alcoholics who completed ExST-C will report significantly greater improvement at post-test as measured by selected instruments in the ecological assessment package used in the study. The operationalized statements are presented below.
(i) The alcoholics who completed ExST-C will improve with respect to their alcohol problem to a significantly greater degree than the alcoholics who completed ExST-I as indicated by lower levels of alcohol dependency as measured by the ADD at post-test.

(ii) The alcoholics who completed ExST-C will improve with respect to their intrapersonal functioning to a significantly greater degree than the alcoholics who completed ExST-I as indicated by lower levels of psychological symptomology as measured by the SCL-90-R at post-test.

(iii) The alcoholics who completed ExST-C will improve with respect to their marital relationship to a significantly greater degree than alcoholics who completed ExST-I as indicated by higher levels of marital adjustment as measured by the DAS at post-test.

(iv) The alcoholics who completed ExST-C will improve with respect to their family to a significantly greater degree than alcoholics who completed ExST-I as indicated by higher levels of family satisfaction as measured by the FS scale at post-test.

(2b) When compared to wives of alcoholics whose husbands completed ExST-I, wives who completed ExST-C with their husbands will report significantly greater improvement at post-test as measured by selected instruments in the ecological assessment package used in the study. The operationalized statements for this sub-hypothesis read:

(i) The wives of alcoholics who completed ExST-C along with their husbands, will improve with respect to their intrapersonal functioning to a significantly
greater degree than the wives whose husbands completed ExST-I as indicated by lower levels of psychological symptomology as measured by the SCL-90-R at post-test.

(ii) The wives of alcoholics who completed ExST-C along with their husbands, will improve with respect to their marital relationship to a significantly greater degree than wives whose husbands completed ExST-I as indicated by higher levels of marital adjustment as measured by the DAS at post-test.

(iii) The wives of alcoholics who completed ExST-C along with their husbands, will improve with respect to their family system to a significantly greater degree than wives whose husbands completed ExST-I as indicated by higher levels of family satisfaction as measured by the FS scale at post-test.

(2c) When compared to the eldest children of alcoholics whose fathers completed ExST-I, the eldest children of alcoholics whose parents both completed ExST-C will improve with respect to their family to a significantly greater degree as indicated by higher scores of family satisfaction as measured by the FS scale at post-test.

(2d) When compared to the alcoholics who completed ExST-I, alcoholics who completed ExST-C will report significantly greater improvement at follow-up as measured by selected instruments in the ecological assessment package used in the study.

(i) The alcoholics who completed ExST-C will improve with respect to their alcohol problem to a significantly greater degree than the alcoholics who completed ExST-I as indicated by lower levels of alcohol dependency as measured by the ADD at follow-up.
(ii) The alcoholics who completed the ExST-C will improve with respect to their intrapersonal functioning to a significantly greater degree than the alcoholics who completed ExST-I as indicated by lower levels of psychological symptomology as measured by the SCL-90-R at follow-up.

(iii) The alcoholics who completed the ExST-C will improve with respect to their marital relationship to a significantly greater degree than alcoholics who completed ExST-I as indicated by higher levels of marital adjustment as measured by the DAS at follow-up.

(iv) The alcoholics who completed ExST-C will improve with respect to their family to a significantly greater degree than alcoholics who completed ExST-I as indicated by higher levels of family satisfaction as measured by the FS scale at follow-up.

(2e) When compared to wives of alcoholics whose husbands completed ExST-I, wives who completed ExST-C with their husbands will report significantly greater improvement at follow-up as measured by selection instruments in the ecological assessment package used in the study.

(i) The wives of alcoholics who completed ExST-C along with their husbands, will improve with respect to their intrapersonal functioning to a significantly greater degree than the wives whose husbands completed ExST-I as indicated by lower levels of psychological symptomology as measured by the SCL-90-R at follow-up.
(ii) The wives of alcoholics who completed ExSt-C along with their husbands, will improve with respect to their marital relationship to a significantly greater degree than wives whose husbands completed ExST-I as indicated by higher levels of marital adjustment as measured by the DAS at follow-up.

(iii) The wives of alcoholics who completed ExSt-C along with their husbands, will improve with respect to their family to a significantly greater degree than wives whose husbands completed ExST-I as indicated by higher levels of family satisfaction as measured by the FS scale at follow-up.

(2f) When compared to the eldest children of alcoholics whose fathers completed ExST-I, the eldest children of alcoholics whose parents both completed ExST-C will improve with respect to their family to a significantly greater degree as indicated by higher scores of family satisfaction as measured by the FS scale at follow-up.
CHAPTER IV: RESULTS

In this chapter the results of the data analyses are reported. The chapter is divided into four main sections which correspond to the four phases of data analyses outlined earlier including: (1) preliminary analyses, which focus on the participant descriptions at pre-treatment and tests regarding group comparability, (2) eco-system analyses, which generate answers to the hypotheses and sub-hypotheses of the study, (3) within system analyses, which expand upon the hypotheses testing results, and (4) therapeutic validation, which report on analyses probing possible therapeutic confounds to the study.

Preliminary Analysis

Instrument Overview and Pre-Treatment Participant Description

Means, standard deviations and internal consistency reliability estimates (Cronbach's Alpha) were calculated on data collected at screening and pre-treatment. The results are presented below in Tables 3-7. Kolmogorov-Smirnov (K-S) tests were conducted for each instrument and sub-scale employed in the ecological battery. All K-S tests for the marker variables were normal. The K-S test results and the findings regarding kurtosis and skew for all scales and sub-scales used in this study may be found in Appendix H. A brief description of the participants is provided for each level of assessment.

Alcohol

As shown in Table 3, the men in this study clearly scored well above the suggested cut-off value indicating alcoholism on the MAST ($\bar{X}=31.54$) and the mothers scored well below the alcoholic threshold score ($\bar{X}=2.14$). As a group, the alcoholics' scores on the ADD indicated that they were at the high end in the moderate dependency range of responding ($\bar{X}=56.05$). The critical value for severe levels of alcohol dependency is 61 on this instrument.
The alcoholics in this study scored in the high risk range of scores on the IDS for all but the physical discomfort sub-scale of the IDS (in which the participants scored in the moderate risk range of scores). The mean IDS values for the participants were compared to the normative sample gathered on men who were entering treatment for a variety of alcohol-related problems. As a group, the alcoholic participants scored in the 64th percentile for unpleasant emotions, 1st percentile for physical discomfort, 79th percentile for pleasant emotions, 42nd percentile for testing personal control, 51st percentile for urges and temptations, 41st percentile for conflict with others, 81st percentile for social pressure to drink, and 65th percentile for pleasant times with others.

Table 3
Means, Standard Deviations and Reliability Estimates (Cronbach’s Alpha) of Alcohol Measures for Fathers and Mothers at Pre-Test

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<th>Mothers</th>
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<tr>
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<td>24.49</td>
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<tr>
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<tr>
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<td>Urges/temptations</td>
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<td>22.23</td>
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<td>Pos. social situations</td>
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<td>23.40</td>
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</table>
With respect to the participants sense of confidence regarding their ability to resist drinking as measured on the SCQ compared to the normative sample of men entering treatment for alcohol related problems, the participants scored in the 48th percentile for unpleasant emotions and frustrations, 45th percentile for physical discomfort, 44th percentile for pleasant emotions, 38th percentile for personal control, 42nd percentile for urges and temptations, 46th percentile for social problems at work, 51st percentile for social tensions, and 39th percentile for positive social situations at pre-treatment.

**Intrapersonal**

The information in Table 4 reveals that the mean husband and wife performance on the SILS vocabulary sub-scale placed them just shy of the mean score for adults of their age ($T = 49$). In addition, the mean husband and wife abstraction scores placed participants within the first standard deviation of the normal population ($T = 55$ for men, $T = 57$ for women). Thus, it is safe to conclude that the participants verbal and mental abilities were within the normal range and assume that deficits in these areas did not play a role in the study. No estimates of internal consistency for the vocabulary or abstraction sub-scale are provided. In addition to being a timed test, the SILS is a power test which increases in difficulty incrementally from the first question to the last. Consequently, the internal consistency reliability Cronbach’s Alpha is inappropriate for this measure. Test-retest and split-half reliability estimates were presented earlier in the instrument section of this dissertation and ranged from $r = .60$ to .89.

The group means on the BDI placed both the father and the mother participants in this study in the moderately depressed range of scores.

The mean husband and wife scores on the nine sub-scales and the global distress index of the SCL-90-R show that as a group, the participants were very distressed in terms of
psychological symptomology. The mean scores exceeded one standard deviation above the mean of the non-patient comparison groups on all sub-scales for both husbands.

Table 4
Means, Standard Deviations and Reliabilities (Cronbach's Alpha) of Intrapersonal Measures for Fathers and Mothers

<table>
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<th>Scale/Sub-scale</th>
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<th></th>
<th>Mothers</th>
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<th>Alpha</th>
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<td>SD</td>
<td>Mean</td>
<td>SD</td>
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<td>20.14</td>
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<td>19.19</td>
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<td>19.74</td>
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<td>.84</td>
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<tr>
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<td>.80</td>
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<td>Paranoid ideation</td>
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<td>14.83</td>
<td>8.61</td>
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</table>

and wives with the exception of wives phobic sub-scale score. The SCL-90-R data was recast against the in-patient psychiatric norm group. In order to compare the data to the psychiatric norm group, the raw data was re-calibrated to fit the standard score mean and standard deviation of the psychiatric norm. As the second graph in Figure 5 reveals, both the husband and wife participants in this study scored in a fashion consistent with psychiatrically hospitalized people. The participant comparison with both the non-patient and the in-patient norms are presented in Figure 5.
Figure 5. Fathers’ and mothers’ mean pre-treatment SCL-90-R sub-scale scores compared to normal non-patient and in-patient norms.

Couple

The means, standard deviations and reliability estimates for the instrument the couples level of assessment appear in Table 5. As the Table shows, the mean EMCS value for fathers was 14.89 and for mothers was 6.67. While the instrument was not used to screen out participants (using a cut-off value of 20 or greater as indicative of an unacceptable level of marital conventionality), the mean scores suggest that the tendency to misrepresent the marriage in an overly positive fashion was not a major issue for the participants in this study.

Both husbands’ and wives’ mean DAS scores show that the couples in the study were indeed maritally distressed and well below the critical value of 100. When compared to normal contented couples on the DAS sub-scales, the couples in this research scored well below the means on the sub-scales of dyadic satisfaction, dyadic cohesion and affectional expression. While the couples did scored below the normal average on the dyadic cohesion sub-scale, this difference was negligible.
Table 5
Means, Standard Deviations and Reliability Estimates of Couples Measures for Fathers, Mothers and Couples at Pre-test

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<th>Father SD</th>
<th>Father Mean</th>
<th>Father SD</th>
<th>Father Mean</th>
<th>Father SD</th>
<th>Father Mean</th>
<th>Father SD</th>
<th>Mother Mean</th>
<th>Mother SD</th>
<th>Mother Mean</th>
<th>Mother SD</th>
<th>Couple Mean</th>
<th>Couple SD</th>
<th>Alpha</th>
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Regarding the couples AC pre-treatment values, comparisons with distressed and non-distressed normative groups available for some of the scales show that the fathers' and mothers' scores on desired change and perceived change fit within the distressed marital ranges. Thus, the amount of change that couples were asking for in this sample were consistent with the levels of change requested by couples in marital distress. While fathers' and mothers' perceptual accuracy values were not within the distressed couple range, the mean scores closely resemble the normative values for couples struggling with alcohol dependency provided by O'Farrell and Birchler (1987).
Family

The descriptive data related to the family assessment level are shown in Tables 6 and 7. The level of parental satisfaction with their families was very low at pre-treatment. The fathers' mean score of 37.73 placed them in the 4th percentile, and the mothers' mean score of 36.11 placed the women in the 1st percentile of scores on this instrument. The first born children's mean score of 40.09 suggested that they were less dissatisfied with their families than were the parents. This mean score, although low when compared to the norm group, placed the eldest children in the 28th percentile and within the normal family range.

Table 6
Means Standard Deviations and Reliability Estimates of Family Measures for Fathers and Mothers at Pre-Test

<table>
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<th>Instrument</th>
<th>Scale/Sub-scale</th>
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<th>SD</th>
<th>Mothers Mean</th>
<th>SD</th>
<th>Alpha</th>
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<td>Independence</td>
<td>6.33</td>
<td>1.56</td>
<td>5.89</td>
<td>2.05</td>
<td>.46</td>
</tr>
<tr>
<td></td>
<td>Organization</td>
<td>3.81</td>
<td>2.48</td>
<td>4.23</td>
<td>2.22</td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.29</td>
<td>1.96</td>
<td>4.84</td>
<td>2.06</td>
<td>.53</td>
</tr>
<tr>
<td>FACES III</td>
<td>Cohesion</td>
<td>32.42</td>
<td>7.37</td>
<td>34.47</td>
<td>7.61</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
<td>24.51</td>
<td>5.29</td>
<td>24.93</td>
<td>4.97</td>
<td>.67</td>
</tr>
</tbody>
</table>
Table 7
Means, Standard Deviations and Reliability Estimates of Family Measures for Eldest Children at Pre-test

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Scale/Sub-scale</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS</td>
<td>Total</td>
<td>40.09</td>
<td>10.63</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>Cohesion</td>
<td>24.23</td>
<td>5.75</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
<td>17.84</td>
<td>5.17</td>
<td>.79</td>
</tr>
<tr>
<td>FES</td>
<td>Cohesion</td>
<td>4.48</td>
<td>2.66</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td>Expressiveness</td>
<td>3.62</td>
<td>1.95</td>
<td>.61</td>
</tr>
<tr>
<td></td>
<td>Conflict</td>
<td>4.72</td>
<td>2.58</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>5.89</td>
<td>1.96</td>
<td>.46</td>
</tr>
<tr>
<td></td>
<td>Organization</td>
<td>4.44</td>
<td>2.43</td>
<td>.69</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4.28</td>
<td>2.41</td>
<td>.53</td>
</tr>
<tr>
<td>FACES III</td>
<td>Cohesion</td>
<td>29.55</td>
<td>7.36</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
<td>25.67</td>
<td>6.37</td>
<td>.67</td>
</tr>
</tbody>
</table>

The family participants’ FES scores were compared to the mean scores of the distressed family norms provided by Moos and Moos (1981). The comparison between the father, mother and eldest child pre-treatment data from the present study and the distressed family norm scores on the six sub-scales are presented below in Figure 6.

Figure 6. Participating family mean scores on FES at pre-treatment and distressed norm comparison.
This contrast suggested that the families in this project scored in a similar fashion to other distressed families. On the cohesion and expressive sub-scales, the eldest children reported scores somewhat lower than the distressed contrast group, however, the scores of the parents in the study were very similar to the comparison group. More conflict was reported by both mothers and eldest children than the distressed norm group. While both mothers and children scored identically to the norm group on independence, fathers reported somewhat higher levels than the distressed contrast group on this sub-scale. All family members reported lower levels of organization than the distressed family norm. Finally, while both fathers and eldest children reported lower levels of control, mothers reported mean scores equal to the distressed norm value on this sub-scale. It should be noted that the control sub-scale does not differentiate distressed families from normal families.

The FACES III mean scores for father and mother were comparable. The difficulties which both parents reported were found in the cohesion sub-scale with fathers and mothers both reporting that the families were somewhat disengaged. On the adaptability sub-scale, the parents' score located the families in the mid-range of the scale indicating that from their perspective the families were structured. The eldest children appear to agree with their parents assessment of family cohesiveness rating it as disengaged. However, the eldest children differed with their parents in terms of how they rated the adaptability dimension of the family. While the parents viewed the families as structured, the eldest children reported that the families were more on the flexible side. In either case, these mean scores did not represent extreme scores and were not interpreted as clinically problematic.

**Group Equivalence**

The assumption of group equivalence was tested with respect to treatment group membership (ExST-I, ExST-C, and SFT) and project participation (drop-out no treatment,
The analyses were based on data collected at screening and pre-treatment. The first multivariate analysis was conducted on a variety of demographic variables gathered at screening on the FDF. The variables included number of people residing in the household, father's marital record, mother's marital record, father's divorce rate, mother's divorce rate, father's number of previous marriages, mother's number of previous marriages, present marital status, couples number of years living together, and father's and mother's employment status. The results of this multivariate analysis revealed no significant difference between the three randomly assigned treatment groups, approximate $F(S=2, M=4, N=45.5) = 1.52, p = 0.07$ or the project participation sub-groups, approximate $F(S=3, M=3/12, N=45.5) = 1.10, p = 0.329$.

The second equivalency analysis was conducted on father's age, census class number, socio-economic status, and income derived from the Blishen socio-economic index (Blishen, Carrol & Moore, 1982). This MANOVA showed that there was no significant difference between the 3 treatment groups, approximate $F(S=2, M=1, N=46) = 1.29, p = 0.238$, or between the four project participation sub-groups, approximate $F(S=5, M=-.5, N=46) = 0.78, p = 0.768$. Another MANOVA comparing the treatment and project participation groups in terms of mother's age and the Blishen index categories of census class number, socioeconomic status, and income also failed to establish any significant difference prior to the commencement of treatment, approximate $F(S=2, M=1, N=39) = 0.93, p = 0.50$ for the treatment groups, and approximate $F(S=3, M=.5, N=39) = 1.28, p = 0.216$ for the project participation groups.

A third set of analyses were performed on fathers' and mothers' data on measures which were administered only at screening including the MAST, EMCS and SILS. Again, the MANOVA on fathers' data did not indicate any significant pre-treatment difference
between the treatment groups, $F(S=2, M=.5, N=49) = 0.69, p = 0.700$ or the project participation sub-groups, $F(S=3, M=0, N=49) = 1.38, p = 0.176$. Similarly, the MANOVA on mothers' data did not detect any significant difference between the treatment groups, $F(S=2, M=.5, N=49) = 0.69, p = 0.700$ or the project participation sub-groups, approximate $F(S=3, M=0, N=49) = 1.64, p = 0.08$.

Special attention was focused on the marker variables and the complete therapy sub-group equivalence because the bulk of the analyses performed was based on data from the group of participants that completed treatment and the hypotheses testing portion of the analyses centered on these instruments. Consequently, a series of equivalency analyses focused on the comparability of the complete treatment group in terms of treatment group membership (ExST-I, ExST-C, and SFT) using the marker variable indices (ADD, SCL-90-R, DAS, and FS) were conducted. The multivariate analysis of fathers' scores did not indicate significant differences between the treatment groups, approximate $F(S=2, M=.5, N=26) = 0.92, p = 0.51$. Similarly, the MANOVA results of mothers' data and the ANOVA results of the eldest children's scores showed no significant differences between the SFT, ExST-I, and ExST-C treatment groups at pre-treatment, approximate $F(S=2, M=0, N=26.5) = 1.39, p = 0.22$ for mothers, and $F(30, 2) = 1.43, p = 0.256$ for eldest children.

The next line of equivalence analysis was concerned with project participation and explored the assumption that participants in the group that completed treatment were equivalent to those who either dropped out of the study or those whose incomplete data sets precluded them from inclusion in the post-treatment analyses on the marker variables. Separate univariate analyses were performed on each of the marker variables.

The ANOVA contrasting the complete treatment group with the treatment drop-out group and the missing data group on the ADD revealed no significant differences, $F(3, 96)$
The participation group equivalence analyses of the SCL-90-R revealed no significant difference between the complete treatment group and the other three participation groups, \( F(3, 223) = 0.75, p = 0.52 \). The comparison between the two drop-out groups was also not statistically significant on the SCL-90-R, \( F(82, 1) = 0.06, p = 0.81 \). The contrast between the genders of parents also revealed no significant difference, however there was a trend towards the men being more symptomatic than the women, \( F(1, 225) = 2.62, p = 0.10 \).

The equivalence analyses of project participation group on the DAS revealed no significant difference between the four participation groups, \( F(3, 224) = 0.36, p = 0.78 \). Similarly, there was no significant difference between the two drop-out groups, \( F(1, 82) = 0.86, p = 0.36 \). However, a significant difference between the husbands' and the wives' scores on the DAS was identified revealed that the wives reported significantly more marital distress than their husbands, \( F(1, 226) = 10.78, p = 0.001 \).

A statistically significant difference was found in the participation group contrast at the family level of assessment for fathers and mothers. Since no family measure was administered at screening the pre-treatment drop out group was not considered in this analysis. Nonetheless, the ANOVA on fathers' data was statistically significant, \( F(2, 82) = 3.38, p = 0.039 \). A review of the data revealed that the fathers who dropped out of treatment were significantly less satisfied with their families than either the group that completed treatment or the group that completed treatment but was missing data at post-treatment. Similarly, the mothers in the group that dropped out of treatment were significantly more dissatisfied with their families than were the women in either of the two groups that completed treatment, \( F(2, 86) = 6.86, p = 0.002 \). The ANOVA comparing the
eldest children by participation group on the FS was not significant, $F(2, 51) = 0.53, p = 0.662$.

**Summary of Equivalency Tests**

The equivalency analyses indicated that the random assignment of clients to treatment groups had adequately controlled for chance bias. Based on the analyses of data from the entire study sample, and data on the families who completed treatment (the focus of the remaining analyses) it was shown that the treatment groups were indeed comparable.

In the main, the project sub-group set of analyses failed to identify any unique characteristics which differentiated those who completed treatment from those who did not. However, the comparability analyses identified one important factor in the study and this pertained to those in the project participation sub-groups that terminated treatment prematurely. The analyses indicated that both fathers and mothers in this sub-group reported significantly lower levels of family satisfaction than did the two sub-groups that completed their course of treatment. Although the two remaining project participation sub-groups were very dissatisfied with their families (pre-treatment mean score values placing them on the 10th and 13th percentile), the parents that were extremely dissatisfied (mean score in the 1st percentile) dropped out of the study before completing treatment. This result would appear to be consistent with the findings of Bromet and Moos (1977) and Moos et al. (1979) who reported that better family environments were significantly correlated with better treatment outcomes for recovering alcoholics. In the present study, the less severe levels of family dissatisfaction appeared to support the treatment procedures in some fashion. In the cases of the most extreme levels of family dissatisfaction, the participants were seemingly unable to honor their commitment to complete therapy.
Eco-System Analyses of Hypotheses

The eco-system analyses generated the primary results for the two main research hypotheses of the study. Testing the operationalized statements of the sub-hypotheses, the eco-system analyses results were used to point to further analytic elaboration in the within systems analyses section. The two hypotheses and their constituent sub-hypotheses are presented in this section. All analyses were based upon data from the complete treatment project participation group and were conducted using SPSS statistical packages.

First Research Hypothesis: Differential Efficacy of ExST and SFT

The first hypothesis was concerned with the differential treatment effects of ExST and SFT. This hypothesis was broken into three sub-hypotheses which separately addressed the perspectives of the father, mother and children. The results from tests centered on each sub-hypothesis are presented below.

Sub-Hypothesis 1-a

When compared to alcoholics who completed SFT, alcoholics who completed ExST will report significantly greater improvement at post-test on measures contained in the ecological assessment package employed in the study.

A multivariate analysis of variance was conducted on fathers’ pre-treatment and post-treatment scores on the marker variables to determine whether or not the two treatments had a differential treatment effect as predicted in hypothesis 1-a. The MANOVA analysis of treatment and occasion interaction was not statistically significant, \( F(S=1, M=1, N=55.5) = 0.038, \ p = 0.99 \). There was no evidence found that would support hypothesis 1-a and consequently it was rejected.

A highly significant occasion effect was found between pre-treatment and post-treatment scores, \( F(S=1, M=1, N=55.5) = 21.23, \ p = 0.001 \). This MANOVA result
indicates that both treatments were associated with important post-treatment changes and consequently univariate F-tests were conducted on each marker variable inducted in the MANOVA. The ANOVA results are presented in Table 8. The pre-treatment and post-treatment means for the two treatments are also presented in Table 9 and are illustrated in Figure 7.

**Table 8**

<table>
<thead>
<tr>
<th>Marker Variable</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD</td>
<td>59.37</td>
<td>.001**</td>
</tr>
<tr>
<td>SCL-90-R</td>
<td>48.75</td>
<td>.001**</td>
</tr>
<tr>
<td>DAS</td>
<td>16.69</td>
<td>.001**</td>
</tr>
<tr>
<td>FS</td>
<td>7.19</td>
<td>.008*</td>
</tr>
</tbody>
</table>

* Significant at alpha = .01
** Significant at alpha = .001
Degrees of freedom = (1, 116)

**Table 9**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Pre-treatment</th>
<th>Post-treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>ExST</td>
<td>ADD</td>
<td>54.88</td>
<td>18.38</td>
</tr>
<tr>
<td>n=40</td>
<td>SCL-90-R</td>
<td>76.04</td>
<td>18.99</td>
</tr>
<tr>
<td></td>
<td>DAS</td>
<td>87.52</td>
<td>16.27</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>39.41</td>
<td>8.45</td>
</tr>
<tr>
<td>SFT</td>
<td>ADD</td>
<td>53.65</td>
<td>19.75</td>
</tr>
<tr>
<td>n=20</td>
<td>SCL-90-R</td>
<td>78.17</td>
<td>20.14</td>
</tr>
<tr>
<td></td>
<td>DAS</td>
<td>86.78</td>
<td>18.81</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>39.59</td>
<td>9.44</td>
</tr>
</tbody>
</table>
Figure 7. Fathers' pre-treatment and post-treatment means of marker variable for ExST and SFT.

Sub-hypothesis 1-B

When compared to the wives whose husbands completed SFT, the wives whose husbands completed ExST will report significantly greater improvement at post-test on measures contained in the ecological assessment package employed in the study.

The MANOVA testing sub-hypothesis 1-b contrasted the pre-treatment and post-treatment scores of the wives in terms of the treatment their husbands received. The MANOVA results show that there was no statistically significant interaction between the measurement occasion and the spouses whose husbands completed SFT verses those whose
husbands completed ExST, $F(S=1, M=.5, N=56) = 0.43, p = 0.729$. In light of this finding, sub-hypothesis 1-b could not be viewed as tenable and was rejected.

The MANOVA result concerned with measurement occasion was found to be highly significant and showed that the mothers’ scores on the instruments had dramatically improved, $F(S=1, M=.5, N=56) = 9.77, p = 0.001$. Subsequently, univariate F-tests were performed on each of the marker variables and these indicated that the treatments had a significant effect on each measure. The ANOVA results for each marker variable is shown in Table 10.

**Table 10**

*Summary of Univariate Tests of Mothers' Marker Variables for Pre-treatment and Post-treatment Differences for ExST and SFT*

<table>
<thead>
<tr>
<th>Marker Variable</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL-90-R</td>
<td>19.60</td>
<td>.001*</td>
</tr>
<tr>
<td>DAS</td>
<td>20.17</td>
<td>.001*</td>
</tr>
<tr>
<td>FS</td>
<td>13.68</td>
<td>.001*</td>
</tr>
</tbody>
</table>

* Significant at alpha = .001

Degrees of freedom = (1, 116)

**Table 11**

*Mothers' Pre-treatment and Post-treatment Means and Standard Deviations of Marker Variables for ExST and SFT*

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Pre-treatment Mean</th>
<th>Pre-treatment SD</th>
<th>Post-treatment Mean</th>
<th>Post-treatment SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExST</td>
<td>SCL-90-R</td>
<td>72.65</td>
<td>19.43</td>
<td>57.87</td>
<td>13.58</td>
</tr>
<tr>
<td>n=40</td>
<td>DAS</td>
<td>83.18</td>
<td>19.42</td>
<td>98.64</td>
<td>20.45</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>37.63</td>
<td>8.66</td>
<td>44.29</td>
<td>8.02</td>
</tr>
<tr>
<td>SFT</td>
<td>SCL-90-R</td>
<td>74.50</td>
<td>16.04</td>
<td>63.76</td>
<td>16.44</td>
</tr>
<tr>
<td>n=20</td>
<td>DAS</td>
<td>82.81</td>
<td>14.81</td>
<td>97.11</td>
<td>15.69</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>39.31</td>
<td>7.81</td>
<td>42.49</td>
<td>7.72</td>
</tr>
</tbody>
</table>
The pre-treatment and post-treatment means for the two treatments for mothers' scores presented in Table 11 show the level of change on the marker variables. The pretreatment and post-treatment mean scores for both treatments are illustrated in Figure 8.

![Graphs showing SCL-90-R, DAS, and FS scores over pre-treatment and post-treatment occasions for ExST and SFT.](image)

**Figure 8.** Mothers' pre-treatment and post-treatment means of marker variables for ExST and SFT.

**Sub-hypothesis 1-C**

The eldest children in families whose alcoholic father completed ExST will have improved with respect to their family to a significantly greater degree than the eldest children in families whose alcoholic father completed SFT as indicated by higher levels of family satisfaction on the FS scale at post-test.

The ANOVA testing for differential treatment effects between ExST and SFT from the eldest children's perspective showed no treatment by occasion interaction, $F(1, 62) = 0.11, p = 0.738$. This result meant that the eldest children whose fathers received ExST had...
not fared significantly better than the eldest children whose fathers completed SFT. Accordingly, sub-hypothesis 1-C was rejected.

The analysis of the pre-treatment and post-treatment measurement occasion data indicated that the SFT and ExST treatments had no statistically significant impact on the siblings in the family from the eldest children’s perspective. Unlike the analyses of sub-hypothesis 1-a and 1-b, this analysis was not significant, $F(1, 62) = 0.97, p = 0.330$. An examination of the pre-treatment and post-treatment means found below in Table 12 and graphed in Figure 9, reveals that there was indeed very little pre-treatment/post-treatment change at the family level reported by the eldest children.

Table 12

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Pre-treatment Mean</th>
<th>SD</th>
<th>Post-treatment Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExST</td>
<td>FS</td>
<td>45.89</td>
<td>8.58</td>
<td>47.61</td>
<td>8.85</td>
</tr>
<tr>
<td>n = 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFT</td>
<td>FS</td>
<td>40.00</td>
<td>10.58</td>
<td>43.50</td>
<td>13.91</td>
</tr>
<tr>
<td>n = 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 9. Eldest children’s pre-treatment and post-treatment means of marker variable for ExST and SFT.
Second Research Hypothesis: Differential Efficacy of ExST-I and ExST-C

The second research hypothesis focused attention on the differential treatment effects of the two formats (individual and couples) of ExST. Six sub-hypotheses were articulated for this hypothesis in which three dealt with pre-treatment/post-treatment differences, and three focused on post-treatment/follow-up differences. The results from the analyses pertaining to each sub-hypothesis follow.

Sub-hypothesis 2-a

When compared to alcoholics who completed ExST-I, alcoholics who completed ExST-C will report significantly greater improvement at post-test as measured by selected instruments in the ecological assessment package used in this study.

A multivariate analysis of variance using the pre-treatment and post-treatment scores as dependent factors and treatment format as independent factors was conducted to test this sub-hypothesis. Employing the ADD, SCL-90-R, DAS and FS as marker variables, the MANOVA results showed that there was no statistically significant interaction between the two treatment formats and the measurement occasions as far as the fathers’ were concerned, $F (S=1, M=1, N=35.5) = 1.35, \ p = 0.261$. Consequently, sub-hypothesis 2-a was rejected.

A highly significant measurement occasion difference which contrasted the pre-treatment and post-treatment scores also emerged as part of this analysis, $F (S=1, M=1, N=35.5) = 18.75, \ p = 0.001$. The subsequent univariate analyses of fathers’ marker variables revealed that significant change had occurred at all levels of ecological assessment. The ANOVA results appear below in Table 13.
Table 13
Summary of Univariate Tests of Fathers’ Marker Variables for Pre-Treatment and Post-Treatment Differences for ExST-I and ExST-C

<table>
<thead>
<tr>
<th>Marker Variable</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD</td>
<td>45.61</td>
<td>.001**</td>
</tr>
<tr>
<td>SCL-90-R</td>
<td>41.63</td>
<td>.001**</td>
</tr>
<tr>
<td>DAS</td>
<td>14.42</td>
<td>.001**</td>
</tr>
<tr>
<td>FS</td>
<td>4.50</td>
<td>.037*</td>
</tr>
</tbody>
</table>

* Significant at alpha = .05
** Significant at alpha = .001
Degrees of freedom = (1, 76)

An examination of the pre-treatment and post-treatment means for the two treatment formats of ExST shown below in Table 14 reveals the levels of change for each marker index. The mean scores of the marker variables at pre-treatment and post-treatment for ExST-I and ExST-C are found in graphic form in Figure 10.

Table 14
Fathers’ Pre-treatment and Post-treatment Means and Standard Deviations of Marker Variables for ExST-I and ExST-C

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variables</th>
<th>Pre-treatment</th>
<th>Post-treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>ExST-I</td>
<td>ADD</td>
<td>56.40</td>
<td>18.46</td>
</tr>
<tr>
<td>n=20</td>
<td>SCL-90-R</td>
<td>72.25</td>
<td>16.95</td>
</tr>
<tr>
<td></td>
<td>DAS</td>
<td>93.18</td>
<td>13.78</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>41.70</td>
<td>8.16</td>
</tr>
<tr>
<td>ExST-C</td>
<td>ADD</td>
<td>53.36</td>
<td>18.64</td>
</tr>
<tr>
<td>n=20</td>
<td>SCL-90-R</td>
<td>79.84</td>
<td>18.83</td>
</tr>
<tr>
<td></td>
<td>DAS</td>
<td>81.87</td>
<td>16.91</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>37.11</td>
<td>8.29</td>
</tr>
</tbody>
</table>
Figure 10. Fathers' pre-treatment and post-treatment means of marker variables for ExST-I and ExST-C.

**Sub-hypothesis 2-b**

When compared to the wives of alcoholics whose husbands completed the ExST-I, wives who completed ExST-C with their husbands will report significantly greater improvement at post-test as measured by selected instruments in the ecological assessment battery in this study.

In keeping with the earlier analysis of mothers' data, the SCL-90-R, DAS, and FS marker variables were employed to test this sub-hypothesis. The multivariate analysis contrasting the pre-test and post-test measurement occasions and the two treatment formats of ExST relevant to sub-hypothesis 2-b showed no statistically significant interaction, $F$
$(S=1, M=.5, N=36) = 0.98$, $p = 0.405$. This finding rendered sub-hypothesis 2-b untenable and as a consequence it was rejected.

The rejection of the sub-hypothesis was once again accompanied by a highly significant measurement occasion effect. The MANOVA results again indicated that both treatment formats had brought about eco-systemic change, $F(S=1, M=.5, N=36) = 7.49$, $p = 0.001$. Separate univariate F-tests were performed on each index included in the marker variable set and the results of these analyses are shown below in Table 15. The levels of the pre-treatment and post-treatment changes of the marker variables for both treatment formats are found below in Table 16 and these are shown in graph form in Figure 11.

Table 15

<table>
<thead>
<tr>
<th>Marker Variables</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL-90-R</td>
<td>15.55</td>
<td>.001*</td>
</tr>
<tr>
<td>DAS</td>
<td>12.61</td>
<td>.001*</td>
</tr>
<tr>
<td>FS</td>
<td>12.43</td>
<td>.001*</td>
</tr>
</tbody>
</table>

* Significant at alpha = .001
Degrees of freedom = (1, 76)

Table 16

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Pre-Treatment</th>
<th>Post-Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>ExST-I</td>
<td>SCL-90-R</td>
<td>68.86</td>
<td>12.77</td>
</tr>
<tr>
<td>n=20</td>
<td>DAS</td>
<td>90.44</td>
<td>13.69</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>38.31</td>
<td>8.24</td>
</tr>
<tr>
<td>ExST-C</td>
<td>SCL-90-R</td>
<td>76.44</td>
<td>24.12</td>
</tr>
<tr>
<td>n=20</td>
<td>DAS</td>
<td>75.92</td>
<td>21.79</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>36.96</td>
<td>9.23</td>
</tr>
</tbody>
</table>
Figure 11. Mothers’ pre-treatment and post-treatment means of marker variables for ExST-I and ExST-C.

Sub-hypothesis 2-c

When compared to the eldest children of alcoholics whose fathers completed ExST-I, the eldest children of alcoholics whose parents both completed ExST-C will improve with respect to their family to a significantly greater degree as indicated by higher levels of family satisfaction as measured by the FS scale at post-test.

A univariate F test was performed to test the sub-hypothesis related to differential treatment format effects from the perspective of the eldest child using the FS marker as the dependent variable. The ANOVA results revealed no statistically significant interaction between the treatment formats and the measurement occasion from the children’s point of
view, $F(1, 42) = 0.01$, $p = 0.989$. In accordance with this finding, sub-hypothesis 2-c was rejected.

In keeping with the earlier analysis of the eldest children’s data, the ANOVA test verifying whether or not the treatment formats had any substantive impact was not statistically significant, $F(1, 42) = 0.19$, $p = 0.664$. The eldest children’s pre-treatment and post-treatment means on the marker variable for both ExST-I and ExST-C appear in Table 12 and are charted in Figure 11. The data illustrates how little variation on the scores were evident between measurement occasions.

Table 17

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Pre-treatment</th>
<th>Post-treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>ExST-I</td>
<td>FS</td>
<td>46.47</td>
<td>4.38</td>
</tr>
<tr>
<td>n=11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ExST-C</td>
<td>FS</td>
<td>45.36</td>
<td>11.37</td>
</tr>
<tr>
<td>n=12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Figure 12](image-url)
**Sub-hypothesis 2-d**

When compared to the alcoholics who completed ExST-I, alcoholics who completed ExST-C will report significantly greater improvement at follow-up as measured by selected instruments in the ecological assessment battery used in the study.

A multivariate analysis of variance was conducted on the fathers' post-treatment and follow-up data to test whether or not there was a differential treatment format effect detectable at follow-up on the marker variables used in testing sub-hypothesis 2-a. The results of the MANOVA indicated that the treatment format and measurement occasion interaction did not reach acceptable levels of significance, $F (S=1, M=1, N=11) = 1.15$, $p = 0.357$. This finding necessitated the rejection of sub-hypothesis 2-d.

The MANOVA analysis that was performed to test for a measurement occasion main effect yielded no significant difference, $F (S=1, M=1, N=11) = 1.199$, $p = 0.337$. This finding indicated that the treatment gains noted at post-treatment were stable up to follow-up.

A presentation of the mean score values of the marker variables for both post-treatment and follow-up occasions and the two treatment formats is found in Table 18. It should be noted that the sample in the post-treatment/follow-up contrast is smaller than the sample used in the treatment/post-treatment comparison. The mean values appearing in Table 18 are charted in Figure 13.
Table 18

Fathers’ Post-Treatment and Follow-up Means and Standard Deviations of Marker Variables for ExST-I and ExST-C

| Treatment | Marker Variable | Post-treatment | | | Follow-up | | |
|-----------|----------------|----------------|---|---|---|---|
|           |                | Mean | SD   | Mean | SD   | |
| ExST-I    | ADD            | 16.83 | 21.54 | 23.06 | 28.66 | |
| n = 16    | SCL-90-R       | 54.39 | 11.49 | 61.99 | 14.00 | |
|           | DAS            | 103.63 | 15.62 | 100.84 | 18.91 | |
|           | FS             | 45.81 | 7.60  | 43.00 | 9.09  | |
| ExST-C    | ADD            | 31.92 | 27.18 | 30.85 | 36.86 | |
| n = 13    | SCL-90-R       | 58.45 | 12.99 | 58.15 | 19.53 | |
|           | DAS            | 97.60 | 21.02 | 102.97 | 22.11 | |
|           | FS             | 41.14 | 9.69  | 40.85 | 11.22 | |

Figure 13. Fathers’ post-treatment and follow-up means of marker variables for ExST-I and ExST-C.
Sub-Hypothesis 2-e

When compared to wives of alcoholics whose husbands completed ExST-I, wives who completed ExST-C with their husbands will report significantly greater improvement at follow-up as measured by selected instruments in the ecological assessment package used in the study.

The MANOVA conducted to test sub-hypothesis 2-e found that there was no significant treatment format and measurement occasion interaction differentiating the women in this study, \( F(S=1, M=.5, N=12) = 0.236, \ p = 0.870 \). In view of this finding, the sub-hypothesis could not be held as tenable and was rejected.

The durability of the significant treatment effects of both formats revealed in the testing of sub-hypothesis 2-b were explored by the multivariate analysis testing sub-hypothesis 2-e. The MANOVA showed that the treatment effects had not deteriorated to a statistically significant degree, \( F(S=1, M=.5, N=12) = 0.26, \ p = 0.852 \).

The post-treatment and follow-up mean values for each marker variable and treatment format group are found in Table 19. It should be noted that the post-treatment/follow-up analysis was conducted on a somewhat smaller sample size than the pre-treatment/post-treatment analysis. The mean values in Table 19 are illustrated in Figure 14.
Table 19
Mothers' Post-treatment and Follow-up Means and Standard Deviations of Marker Variables for ExST-I and ExST-C

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Post-treatment</th>
<th></th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>ExST-I</td>
<td>SCL-90-R</td>
<td>57.06</td>
<td>11.98</td>
<td>56.22</td>
</tr>
<tr>
<td>n=17</td>
<td>DAS</td>
<td>98.98</td>
<td>17.53</td>
<td>99.99</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>44.17</td>
<td>8.82</td>
<td>43.92</td>
</tr>
<tr>
<td>ExST-C</td>
<td>SCL-90-R</td>
<td>55.51</td>
<td>11.99</td>
<td>54.03</td>
</tr>
<tr>
<td>n=13</td>
<td>DAS</td>
<td>104.62</td>
<td>19.03</td>
<td>103.88</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>44.30</td>
<td>8.12</td>
<td>46.02</td>
</tr>
</tbody>
</table>

Figure 14. Mothers' post-treatment and follow-means on marker variables for ExST-I and ExST-C.
Sub-Hypothesis 2-f

When compared to the eldest children of alcoholics whose fathers completed ExST-I, the eldest children of alcoholics whose parents both completed ExST-C will improve with respect to their family to a significantly greater degree as indicated by higher scores of family satisfaction as measured by the FS scale at follow-up.

The differential treatment format effect associated with the individual and couples forms of ExST from the perspective of the eldest children was examined employing a univariate analysis of variances. The ANOVA results based on data from the FS marker variable indicate that there was no significant interaction between the two treatment formats and the measurement occasion as far as the eldest children were concerned, $F(1, 15) = 0.33, p = 0.577$. Accordingly, sub-hypothesis 2-f was rejected.

The effect of the two formats were also shown to be not statistically significant in the ANOVA employed for the analysis of the eldest children's post-treatment follow-up data, $F(1, 15) = 0.27, p = 0.612$. Thus, it seems clear that the eldest children's assessment of their family was relatively unaffected by either treatment formats at post-test and follow-up. The post-treatment and follow-up means and standard deviations for the eldest children participants appear in Table 20 and are graphed in Figure 15.

Table 20

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Marker Variable</th>
<th>Post-treatment</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>ExST-I</td>
<td>FS</td>
<td>47.39</td>
<td>9.24</td>
</tr>
<tr>
<td>n=9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ExST-C</td>
<td>FS</td>
<td>44.69</td>
<td>9.31</td>
</tr>
<tr>
<td>n=8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Within Systems Analysis

The within systems analyses were conducted as indicated by the eco-system analyses. While all of the differential treatment effect (ExST and SFT) and the differential treatment format effect (ExST-I and ExST-C) sub-hypotheses were rejected, the pre-treatment and post-treatment contrasts for fathers and mothers for both treatment and format were characterized by highly significant occasion main effects across all of the marker variables. Consequently, within systems analyses were conducted for all of the levels of assessment for both fathers and mothers in the pre-treatment/post-treatment contrast of all three experimental treatment groups.

Within Alcohol System

A MANOVA was conducted using the pre-treatment and post-treatment fathers' data. Included as dependent variables were the eight sub-scales of both the IDS and SCQ. Thus, a total of 16 sub-scales served as dependent measures in this analysis. The results of this multivariate test mirrored the eco-systems results and indicated that while there was no significant treatment and measurement occasion interaction, approximate $F(S=1, M=7.5, N=18.5) = 0.96$, $p = 0.54$, there was a substantial statistically significant difference found
between the pre-treatment and post-treatment scores, $F (S=1, M=7.5, N=18.5) = 15.28, p = 0.001$.

Univariate F-tests performed on each of the sub-scales revealed that measurement occasion differences on all but one of the sub-scales in SCQ were highly significant. The results of the ANOVA tests appear in Table 21

**Table 21**

Summary of Univariate Tests Within Alcohol Level of Assessment of Pre-treatment and Post-treatment Differences

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sub-scale</th>
<th>$F$</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDS</td>
<td>Unpleasant emotions</td>
<td>79.40</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Physical discomfort</td>
<td>40.03</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Pleasant emotions</td>
<td>86.89</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Testing personal control</td>
<td>40.28</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Urges and temptations</td>
<td>104.12</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Conflict with others</td>
<td>110.43</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Social pressure to drink</td>
<td>96.94</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Pleasant times with others</td>
<td>122.38</td>
<td>.001*</td>
</tr>
<tr>
<td>SCQ</td>
<td>Unpleasant emotions</td>
<td>24.19</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Physical discomfort</td>
<td>20.89</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Pleasant emotions</td>
<td>2.91</td>
<td>.093</td>
</tr>
<tr>
<td></td>
<td>Testing personal control</td>
<td>32.76</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Urges and temptations</td>
<td>26.35</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Social problems</td>
<td>47.39</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Social tensions</td>
<td>23.47</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Positive social situations</td>
<td>30.41</td>
<td>.001*</td>
</tr>
</tbody>
</table>

*Significant alpha = .001
Degrees of freedom = (1, 55)

The pre-treatment total sample means and post-treatment means for instrument sub-scales are charted below for the three treatment groups in Figure 16. As Figure 16 shows,
the pre-treatment total sample means and post-treatment values for all treatment conditions show considerable improvement.

**Within Alcohol System**

![Graph showing IDS Score and SCQ Score for various sub-scales under alcohol system variables.]

Figure 16. Fathers’ total sample pre-treatment means and treatment group post-treatment means for within alcohol system variables.

**Within Intrapersonal System**

The indices involved in this within system analysis were the nine sub-scales from the SCL-90-R and the total depression score from the BDI. Thus, pre-treatment and post-treatment data from ten dependent variables served as data for the mixed model MANOVA conducted at the intrapersonal system level. Separate analyses were conducted on fathers’ and mothers’ data.
The results from the fathers' analyses were in keeping with earlier findings and showed that there was no statistically significant interaction between the measurement occasions and the treatments, approximate $F (S=2, M=3.5, N=22.5) = 0.97, p = 0.508$. The MANOVA also expanded on the substantive client changes that was associated with the treatments. Again, a highly significant difference was found between the pre-treatment and post-treatment scores, $F (S=1, M=4, N=22.5) = 10.43, p = 0.001$. Separate univariate F-tests were conducted subsequent to this finding. As revealed in Table 22 there were large statistically significant differences between each dependent variable at pre-treatment and post-treatment.

Pre-treatment total sample mean and post-treatment means for each treatment condition and for each dependent measure are compared to the non-patient norms and are charted below in Figure 17.

**Table 22**

Summary of Univariate F-Tests of Fathers' Within Intrapersonal Level of Assessment for Pre-treatment and Post-treatment Differences

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sub-scale</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL-90-R</td>
<td>Somatization</td>
<td>29.53</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Obsessive-compulsive</td>
<td>85.03</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Intrapersonal sensitivity</td>
<td>54.80</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td>65.45</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>71.49</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Hostility</td>
<td>44.86</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Phobic anxiety</td>
<td>14.35</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Paranoid ideation</td>
<td>33.45</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Psychoticism</td>
<td>56.81</td>
<td>.001*</td>
</tr>
<tr>
<td>BDI</td>
<td>Total</td>
<td>35.94</td>
<td>.001*</td>
</tr>
</tbody>
</table>

* Significant at $p = .001$

Degrees of freedom = (1, 56)
Within Intrapersonal System

Figure 17. Fathers’ total sample pre-treatment means and treatment group post-treatment means for within intrapersonal system variables.

The multivariate within intrapersonal analysis of mothers’ pre-treatment and post-treatment data was consistent with fathers’ within intrapersonal system findings. Once again, the MANOVA, while establishing no significant measurement occasion and treatment condition interaction, $F(S=2, M=3.5, N=23) = 0.67$, $p = 0.842$, also indicated considerable statistically significant measurement occasion main effect for all treatment groups, $F(S=1, M=4, N=23) = 3.58$, $p = 0.001$. Dependent variable ANOVA’s showed that there had been marked significant improvement on all variables employed at this level of analysis. The results of the univariate F-tests appear below in Table 23 and the post-treatment data are presented in Figure 18.
Table 23
Summary of Univariate Tests of Mothers' Within Intrapersonal Level of Assessment for Pre-treatment and Post-treatment Differences

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sub-scale</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL-90-R</td>
<td>Somatization</td>
<td>14.21</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Obsessive-compulsive</td>
<td>26.41</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Interpersonal sensitivity</td>
<td>29.42</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td>27.81</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>21.85</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Hostility</td>
<td>11.21</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Phobic anxiety</td>
<td>4.48</td>
<td>.039*</td>
</tr>
<tr>
<td></td>
<td>Paranoid ideation</td>
<td>17.84</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Psychoticism</td>
<td>10.07</td>
<td>.002**</td>
</tr>
<tr>
<td>BDI</td>
<td>Total</td>
<td>20.59</td>
<td>.001***</td>
</tr>
</tbody>
</table>

* Significant at alpha = .05
** Significant at alpha = .01
*** Significant at alpha = .001
Degrees of freedom = (1, 57)

Within Intrapersonal System

Figure 18. Mothers' total samples pre-treatment means and treatment group post-treatment means for within personal intrapersonal system variables.
The treatment gains on these variables illustrated in Figure 18, show the three treatment groups post-treatment means contrasted with the total samples pre-treatment means for each sub-test. As the figure reveals, the improvement rate of the ExST treatments appear slightly higher than the SFT condition in a consistent fashion. While this difference is not statistically significant, it would appear to be important on a clinical level as the ExST values are within normal limits while the SFT values are outside of the normal ranges.

Within Couple System

The within couple system analyses included three separate MANOVA runs including analyses focused on fathers’ mothers’ and couples data. The couples perspective analysis was based on variables from the AC measure that require an aggregation of fathers’ and mothers’ scores. The analyses for both fathers and mothers included the four sub-scale variables constituting the DAS and the five relevant sub-scales of the AC.

The results from the MANOVA on fathers’ and mothers’ views reflected a similar pattern of results which found no treatment by measurement occasion interaction coupled with substantive pre-treatment/post-treatment change. The values for fathers’ MANOVA were, approximate $F (S=2, M=3.5, N=23) = 90$, $p = 0.575$ for the differential treatment group contrast, and $F (S=1, M=3.5, N=23) = 5.97$, $p = 0.001$ for the measurement occasion main effect. Similarly the values for mothers’ MANOVA were, $F (S=2, M=3, N=23.5) = 1.04$, $p = 0.426$, and $F (S=1, M=3.5, N=23) = 5.97$, $p = 0.001$ for the two contrasts respectively.

The results from the subsequent ANOVA tests on each dependent variable for fathers and mothers are shown in Table 24.
Table 24

Summary of Univariate Tests of Fathers' and Mothers' Within Couple Level of Assessment for Pre-treatment and Post-treatment Differences

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sub-scale</th>
<th>Father F-Value</th>
<th>Father Probability</th>
<th>Mother F-Value</th>
<th>Mother Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Agreement</td>
<td>10.29</td>
<td>.002*</td>
<td>44.22</td>
<td>.001**</td>
</tr>
<tr>
<td></td>
<td>Disagreement</td>
<td>23.81</td>
<td>.001**</td>
<td>2.26</td>
<td>.138</td>
</tr>
<tr>
<td></td>
<td>Desired Change</td>
<td>8.49</td>
<td>.005*</td>
<td>34.29</td>
<td>.001**</td>
</tr>
<tr>
<td></td>
<td>Perceived Change</td>
<td>18.83</td>
<td>.001**</td>
<td>21.19</td>
<td>.001**</td>
</tr>
<tr>
<td></td>
<td>Perceptual Accuracy</td>
<td>1.28</td>
<td>.262</td>
<td>32</td>
<td>.574</td>
</tr>
<tr>
<td>DAS</td>
<td>Concensus</td>
<td>25.64</td>
<td>.001**</td>
<td>29.62</td>
<td>.001**</td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
<td>25.29</td>
<td>.001**</td>
<td>36.33</td>
<td>.001**</td>
</tr>
<tr>
<td></td>
<td>Affection</td>
<td>12.23</td>
<td>.001**</td>
<td>8.53</td>
<td>.005*</td>
</tr>
<tr>
<td></td>
<td>Cohesion</td>
<td>18.51</td>
<td>.001**</td>
<td>16.88</td>
<td>.001**</td>
</tr>
</tbody>
</table>

* Significant at alpha = .01
** Significant at alpha = .001

Fathers' analyses, degrees of freedom = (1, 56)
Mothers' analyses, degrees of freedom = (1, 57)

The magnitude of the post-treatment changes for the fathers' and mothers' at the within couples level of assessment are illustrated in Figures 19 and 20. In these figures, the total sample pre-treatment mean scores are provided to serve as a contrast group to the treatment condition post-treatment scores for fathers and mothers on the DAS and AC instruments.
Within Couples System

Figure 19. Fathers' and mothers' total sample pre-treatment means and treatment group post-treatment means for within couple system variable DAS.
Within Couples System

Figure 20. Fathers' and mothers' total sample pre-treatment means and treatment group post-treatment means for within couple system variables AC.
The MANOVA results on the couples sub-scales on the AC were consistent with those found for the fathers' and mothers' within couple system analyses. The multivariate analyses was performed on four dependent variables and showed that while no significant measurement and treatment condition interaction was detectable, approximate $F (S=2, M=1, N=25.5) = 1.52, p = 0.141$, a large measure of change had occurred for all groups at post-treatment, $F (S=1, M=1.5, N=25.5) = 39.12, p = 0.001$. The univariate analyses carried out subsequent to the MANOVA revealed that the pre-treatment/post-treatment changes were substantial across all four variables. A summary of the series of ANOVA's is found below in Table 25.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sub-scale</th>
<th>F-Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC</td>
<td>Total Agreement</td>
<td>44.72</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Total Disagreement</td>
<td>16.52</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Desired Change</td>
<td>35.59</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Perceived Change</td>
<td>32.52</td>
<td>.001*</td>
</tr>
</tbody>
</table>

* Significant at alpha = .001
Degrees of freedom = (1, 57)

A visual comparison of the total samples pre-treatment means for each couples variable and the post-treatment values for each by treatment group is enabled by Figure 21.
Within Couples System

Figure 21. Couples' total sample pre-treatment means and treatment group post-treatment means for within couple system variables.

Within Family System

The final series of within systems analyses centered on the family level of assessment and were based on the six sub-scales of the FES and the two sub-scales of both the FACES III and the FS. Consequently, ten dependent variables were employed in each of the MANOVA runs for fathers' and mothers' perspectives.

The pre-treatment/post-treatment MANOVA on fathers' data, while closer than other within system analyses, indicated that there was no statistically significant measurement occasion by treatment condition interaction, $F(S=2, M=3.5, N=23) = 1.45$, $p = 0.118$. The yield from the mixed model MANOVA on data from mothers' perspectives
was more definitive finding regarding the absence of differential treatment effects, \( F(S=2, M=3.5, N=22.5) = 0.69, p = 0.818. \)

Both fathers’ and mothers’ analyses echoed the previous within systems analyses in terms of identifying highly significant measurement occasion main effects for all treatments, \( F(S=1, M=4, N=23) = 5.47, p = 0.001 \) for fathers, and \( F(S=1, M=4, N=23) = 4.49, p = 0.001 \) for mothers.

The univariate F-tests that followed the MANOVA results showed that seven of fathers’ ten and eight of mothers’ ten dependent variables were significant at the .05 level or greater. The ANOVA findings are presented below in Table 26.

**Table 26**

*Summary of Univariate Tests of Fathers’ and Mothers’ Within Family Level of Assessment for Pre-treatment and Post-treatment Differences*

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sub-scale</th>
<th>Father</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F-value</td>
<td>Probability</td>
</tr>
<tr>
<td>FESC</td>
<td>Cohesion</td>
<td>17.68</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Expressions</td>
<td>21.69</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Conflict</td>
<td>8.91</td>
<td>.004**</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>.35</td>
<td>.558</td>
</tr>
<tr>
<td></td>
<td>Organization</td>
<td>13.75</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.87</td>
<td>.354</td>
</tr>
<tr>
<td>FACES III</td>
<td>Cohesion</td>
<td>15.12</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
<td>.002</td>
<td>.962</td>
</tr>
<tr>
<td>FS</td>
<td>Cohesion</td>
<td>19.19</td>
<td>.001***</td>
</tr>
<tr>
<td></td>
<td>Adaptability</td>
<td>10.66</td>
<td>.002**</td>
</tr>
</tbody>
</table>

* Significant at alpha = .05
** Significant at alpha = .01
*** Significant at alpha = .001

Degrees of freedom = (1, 57)
The changes indicated by these analyses are illustrated below in Figures 22 and 23 which chart fathers' and mothers' total sample pre-treatment means and the post-treatment means for each dependent variable by treatment group.

**Within Family System**

Figure 22. Fathers' total sample pre-treatment group post-treatment means for within family system variables.
Within Family System

Figure 23. Mothers’ total sample pre-treatment means and treatment group post-treatment means for within family system variables.

Therapeutic Process Validation

In this section the data was analyzed to explore for the possibility of treatment effects associated with clinic site, gender of therapist and therapist.

Clinic Site

A MANOVA was conducted comparing the pre-treatment and post-treatment data by clinic site on the marker variables for fathers and mothers separately. The MANOVA result based on data from the fathers’ perspective indicated that there was no statistically
significant interaction between the measurement occasions (pre-test and post-test) and clinic site, \( F(S=1, M=1, N=26.5) = 0.324, \ p = 0.860 \). The clinic site MANOVA based on mothers' data was also not statistically significant, \( F(S=1, M=5, N=27) = 0.257, \ p = 0.855 \).

**Therapist Gender**

The hypothesis that the gender of the therapist played a major role in the results of the study was explored by comparing the pre-treatment and post-treatment scores on marker variables for fathers and mothers seen by the male and female therapists. The MANOVA contrast for therapist gender and measurement occasion for fathers was not statistically significant, \( F(S=1, M=1, N=26.5) = 0.59, \ p = 0.671 \). Similarly, the gender of therapist and measurement occasion multivariate analysis based on mothers' data showed no significant interaction and indicated that this variable had no substantial impact on the results, \( F(S=1, M=.5, N=27) = 0.400, \ p = 0.753 \).

**Therapist**

The multivariate analysis test meant to verify whether or not the fathers' results had been substantially effected by the individual therapist that had provided the treatment was conducted using the pre-treatment and post-treatment marker variable data. Only the therapists who had completed four or more cases were included in this particular contrast \((n=8)\). The MANOVA results indicate that there was no statistically significant interaction between the therapists and the measurement occasions, approximate \( F(S=4, M=.5, N=22) = 0.858, \ p = 0.658 \). The MANOVA testing for therapist effects based on mothers' data also yielded no significant difference, approximate \( F(S=3, M=1, N=22.5) = 1.09, \ p = 0.362 \).
CHAPTER V: DISCUSSION

In this chapter the results of the four phases of data analysis are discussed. Since the research questions centered on the differential efficacy issues, the results of the hypotheses testing Phase 2 will be presented first before the within systems and therapeutic process validation phases of analysis are considered. The limitations and the generalizability of the study are addressed prior to the conclusions of the research and future directions sections which complete the discussion chapter.

Eco-System Analyses

This portion of the data analysis challenged the tenability of the two research hypotheses. The first research hypothesis which asserted the ExST treatment would be more potent than the SFT comparison treatment was not supported by the study. The multivariate analyses of the marker variables indicated that there were no statistically significant difference between the two treatments and a review of the means and standard deviations revealed that there was indeed very little separating ExST and SFT at post-treatment.

The second research hypothesis that the couple treatment format of ExST would be superior to the individual treatment format of ExST at post-test and at follow-up was not supported. At post-treatment there was no indication that either of the formats out-performed the other. Furthermore, no differences between the formats emerged at follow-up. These findings are expanded upon in more detail below.

First Research Hypothesis: Differential Efficacy of ExST and SFT

One of the aims of this study was to test the efficacy of ExST. The ExST model had been developed for the treatment of alcohol dependency in response to both the calls for innovation in treatment in the area by researcher and the pressing needs of therapists in the field. The integrative qualities of ExST gave the model a novel treatment orientation that
allowed therapist to tailor therapy programs to meet the unique needs of individual clients. Highly favorable results from informal case studies by therapists implementing ExST in clinical settings motivated the developers of the model to further examine the effectiveness of the treatment.

The study was originally designed to test the efficacy of ExST compared to a wait-list control group, however, the design was altered for pragmatic reasons. Accordingly, SFT was developed and implemented as a comparison treatment condition. The intent behind the generation of SFT was to develop a treatment condition that was distinctly different from ExST in a number ways and at the same time, control for a variety of variables including therapeutic involvement, attention, and gains arising as a consequence of the repeated measurement of participants with an extensive array of instruments. Nonetheless, the results suggest that the SFT treatment functioned as a potent form of intervention.

The non-significant differential treatment effect results are best understood in view of the magnitude of pre-treatment/post-treatment changes associated with both treatment conditions. The fathers and mothers involved in both ExST and SFT reported significant amounts of change at all levels of eco-systemic assessment. Consequently, the reason there was no differential treatment effect was not due to a poor performance of the ExST treatment. Indeed, the ExST treatment outcomes were statistically significant and clinically impressive. Rather, the non-significant finding was the result of the SFT treatment performing in a fashion that far exceeded expectations. The unpredicted potency of SFT raises questions regarding how this quasi-control comparison treatment function so well. It is necessary to consider several factors to explain the success of SFT.

The first consideration that is noteworthy with respect to the SFT treatment pertains to the broad-spectrum quality of this therapy. The assumption that underlies broad-spectrum models of treatment is that the drinking behavior is functionally related to a
variety of other problems in a person's life. Broad-spectrum treatment approaches which address a host of difficulties in the alcoholic's life rather than focusing on the drinking behaviour alone have been shown to be effective in treating dependency problems (Miller & Hester, 1986). SFT focused on a considerable breadth of life problems with clients and was based on the Weekly Situation Diaries which were carefully designed to measure major areas of the clients' ecological context terms of change, satisfaction and proximity to the ideal. Accordingly, it may be appropriate to think of SFT as a broad-spectrum systemic model of treatment.

A second feature in explaining SFT's success is concerned with technique. One of the technical cornerstones of SFT is the behaviour monitoring aspect of the therapy. Behaviour monitoring is a component of therapy that has been used in treating a variety of problems including alcohol dependency. Self-monitoring has a long-standing impressive clinical record (e.g., Alden, 1988; Beck, Rush, Shaw, & Emery, 1979; Connors, Tarbox, & Faillace, 1992; Elkin, Shea, Watkins, Imber, Sotsley, Collins, Glass, Pilleonis, Leber, Docherty, Fiester, & Parloff, 1989; Heather, Robertson, MacPherson, Allsop, & Fulton, 1987; Sanchez-Craig, Annis, Bornet, & MacDonald, 1984). Self-monitoring has recently been used successfully as a key component in the psychological treatments of a wide array of problems including depression. (Beck et al., 1979; Elkin et al., 1989; McKnight, Nelson-Grey & Barnhill, 1992), panic attacks (Salkovskis, Clark, & Hackmann, 1991), bulimia (Wilson, Eldredge, Smith, & Niles, 1991), inflammatory bowel disease (Schwartz & Blanchard, 1991), chronic lower back pain (Nicholas, Wilson, & Goyern, 1991), and alcohol dependency (Connors, Tarbox, & Faillace, 1992). Given that behaviour monitoring has been associated with positive treatment outcomes, it is not surprising that SFT fared so well. In addition, because the scope of the self-monitoring procedure used in this study had a systemic orientation that addressed a broad-spectrum of relational contexts, it is possible that the
positive effects typically associated with behaviour monitoring procedures were amplified in
the case of SFT.

A third point in connection to the behaviour monitoring and charting process, is that
the procedure served to assist the clients in deconstructing their lives (Foucault, 1980; White,
1992). This is to say that clients in SFT learned to differentiate various domains (individual,
couple, family, friends, and work) of their lives that were usually fused at the onset of
treatment. Typically, when clients would appear at their first SFT sessions, the evaluation of
the various systems they were monitoring would be identical and undifferentiated. Within 2
or 3 session, the assessments at each level would routinely begin to differentiate and the
various domains of life would begin to take on a quality of independence from one another.
Accordingly, clients learned to find areas of life that were improving even as others were not
and this aspect of the feedback seemed particularly encouraging and helpful to clients.

A fourth factor important in explaining the potency of SFT is the charting component
of the approach. The wall charts were designed to allow the person’s own narrative to
appear before them and thereby, as Grigg et al. (1991) noted, "enable client’s own living
process to speak directly to them" (pg. 1). In this way, many aspects of the client’s life and
their problems were made external to them. The process of externalization has recently
become an important feature to many approaches in family therapy (e.g., White & Epston,
1991) and is thought to be an important technique in enabling clients to generate new
solutions to their problems.

Another factor connected to the discussion of SFT’s potency is concerned with the
areas of overlap that were shared by both SFT and ExST. Both treatments aimed at
establishing a therapeutic relationship between client and therapist that was empathic,
caring, non-judgmental, genuine, and warm. Both treatments conveyed a respectful and non-
coercive valuing of clients that welcomed clients' problems and honesty. Additionally, the therapies were based on the attainment of clearly defined goals that were established at the beginning of the treatments and both treatments functioned as forms of brief therapy with a clearly defined time of termination. These general factors of the treatments are themselves important features of therapy which no doubt contribute substantively to the improvements reported by clients directly involved in the treatments.

In addition to the treatment factors that help explain the impressive performance of SFT, two issues related to the research design are germane to the discussion. The first of these issues relates to the context of post-treatment responding for SFT participants. When SFT families entered the study, they did so with the understanding that after the 16 weeks of SFT treatment was finished, they would be asked to complete the post-treatment questionnaires and would then be welcome to continue with additional treatment. In fact, 68.75% of the SFT participants continued with some form of treatment after the post-treatment questionnaires were collected, and 90% of these people initiated couples therapy with clinicians trained in ExST. In view of this fact, it is clear that many of the SFT participants were anticipating further treatment at the time of post-treatment questionnaire completion. In contrast, the ExST participants were facing a 3 month follow-up period at the time they responded to the post-test battery. This difference would seem to weigh in favor of positive post-treatment assessments for the SFT treatment condition. Since most of the SFT husbands had successfully completed one course of treatment and were committed to additional therapy at the time of post-test, the assessments done by SFT families may well have included measures of hope and enthusiasm that were not available to ExST participants. In this connection, it should be pointed out that since no follow-up information regarding SFT was generated by this study, the stability of the treatment effects of this new model of therapy remains unsubstantiated.
The second connection regarding the efficacy of SFT and research design addresses the attention and measurement effects that are components of an outcome study of this type. At present, it is impossible to determine the role these factors played in the results. One must assume that some portion of the overall change variance for both treatments was attributable to this aspect of research and presumably both treatments were equally affected by them. The magnitude of improvements of clients cannot be accounted for by such things as Hawthorne effect or statistical regression to the mean. Nevertheless, measurement effects must be included when considering the post-treatment outcome of both the SFT and ExST treatments.

In view of the methodological limitations in the implementation of SFT in this research study, excitement regarding the efficacy of the treatment must be somewhat tempered by caution. The results appear to support the position that SFT is an effective treatment, however, until its efficacy is more fully evaluated a more definitive assertion would be premature.

The ExST treatment outcomes at post-treatment consistently showed highly statistically significant and clinically relevant improvements across all levels of the ecological assessment for both fathers and mothers in this study. While it would be desirable to contrast the improvement rates of the treatments in this study, with comparable studies in the area of alcoholism treatment, such a comparison is hampered by the unavailability of investigations with similar assessment strategies and instrument selection. Of the well designed studies reviewed earlier, only one study implemented the same measure of marital adjustment that was used in this study. Zweben et al. (1988) reported significant improvements on the DAS for both treatment conditions in their study. The significant improvements in marital adjustment were based on group mean change values of 7-8 points (approximate effect size .36 to .42) on the DAS for both husbands and wives. The group
mean improvements of couples in this study are slightly higher and range from 14 to 16 points on the DAS (effect size ranging from .87 for fathers and .79 for mothers).

Additionally, couples in this study began treatment in states of considerably more marital distress than was the case in Zweben et al. (1988). While the mean scores of couples at pre-treatment in this study were well within the distressed range (\( \bar{x} = 88.86 \) for husbands, and \( \bar{x} = 81.06 \) for wives), the couples in the Zweben et al. initiated treatment with considerably less marital distress. In fact, on average both identified clients and spouses in Zweben et al. scored in the non-distressed range of the measure (DAS total score of 103.35 for identified patients, and 104.45 for spouses). Accordingly, couples in the present study improved somewhat more in terms of marital adjustment than participants in Zweben et al. (1988). Additionally, the changes in this study were qualitatively different, since they involved moving from levels of marital distress to non-distressed ranges of scores. In the Zweben et al. study, the changes at the couples level were matters of increasing the level of marital adjustment of couples who were non-distressed at the onset of treatment.

Similar comparisons of the rates of improvements with other studies are impossible at the present. Few of the studies have employed measures relevant to the individual and family domains of assessment, and none of the studies reviewed earlier employed the same measure of alcohol dependency. Consequently, the clinical meaning of the rates of improvement are best interpreted in light of the available normative information provided for each instrument.

While the clinical profile of the parents at pre-treatment was highly distressed, the situation had improved substantively at post-treatment. The marker variable treatment gains included: (1) a decrease in level of alcohol dependency from the extreme end of the moderate dependency range to a level well within the mild dependency range, (2) an improvement in intrapersonal psychological symptomology for both fathers and mothers that went from levels clearly within the psychiatric in-patient norms to tolerable levels within the non-patient norms, (3) an increase in marital adjustment for both fathers and mothers that
improved from levels in the distressed range to levels within the normal range for fathers and slightly below the normal range for mothers, (4) an improvement in levels of family satisfaction for both fathers and mothers that went from levels below the normal range to levels well within the normal range. In view of these results, it is legitimate to assert that ExST has shown itself to be an effective form of treatment for fathers and mothers in the amelioration of alcohol dependency problems.

The SFT and ExST treatment conditions implemented in this investigation did not have any statistically significant effect on the eldest children's assessments of family satisfaction. In discussing this finding it is important to mention that the pre-treatment mean assessment of family satisfaction from the eldest child perspective fell within the normal range before the treatment had commenced. Consequently, a ceiling effect may have played some role in the post-treatment outcomes. It should be recalled that the mean age of these project participants was in the teen years which suggests that the developmental focus of the eldest children was on separation from their families and this may have also influenced the results. However, while the teenage concern of differentiation may have in part accounted for why the eldest children's family satisfaction rating did not change along with their parents assessments, it is unlikely that this alone accounts for the lack of improvement. It would seem more reasonable to argue that the eldest children, having grown up in families troubled by the presence of parental alcohol dependency, were already hardened to changes in their families and suspicious of any shifts might have emerged as a consequence of treatment. Accordingly, they would be unlikely to recognize or acknowledge any familial improvement that had not withstood the test of time.

A final point regarding the eldest children's family satisfaction result is that this finding should not be interpreted as indicating the treatments had no effect on the children. Of all the instruments selected as marker variables, the family satisfaction index was the least affected by the treatments for fathers and mothers. In addition, it is possible that
important changes in the eldest children that may have emerged as a result of the treatments (e.g., self-esteem), were not identified because they were not measured in the ecological assessment procedure used in this study.

With respect to the many systematic differences between the two therapies which had been built into the design of SFT, this research appears to have shown that a number of aspects intrinsic to the ExST model were not necessarily critical to bringing about therapeutic change in alcohol dependent clients. In particular, the inquiry has demonstrated that the unstructured, individually tailored treatment approach of ExST was not superior to the more structured uniformed procedures of SFT. Accordingly, the notion that a treatment which was flexible enough to address unique client concerns would be more effective than a structured treatment was not supported by this research.

The experiential and symbolic orientation of ExST did not show itself to be more effective than the cognitive and behavioural focus of SFT. These dimensions of treatment appear to have functioned equally effectively for the two therapies, and it would seem that both perspectives are powerful means of bringing about therapeutic changes. The change constructs which underlie the two therapies of atypical responding and learning functioned equally well within treatment models. Thus, the here-and-now intense way of working which characterized ExST was not any more effective than the there-and-then less intense learning format which typified SFT.

The two treatments also differed in terms of the distance between therapists and clients assumed to be optimally therapeutic. The results of this study showed that the close professionally intimate therapist and client relationship of ExST was no more curative than the more distant and less involved therapist and client relationship of SFT. Consequently, it can be understood that therapist distance may vary considerably from one treatment to another without necessarily implying that one is superior over another.
In conclusion, the systematic between therapy model differences built into the design of this study have revealed that these features are not in and of themselves the crucial elements of transformation with alcohol dependent clients. Rather it would appear that the many shared aspects of the treatments detailed earlier in this section were the most important features to the amounts of change reflected in the ecological assessment. This is not to say that the between model differences were trivial components to the treatment outcomes. These differences are critical within treatment model elements which give the models their own flavour or style. While such aesthetic aspects may not play a measurable role in the pragmatics of between therapy treatment outcomes, they nonetheless are essential to the processes of change unique to each model.

Second Research Hypothesis: Differential Efficacy of ExST-I and ExST-C

The second goal of the study was to evaluate the differential effects of the individual and couples formats of the ExST approach. There were competing ideas that lay beneath this question. On the one hand, there was the view that ExST was believed to bring about systemic change when conducted in an individual format. On the other hand, there was the perspective that the couples format would have the added benefit of allowing direct therapeutic involvement with the marital relationship, and therefore should perform in a superior manner. The perspective that the couples format would be more powerful than the individual format had some empirical support and accordingly, the research hypothesis was framed in directional terms which favored the couples format. The directionality of the hypothesis was not supported by data analyses.

It would appear that both treatment formats of ExST were equally effective. Again, the lack of differential treatment format effect must be understood in terms of by the statistically significant pre-treatment/post-treatment changes that were noted in the data.
analyses related to fathers and mothers. Both treatments were associated with highly significant eco-systemic change for both fathers and mothers. In addition, the treatment gains established at post-treatment were found to be stable at the 3 month follow-up with no significant occasion difference between post-treatment and follow-up being identified. It should also be recalled that neither format appeared to have a measurable effect on the eldest children’s assessments of family satisfaction.

These results would seem to question the contributing role often ascribed to non-alcohol abusing spouses in the persistence of alcohol dependency in their mates. Even without receiving direct treatment the participating women in this study, whose husbands received individual therapy, improved to a remarkable degree. This would seem to suggest that in many cases, the non-alcoholic spouses’ difficulties are directly related to the hardships related to their partners’ abuse of alcohol. Accordingly, the results would seem to support the perspective offered by Zweben (1986) who argued that spousal problems are more often than not the result of the alcoholic’s impaired behavior rather than the cause. In any case, the present study established that therapy with alcoholics can lead to the amelioration of psychological symptomology, marital distress, and familial dissatisfaction in spouses not directly involved in treatment.

The results related to the second hypothesis are different from the results of previous research in the area of treatment format (Foley et al., 1989; Jacobson et al., 1991; O'Leary & Beach, 1990). All previous research to date on treatment format had found evidence which supported the view that marital treatment formats had certain advantages over individual treatment formats. The present study results stand in contrast to this perspective and indicate that there was no particular added benefit to receiving the couples form of treatment. In interpreting this result it is germane to bear in mind that unlike the previous efforts, the individual treatment format implemented in this study was oriented systemically
in underlying theory. The individual formats employed in the earlier research efforts were individual treatments in both format and theoretical orientation. Accordingly, the individual treatments of earlier research were not designed to address systemic issues in the clients interpersonal lives. In contrast, the individual format of ExST was meant to concern itself with the interpersonal contexts of the individual clients. This difference in underlying theoretical orientation would seem to best explain the differences between the findings of the previous research on treatment format and the present investigation.

The results pertaining to this research question are particularly surprising with respect to the wives whose husbands completed the individual form of ExST. Not only did these women change as much across the three marker variables as their couples format counterparts at post-treatment, these gains (which might have been thought of as less durable) were also retained equally well at follow-up. It would seem that the therapeutic efforts with the fathers in the individual format had profound and lasting effects on the mothers such that mothers' assessments of themselves, their marriages and their families were markedly improved. This result is in keeping with the study by Sisson and Azrin (1986) which showed that people not specifically attending therapy could nonetheless experience important improvements as a consequence of relationally focused interventions. Certainly this treatment potential would seem to have been realized by the ExST-I mothers who did not attend a single therapy session.

The observation that the wives of the men who attended ExST-I changed in such a positive way is at odds with the first-order cybernetic view of alcohol dependency. The homeostatic assumption of first-order family therapy models asserts that symptoms play an important role to the entire family system. As a result, the family was predictably seen to resists improvement in the symptomatic behaviour in an effort to preserve its sense of identity and equilibrium (Killorin & Olson, 1984). Such a dynamic would not appear to have been operating in any important fashion for the fathers and mothers participating in
this study. To the contrary, the women who did not attend therapy appear to have enjoyed
the benefits of their husbands' improvement and in fact, reported improvements in
themselves, their marriages and their families. Similarly, the husbands, who did not have the
advantage of having their wives present in treatment were nevertheless able to make
substantial and lasting gains with respect to their drinking, themselves, their marriages and
their families. Additionally, the inclusion of the alcoholics' spouses in treatment did not
prove to significantly add to the post-treatment gains made by the men who participated in
the couples treatment when compared to their counterparts involved in the individual
treatment format.

The follow-up results would seem to lend further support to the view that both
treatment formats of ExST performed equally well for fathers and mothers. In view of this
finding, it would seem safe to assert that the treatment effects for both formats were both
comparable at post-treatment and durable up to 3 months after the cessation of therapy.
One would assume that if the kinds of systemic dynamics postulated by the first-order family
models were at work, then the post-treatment gains of the individual treatment condition
would have deteriorated substantially at follow-up. This of course was not the case in the
present investigation. To the contrary, the individual treatment gains appeared to be as
stable as the couple treatment condition.

The result related to the second hypothesis support the view that systemic family
treatment can be successfully accomplished when only the alcohol dependent individual is
seen in therapy. The benefits of individual treatment need not necessarily be viewed
disparagingly as only concerned with individual intrapsychic processes. Rather, the results
from this study suggest that the improvements associated with the systemic treatment of
individuals can generalize to spouses not attending treatment. This finding highlights the
need for a clear distinction between format and theory in the field of family therapy.
It was noted earlier that for many family therapists, systemic therapy means working with couples and families in conjoint treatment. This position essentially fuses format and theory and the distinction between the two is lost. If the distinction between format and theory is blurred, and the fact that both the individual and couples formats in this study were systemically based is ignored, then the format of treatment would define the therapeutic protocol. In this case, the findings of this research would appear to challenge the very assumptions which led to the splitting of marriage and family therapy from the individually oriented mainstream of psychiatry and psychology. This is to say that the common assumption in family therapy that working with larger systems (such as the couple) is a more effective and efficient way of treating problems in comparison to working with individuals was not supported by the empirical evidence of this study.

Accordingly, a clear recognition of the difference between format and theoretical orientation becomes key to the interpretation of the results of the present investigation. This study did not pit an individually oriented therapy against a systemically oriented treatment. Rather, it established a comparison between the individual and couples formats of a single systemically grounded model of therapy. Consequently, while the findings may be seen as relevant to the historical assumptions of the field, they are better understood as contributing empirical support for the systemic treatment of individuals. The present study suggests that family systems models that integrate individual processes into their theoretical formulations can be as successfully employed with individuals as they are with couples in the treatment of the myriad of family problems associated with alcohol dependency.

Within Systems Comparisons

The within systems analyses were congruent with the eco-systems analyses and augmented the understanding of the breadth of improvements that had occurred in this study. Pre-treatment/post-treatment within system analyses were undertaken for both fathers and mothers as indicated by the earlier eco-systems analyses. The results of the
within systems analyses will be discussed with reference to normative data in order to consider the significant findings within a clinically relevant frame.

**Within Alcohol System**

The results from the within alcohol system analyses indicated that there was no significant differential treatment effect coupled with a highly significant level of change between pre-treatment and post-treatment scores. In fact, the alcoholics in this study who received ExST-I, ExST-C and SFT had improved to a highly statistically significant degree on 16 of the 17 dependent variables used in these analyses. Because there were no significant between treatment group differences, the results will be discussed in terms of the entire sample of participants.

The alcoholics in this study dropped from their pre-treatment level of dependency that was just shy of the severe dependency cut-off value in the moderate range, to a level of mild dependency. This substantial improvement in dependency level indicates that an important shift in the participants relationship to alcohol had occurred over the course of treatment.

The results from the IDS elaborates on this point. At pre-treatment the participating fathers had mean scores on the 8 sub-scales that placed them in the high risk range for all but one of the sub-scales which fell in the moderate category. At post-test the mean scores for alcoholics in this study were lowered to the moderate risk level across all 8 sub-scales. Furthermore, with respect to the norms based on people entering treatment for alcohol related problems, the mean scores for each sub-scale at post-treatment was found to be below the first percentile across all variables.
The SCQ findings further support the view that the alcoholic participants relationship to alcohol had changed in important ways. On 7 of the 8 variables included in the analyses, the mean scores for the fathers were significantly different from pre-treatment at post-treatment. While the mean total SCQ score at pre-treatment indicated that the alcoholic’s were 68.31% (43rd percentile) confident they could resist drinking heavily in the array of situations covered in the instrument, the mean total assessment of confidence value had increased to 84.25% (65th percentile) at post-treatment.

**Within Intrapersonal System**

The within intrapersonal system analyses added to the understanding of how the fathers and mothers had individually changed. The significant changes in terms of the parents intrapersonal measures showed that while there was no statistically significant difference between the three treatment groups, the fathers and mothers had improved considerably by post-treatment. Importantly, the post-treatment improvements represented shifts in individual symptoms that moved from considerably distressed magnitudes to levels that were for the most part within normal ranges of behaviour. In a few instances, the decreased levels of symptomology require some additional comment.

The BDI scores indicated that at pre-treatment both husbands and wives were moderately depressed, however by post-treatment only the women whose husbands had attended SFT remained in the moderate range of depression. All fathers’ and ExST mothers’ scores were within the asymptomatic range at post-test. This result while interesting, is best seen in light of the pattern of responding on the depression sub-scale on the SCL-90-R. On this measure of depression, the participants had reported pre-treatment levels of depression that were around the average values reported by in-patient psychiatric patients. By post-treatment both husbands and wives in all treatment groups had improved significantly, however the mean values for both husbands and wives remained slightly above
one standard deviation from the mean of the non-patient norm group. In view of the finding on the SCL-90-R depression sub-scale, it would seem necessary to temper the BDI results with a measure of caution and assert that the symptom of depression remained somewhat of a clinical concern for both husbands and wives connected to the study.

Two other symptoms contained in the within intrapersonal level of assessment seem noteworthy in that the scores across treatments uniformly hovered around one standard deviation from the mean of the non-patient norm group. Fathers’ and mothers’ psychotism ratings remained inflated at post-treatment indicating considerable levels of interpersonal alienation (Derogatis, 1983). In addition, both husbands’ and wives’ levels of anger as measured by the hostility sub-scale of the SCL-90-R remained at levels higher than average. Thus, some areas of clinical concern remain within the intrapersonal domain for both fathers and mothers.

Notwithstanding the areas where further therapeutic effort was indicated, the charges at the individual level of assessment were dramatic for all treatment groups and reflected a return to near normal levels of individual functioning for the participants in this study at post-treatment. This finding further supports the view that all of the treatments under study have proven themselves to be effective in moderating the difficulties associated with alcohol dependency.

**Within Couples System**

The within couples pre-treatment and post-treatment analyses revealed that while there were no significant differential treatment effects, there were significant improvements in a variety of facets of the relationship from fathers’, mothers’ and couples’ perspectives.

Both husbands and wives improved significantly on all of the areas measured by the DAS including dyadic consensus satisfaction, affectional expression and cohesion. Interpretation of the cohesion and affection sub-scales of this instrument should be viewed with a degree of caution in view of the low levels of internal consistency found in the first
phase of data analysis. Nonetheless, the couples relationships seem to have been greatly aided by the treatments they received. This is particularly true of the measure of dyadic cohesion which reached normal levels for all treatment groups for both husbands and wives. Despite the considerable change which was reported for all sub-scales by both members of the couple, the mean values on the sub-scales related to dyadic consensus, satisfaction and affectional expression suggested that further couples enrichment was required. The DAS total score means for the husbands and wives in all treatments were scattered about the value of 100 which has been suggested as the cut-off score separating distressed from non-distressed couples. Thus, the average couple in the study appears to have been beginning to function in an adjusted fashion at post-treatment.

The improvements in the marital relationships were also reflected by the AC measure. In keeping with past studies (e.g., Margolin et al., 1983), the assessments of desired change and perceived change from both husbands' and wives' perspectives dropped significantly. It would appear that the marital relationship had improved by post-treatment and both partners recognized their own decrease in wishes for change and their partners' decrease in desire for improvement. Clearly the levels of desired and perceived change indicated that more work on the marital relationship was indicated, however considerably less change was being sought by the couple at post-treatment when compared to the pre-treatment levels.

The perceptual accuracy sub-scale results showed that both fathers' and mothers' levels of agreement with their spouses at post-treatment had significantly decreased. At the same time, the disagreement estimates for fathers also decreased at post-treatment. However, mothers' disagreement scores did not change over the course of treatment. With respect to the perceptual accuracy ratios of the husbands and wives, (which reflects the extent to which spouses are aware of which specific behaviors are meant to be changed and in which direction the change is desired), the couples in this study scored relatively low at
pre-treatment and did not change in any significant way at post-treatment. This finding is somewhat different to the findings of Margolin et al. (1983) who reported a positive relationship between marital distress and increased levels of perceptual accuracy. In the present study, increases in marital adjustment were not found to be accompanied by a concomitant decrease in perceptual accuracy by either spouse. In this connection, it would seem most likely that two factors affected the perceptual accuracy scores. Firstly, in Margolin et al. (1983) the men in the maritally distressed relationships were found to have near perfect perceptual accuracy scores, while the alcoholics in the present study did not present with this degree of understanding at pre-treatment. Secondly, in the present study, the treatments may well have played mediating roles in the perceptual accuracy of the couples such that the accuracy with which the couples perceived the others desires for change did not deteriorate significantly over the course of therapy.

The results from the couples variables of the AC were consistent with the fathers' and mothers' AC results in as much as they showed no significant differential treatment effects coupled with highly significant pre-treatment/post-treatment change. The univariate analyses were similar to the results related to fathers and mothers, with couples total desired change, total perceived change, and total agreement decreasing significantly over the course of the therapeutic interventions. The total disagreement result was in keeping with the fathers' perspectives and in contrast with the mothers' perspectives in as much as it too had decreased to a statistically significantly degree after treatment at post-test. It would seem that the weight of the changes in fathers' disagreement estimates were substantial enough to carry the couples disagreement values over the line of statistical significance.

Taken together, the couples within systems analyses match the marker variable hypotheses testing findings and elaborate on the breadth of change that was reported by couples involved in this study. All the aspects of marital adjustment measured in this study
improved and the need for couple change decreased. In this way, the couples who completed the study were able to make important steps towards more harmonious and richer marital relationships as a consequence of the treatments offered.

Within Family System

The fathers’ and mothers’ within family system analyses were congruent with the pattern in previous within systems analyses, finding no differential treatment effects paired with highly significant pre-treatment/post-treatment change. The univariate tests on each variable revealed that both fathers’ and mothers’ perspectives had shifted substantially with respect to their families by post-treatment.

The family environments had clearly improved by post-treatment for both parents on many of the sub-scales employed in the study. The levels of cohesion, expressiveness, and organization had all increased significantly, while the levels of conflict had significantly decreased in the families according to both fathers and mothers. Importantly the average value of scores for parents in this study now matched the norms for normal families on the cohesion, expressiveness, and conflict sub-scales. In this study, the independence sub-scale’s internal consistency estimates was somewhat low, suggesting tentativeness of viewing this result. In any case, the mothers’ independence rating had significantly improved and normalized. However, fathers’ assessment of family independence, though improved somewhat, had not changed significantly and remained below the normal family contrast norm. This result would seem to be important clinically as it suggested that mothers’ sense of family autonomy had increased by post-test, leaving the families under her direction less susceptible to changes in fathers’ condition. Neither parents’ assessments of control in the family changed significantly between pre-treatment and post-treatment but scores on this sub-scale had been in the normal range prior to treatment. The low level of reliability for this sub-scale shown in the first phase of data analysis, suggest this result should be viewed with some caution.
With respect to parents' assessments of the adaptability and cohesiveness of the families, the results of fathers’ and mothers’ analyses complemented one another. While fathers’ assessments of family cohesiveness and unity increased significantly, mothers’ reported significant increases in family adaptability. It would appear that as the fathers’ sense of family closeness grew stronger, the mothers’ experience of the family’s ability to accommodate to change also increased.

The analyses of the parents’ assessments of their satisfaction with the level of family cohesiveness and adaptability showed that the families had significantly improved from the perspectives of the fathers and mothers. The average post-treatment values on these variables had increased substantially from the pre-treatment levels of the 7th and 13th percentile on cohesiveness and adaptability for fathers, and 4th and 7th percentiles on the same sub-scales for mothers. The results suggested that both parents at post-treatment saw their families as somewhat low on the cohesion sub-scale (scoring in the 28th percentile), but average in terms of adaptability (scoring near the 50th percentile) at post-treatment. Both of these scores were within the normal range of scoring.

The within family system results expanded the understanding of the ways in which the family had been affected by the treatments from the parents’ points of view. Clearly, the parents believed that the therapies had helped their families in many important ways. However, the results also suggested that there remained some areas of concern in the families that could benefit from further therapeutic attention.

Within Systems Summary

The within systems analyses were performed on the systems of alcohol, intrapersonal, couple and family from both fathers’ and mothers’ perspectives on pre-treatment/post-treatment data as indicated by the eco-systemic analyses. The within systems analyses expanded upon the hypotheses testing findings, sharpening the scope of analyses upon each
level of assessment. Taken together, the within system results demonstrated the far reaching effects of the treatments and detailed the many areas of the participants' lives which had been improved as a consequence of receiving one of the therapies offered. The within system results were consistent with the pre-treatment/post-treatment eco-systemic approach taken in the hypotheses testing phase of data analysis and can be seen as lending further weight to the conclusions regarding the two central research hypotheses.

**Therapeutic Validation**

The results from the analyses included in the therapeutic validation section tested for possible moderating variables in the treatment outcomes including clinic site, therapist gender and therapist. There were no statistically significant moderating variables found in the results. Consequently, it can be asserted that the treatments were equally effective in both the urban and the rural clinical contexts. The treatments performed comparably regardless of the gender of the therapist providing the treatment. In addition, no therapist was identified as being associated with significantly better or worse treatment effects.

**Limitations of the Study**

In the design of this study, the variable of therapist was partially nested and crossed. Therapists were nested with respect to treatment (SFT and ExST) and crossed in connection to ExST treatment format (ExST-I and ExST-C). Consequently, it is impossible to separate the effects of therapists from the effects of treatment in the SFT and ExST contrasts (Jacobson, 1985; Kasdin, 1986). This limitation of design was a consequence of the change in research designs noted earlier that resulted in the generation and implementation of SFT in the place of a wait-list control group. By the time that this decision was made, commitments to the ExST therapists had been made that precluded introducing addition requirements on the practitioners (as would have been necessary had they also delivered the SFT treatment). In any case, the benefits of having the same therapists perform both the
ExST and SFT treatments would most certainly have been complicated by the potential for the bleeding through of ExST procedures into the SFT treatment protocol.

The limitation of nesting therapists within treatments was softened by the relatively large numbers of therapist per treatment (5 ExST therapists and 7 SFT therapists). The random assignment of this number of therapists with clients minimized the likelihood of mean differential therapist skills between treatments affecting the results. In addition, in view of the finding that no single therapist, regardless of treatment, was associated with greater or lesser treatment effects, the limitation of nesting would seem to be less of a concern. The crossing of therapists in the ExST format conditions was a strong design feature of the study. Because therapists were crossed, the confound of therapist with treatment was eliminated in the ExST format comparisons. Since the ExST therapists were performing the same therapy in both formats, there was little concern that personal biases of the clinicians influenced the results.

A second limitation to the study is the reliance on self-report measures for data. It has been argued that combining both self-report and direct observational sources of data is a preferred strategy in marital and family therapy research (Cline, Jackson, Klein, Mejia & Turner, 1987; Gurman & Kniskern 1981; Wynne, 1988). However, direct observational sources of data have not been shown to be particularly sensitive in identifying relationship changes (Jacobson, Follette, & Elwood, 1984; Jacobson et al., 1991). In addition, direct observational data have been found to be very expensive to generate. Accordingly, the utility of adding direct observational data was questionable and unjustifiable from a monetary point of view.

In connection to the issue of instrumentation, the study is limited with respect to what can be said about the treatment effects upon the eldest children. Without having a more
complete ecological assessment of the eldest children, it is not legitimate to conclude that the treatments had no effect upon them. Rather the conclusions must be limited to asserting that in terms of their assessment of family satisfaction, the treatments did not have a measurable impact upon the eldest children.

**Limitations of Field-based Research**

Some limits to the research arose as a consequence to the field-based nature of the study. Of these limits, the loss of the wait-list control group and the implementation of the comparison treatment condition was the most impactful. As mentioned earlier, this change limited the clarity of the results regarding the efficacy of ExST since the changes associated with the repeated testing, maturation, and regression to the mean could not be controlled. This change in design was necessary in order for the research to accommodate to the needs of the clinics and their clients. However, the implementation of SFT also brought limitations. As discussed earlier, the situation of the post-treatment responding for SFT participants was not the same as it was for the ExST participants. An ideal comparative treatment design would have seen the SFT participants involved in the follow-up portion of the study. Again due to the clinical circumstances of the investigation, this option was not available. Because SFT was an entirely experimental treatment with no history of implementation, the researcher was left with no ethical option but to exclude the SFT participants from the follow-up and to offer additional treatment at the conclusion of the treatment. Judging by the percentage of those in SFT who did continue with additional therapy, this precaution appears to have been warranted. However, the design unfortunately limits the results with respect to what might have been said about the SFT treatment had the same pattern of results been found and the SFT participants been involved in the 3 month follow-up.
Other factors connected to the study being conducted in the field also affected the investigation. For example, some participants were lost and other treatments were greatly affected when therapist were ethically compelled to contact the child protection authorities due to information revealed over the course of therapy. In some situations, the participants had to be dropped from the study when the constraints of the study in terms of treatment format were clearly at odds with the needs of the participants (e.g., suicidal children, spouses need for therapeutic care). In others, participants were dropped from the study due to incarceration for wife assault, hospitalization, and suicide. In this way, the study was constrained by the legitimate needs of the agencies involved and the day-to-day operation of drug and alcohol clinics. Nonetheless, the limits of field based research studies are balanced by the clinical applicability of such investigations. Issues regarding the generalizability of the research are presented in the next section.

Generalizability

There are several considerations of note in connection to the generalizability of the study. The present research was a field based experiment that was conducted in two outpatient clinical sites. The participants were paid volunteers who were randomly assigned to both treatments and therapists. The therapists were regular therapists employed by the participating centers. No treatment effects regarding clinic site, therapist or therapist gender were evident and accordingly, the results can be generalized to both urban and rural outpatient clinics and therapists trained in the treatments that were studied.

The participating families came to the study from two main sources including normal clinic intake procedures, and responses to the public attention given to TARP by the local media. In addition, the participating families in this study had to meet the inclusion characteristics of the study which included an alcoholic father who had consumed alcohol in the last 3 months and a non-alcohol or drug abusing mother who were maritally distressed
and had at least one child living at home with them. As such, the study participants represent a particular sub-set of the total alcohol dependent population and generalizations beyond this sub-set of alcoholics and their families are not justified.

It has been noted by Kasdin (1986b), that even when volunteers and clinical populations share the same presenting problems, generalizing from research subjects to clinical populations is an open question which must be established empirically because of potential differences related to volunteerism. Therefore, generalizations of this study beyond the volunteer participants to the larger alcoholic populations should be restricted and extended with a modicum of caution.

The loss of the participants who were extremely dissatisfied with their families prior to treatment completion is another factor of concern regarding the generalizability of the study. Although familial dissatisfaction was not an inclusion characteristic of the study, it is nonetheless true to state that as a group, the participants in this research were very dissatisfied with family life. In light of the observation that most extremely dissatisfied families dropped out of treatment prior to its completion, the findings of the investigation regarding treatment outcomes should not be extended to the most severely distressed families with alcoholic dependent fathers.

The final consideration with regards to external validity is the extensive testing that was an essential feature of this investigation. The questionnaires included in the ecological assessment that were repeatedly administered to participants cannot be considered as therapeutically inert. Since all treatment groups were exposed to equal amounts of testing, it is valid to assert that testing was not a factor contributing to the no differential treatment result. However, it is not possible to know how much a role the testing played in contributing to the extensive improvements which were found for all treatment groups. In
addition, it is impossible to assess the role that artifacts of research of this kind including Hawthorne effects and statistical regression to the mean may have played in the overall improvements found for the treatments. Thus it would seem best to assume that the effects of testing, measurement, research participation and treatment are compounded in the findings of significant changes for fathers and mothers in this study. At the same time, the consistency and magnitude of the improvements across instruments, supports the view that the treatments were nevertheless effective in helping participants in a variety of ways. Accordingly, the outcome results of the study may be extended to on untested population with the proviso that treatment gains may be somewhat reduced in the absence of repeated testing.

Conclusions

In this study, a multidimensional ecological assessment approach for measuring fathers, mothers and eldest children was taken to test for the effects of three treatments. The scope of assessment used in this investigation was considerably wider than typically employed in alcohol treatment outcome studies. This approach to measurement has been demonstrated as an effective method of identifying an array of important changes connected to treatment that would otherwise have gone undetected. Accordingly, it would seem desirable for future alcohol treatment outcome studies to adopt a similar measurement strategy.

The ExST model was developed in response to the practical needs of clinicians in the field and the call for therapeutic innovation in the area of alcohol dependency (Institute of Medicine, 1992; Jacobson, Munroe, & Schmaling, 1989; Miller & Hester, 1986; Nathan & Skinstad, 1987). The present research contributes to the clinical body of knowledge by carefully testing the empirical efficacy of this integrative treatment. This investigation has shown that the ExST treatment approach was effective in generating an array of improvements for the fathers and mothers that completed the study. This research suggest
that ExST can be added to the list of therapeutic approaches for alcoholism that have an empirically based claim to efficacy.

The ExST model did not prove to be more effective than SFT. The SFT model of therapy which was designed as a quasi treatment/control group exceeded expectations and appears to have performed as well as the ExST treatment. Due to methodological limitations, the clarity of the efficacy of SFT remains somewhat clouded. Nonetheless, SFT was associated with highly significant post-treatment improvements in alcohol dependency, intrapersonal functioning, marital adjustment and family satisfaction and has shown promise as an effective form of treatment for alcohol dependency.

The present study is an important response to the need for the evaluation of systemically oriented therapies that was issued by McCrady (1989), Jacobson et al. (1989) and O'Farrell (1992). These authors rightly noted that the efficacy of behavioral marital therapy in the treatment of alcohol dependency had been generalized to untested systemic models of marital. This investigation has established empirical support for ExST, a second-ordered systemic therapy in the treatment of alcohol dependency, and consequently, adds some credibility to the use of systemically based treatments in working with alcoholism.

Finally, the study has contributed to the knowledge base of psychotherapeutic format research. Unlike previous investigations, this research has shown the performance of the individual and couples formats of treatment to be comparable. The systemic orientation of the individual treatment implemented in this study differs from the individually oriented treatments used in previous format research. This study has established the individual form of a systemically oriented treatment to be a valuable means of perturbing eco-systemic changes that are comparable to the changes brought about by a couples treatment format.
In the final analysis, this study has been about finding ways to better help families negotiate the difficult road of alcohol recovery. Each of the participants could well have ended up as another member of the skid-row community. However, they have chosen a different avenue. Hidden within the many statistics, tables, and graphs are the courageous stories of people struggling to find better lives for themselves. Without their commitment to health, it is unlikely that any therapy could succeed. The contribution to science made by the participants in this study has been a deeply personal one and it seems only fitting to end the investigation with an acknowledgment of that fact.

**Future Research**

The first direction of future research would seem to point to an additional follow-up of participants in this investigation at a 2-4 year time interval. Such a study would be essential in testing for the long term effects of the treatments and would be useful in continuing to probe for differential treatment effects that might become evident much later after the termination of therapy.

The second line of inquiry that is called for involves a more detailed look at the data in an effort to unearth whether or not particular client characteristics may have been predictive of how the participants faired in treatment. By sub-dividing the sample in terms of those who improved, deteriorated or stayed the same, the wealth of information generated by the ecological assessment might serve to help illuminate factors useful in matching client needs and therapeutic modality.

In view of the finding that the eldest children's assessments of their families was unaffected by the treatments, an additional outcome study that included a family therapy format of ExST would be valuable. Very few studies have been conducted using family
therapy for problems of adult alcohol dependency and such a study would appear to be a logical direction in which to proceed.

Additional study is indicated to establish a more solid empirical base for SFT and to explore the utility of this treatment. Ideally, a Solomon four-group design study could be conducted which would control for testing factors as well as other threats to generalizability.

In terms of the ExST model, two lines of further efficacy study are called for. Firstly, it would be helpful to contrast ExST and another form of marital or family therapy. In this connection, behavioural marital therapy would seem to be the contrast treatment of choice, since it has already established a strong treatment track record with couples struggling with alcohol dependency. Secondly, it would seem important to take ExST out of the alcohol treatment field and to test it with other clinical populations such as depression. Such a line of work would be helpful in establishing whether or not the treatment efficacy of ExST can be generalized to other clinical problems.

Finally, a most promising direction of inquiry is the undertaking of process research. This study has established that the individual and couples formats of ExST were effective in bringing about eco-systemic improvements. However, further research is required to better understand the means by which these changes come about. The tape recordings of each session of treatment made over the course of this investigation provide a rich source of process related data waiting to be explored more completely.
REFERENCES


APPENDIX A

Schedule of ExST Training Events and Alcohol and Drug Program
Therapist Appraisals of ExST Training Experiences
Schedule of Training Activities

February, 1987 - Prince George
2 day presentation to Northern Region Alcohol and Drug Program Directors on Marital and Family Therapy and the relationship between alcohol dependency and marital and family systems.

May, 1987 - Prince George
4 day training workshop to 22 alcohol and drug counsellors in level 1, Western Family Learning Institute training commencement.

July, 1987 - Prince George
4 day training workshop to 22 alcohol and drug counsellors in level 1, Western Family Learning Institute training continues.

September, 1987 - Prince George
4 day training workshop to 20 alcohol and drug counsellors in level 1, Western Family Learning Institute training completed, Certificate awarded.

September, 1987 - to March, 1988 - Prince George
4 counsellors on Level II, Western Family Learning Institute training.
Submission of 15 video-tapes for supervision and feedback.

January, 1988 - Kelowna
2 day training workshop to 20 alcohol and drug counsellors in level 1, Western Family Learning Institute Training commencement.

February, 1988 - Victoria
2 day training workshop to 18 alcohol and drug counsellors in level 1, Western Family Learning Institute training commencement.

March, 1988 - Vancouver
2 day training workshop to 25 alcohol and drug counsellors (exploratory workshop).

September, 1988 - Kelowna
4 day training workshop to 20 alcohol and drug counsellors in level 1, Western Family Learning Institute training continues.

October, 1988 - Victoria
4 day training workshop to 18 alcohol and drug counsellors in level 1, Western Family Learning Institute training continues.
November, 1988 - Kelowna
4 day training workshop to 20 alcohol and drug counsellors in level 1,
Western Family Learning Institute training completed, certificates awarded.

November, 1988 - present - Kelowna
Level II training continuing to interested counsellors

December, 1988 - Victoria
4 day training workshop to 18 alcohol and drug counsellors in level 1,
Western Family Learning Institute training completed, certificates awarded.

January, 1989 - Maple Ridge
4 day training workshop to 20 alcohol and drug counsellors in level 1,
Western Family Learning Institute training commencement.

March, 1989 - Maple Ridge
4 day training workshop to 20 alcohol and drug counsellors in level 1,
Western Family Learning Institute training continues.

May, 1989 - Maple Ridge
4 day training workshop to 20 alcohol and drug counsellors in level 1,
Western Family Learning Institute training completed.

October, 1989 - Vancouver
Address to the British Columbia Psychological Association. Presentation of
the Experiential Systemic Treatment of Alcoholic Families at the annual
conference.

Vancouver has requested Level I training for its alcohol and drug
counsellors but because of our interest in research, we have not entered into a
contract.

Summit clinic in Duncan are implementing levels 2, 3 and 4 training for
senior staff who would then become training associates of the Western Family
Learning Institute. These senior staff would train and supervise their own
staff at the Summit Clinic.
Participant Evaluations of Experiential Systemic Therapy Training: Selected Highlights

- I've been in practice for 15 years and have never had training to compare with it. All practising counsellors should have opportunities to take it.

- The training really brought my understanding of family systems into concrete experience.

- This training has brought me a whole view concept of therapy, the tools to use and a greater understanding of what the tools are used for and where.

- I gained a new awareness of myself [which] I will surely benefit my activity as a therapist. I would highly recommend this training.

- This model and training gave me new and creative tools for working with couples. I have renewed excitement about working with families.

- This training integrates existing skills into systemic therapy.

- The training demonstrates and teaches counselling skills that focuses on interconnections between people.

- Presents a "valuable and meaningful approach to therapy, adjustment and change.

- The model enhances effectiveness and efficiency in client work.

- The approach provides a frame work enabling a client and therapist to experience change.

- Easily incorporated into existing therapy styles with families, couples and individuals.

- Provides many effective ways to improve my therapy.

- I already use these techniques and materials in all of my family sessions at work.

- The training has offered me specific skills and a theoretical foundation for those skills to be used.

- I have learned valuable 'landmarks' in therapy sessions so that I don't feel so much a helpless onlooker in family therapy as things develop. I have gained control and in so doing, I have been able to relinquish meaningless 'control' devices that I used to employ.

- The theoretical and practical applications are a very important part of this program.

- Many of the therapies I have used in the past are now under one framework with the techniques and tools of the trade being utilized to the utmost clarity.
- I enjoyed the workshops because you get a chance to learn as your clients learn.

- Encouraged to use the blocks our clients present and change the process in our sessions.

- My scope of therapy is enlarged due to new ways of thinking and doing.

- This model works for individuals, couples and families.

- I have renewed enthusiasm for family systems work.

- What an excellent model!! Hard to improve this.

- Program offers a balance between learning theory and applying principles on a practical level.

- Although its focus is professional, personal growth is inevitable due to the experiential components.

- The training offers a solid knowledge base in systemic family therapy.

- Much needed skill building and opportunity to practice.

- Opens the heart as well as the mind.
APPENDIX B

Experiential Systemic Therapy Overview
EXPERIENTIAL SYSTEMIC THERAPY

An Overview
(revised March, 1991)

By

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Experiential Systemic Therapy

Experiential Systemic Therapy (ExST) is an integrative treatment approach and paradigm of psychotherapy that synthesizes individual and family therapy concepts and techniques. ExST is based on a unified set of assumptions and concepts which apply equally to individuals, couples and families. The model is not a patching together of different theories of psychotherapy, but is a broadly based approach to change and health. It attends to the multiple layers of experience such that theory and practice are woven together. As a therapy, ExST emphasizes the importance of preserving the contextual nature of relationships and avoids stripping events from their contexts through the use of reductionistic approaches to life situations.

Basic Concepts

The primary component around which all the various concepts of ExST revolve is that of relationships. As such, ExST views relationships as the bedrock of human existence and understands the human condition as an intricate web of systemic connections. ExST is concerned with how relationships manifest in the intrapersonal domain as well as the interpersonal and larger contextual fields. In this respect, ExST shares with the British object relations theorists (Kernberg, 1976; Klein, 1991; Kohut, 1977; Mahler, 1975) an emphasis on intrapersonal relations. ExST also maintains close conceptual ties with interpersonal and existential theorists (Horney, 1939; Kiesler, 1982; May, 1967; Sullivan, 1954; Yalom, 1980) and systemic and ecological
advocates (Bateson, 1972, 1979; Bronfenbrenner, 1979, Keeney, 1983; Whitaker & Keith, 1981). In agreement with the views of these major theoretical positions, ExST holds that the human experience is relational in nature. Human beings from infancy onward form, revise and reform their identities based on their recurrent relationships with others.

ExST concurs with Attachment Theory (Bowlby, 1969, 1973, 1988) asserting that optimal human personality development and functioning is predicated upon the formation of a healthy attachment experience in infancy and childhood. The early caretaking relationship with mother and father is of immense physical, emotional, intellectual and social importance since it influences both the child’s intrapersonal and interpersonal life journey. These early experiences with caregivers are particularly significant as they are the foundation upon which relational rules and codes of conduct continue to develop. Caregiver/child relationships are internalized by the child and play major roles in the ensuing development of substantive relational themes which integrate a person’s ongoing relational experiences in a meaningful fashion. That is, childhood and later life experiences combine to contribute to dynamic interpersonal and intrapersonal relational patterns that have as their undercurrents the themes of love and influence.

As a therapy, ExST consists of three interlocking dimensions: the experiential, the symbolic, and the systemic. The systemic dimension goes far beyond the common view of systems as referring mainly to couples and families. Our view includes
progressively larger and more complex systems such as communities, nations and the globe. In addition, we construe the human being as a system of parts including the psychological (consisting of the cognitive, affective and behavioural dimensions) and physiological (involving the neural, respiratory, digestive, circulatory and immune systems). These systems and subsystems may be meaningfully dissected even further to include the molecular, atomic and subatomic levels and beyond. At each level of analysis, any given system represents a synthesis of smaller constituent subsystems. In turn, each system combines to form systems larger than itself. These systems and subsystems are interdependent and fit coherently together such that the integrity of the whole is preserved. The universe is thus conceived of as an all encompassing collection of isomorphically related systems. We agree with Bateson (1979) that all living biological creatures are connected by what constitutes a "sacred unity of the biosphere" (p. 19). This eco-systemic perspective provides the framework for ExST and contributes to its broad theoretical range and integrative potential.

The symbolic dimension of ExST adds an element of solemn formality and playful curiosity to the therapeutic experience. Symbols are metaphors and possess meaning at multiple levels. As such, they may be words, actions and objects, as well as feelings, thoughts and creations. We view symbols as the basic building blocks of human experience and communication.

The use of symbols in therapy is an important attempt to analogically access perceptual experience. In this regard,
Bateson (1972, 1979) noted that linguistic thought is structured in a digital code and perceptual experience in an analogic code and is communicated in the form of models, metaphors, analogies, stories and rituals. Consequently, human beings relate almost entirely through analogic forms.

ExST views the act of therapy as symbolic. Therapy is recognized as a culturally sanctioned change ritual or rite of passage and all activities connected to it are viewed as intrinsically meaningful within a symbolic frame. In therapy, actual symbolic objects are often employed to provide the vehicle by which the inner world of the client is explored. Alternatively, symbols may be helpful in describing the experience of interpersonal relationships between groups of people. Symbols may also be employed in therapy to represent symptoms such as depression or alcohol dependency. Similarly, they may be used to refer to relationships that clients have with inanimate objects, institutions, culture or ways of life. Symbols provide a means to present ideas at a more experiential and indirect level, making them easier for people to accept and assimilate. At one level, that which is enacted in therapy is viewed as symbolic of that which is enacted in other life situations. Relational changes experienced directly and symbolically in the therapeutic arena translate into changes beyond the therapeutic setting.

In ExST sessions, we have successfully used a variety of symbols such as deeply burnt out hulks of candles to represent inner emptiness and personal bankruptcy; logging trucks burdened
with heavy logs to symbolize the pressures of life; a doormat as a symbol for a mother being trampled by her son or spouse; a cup and saucer to represent a relationship pattern between a man and a woman; rubber snakes to represent vile and underhanded behaviours; a beer bottle to symbolize drinking behaviour; salt to represent curative activity; a burning candle to represent universal light; an owl as a symbol of being open to information and wise; a song bird to symbolize cheerfulness and spontaneity; and finally a donkey to represent slowness and lack of friendship.

The third dimension of ExST is the experiential focus. Along with Frieda Fromm-Reichmann (May 1967), and Yalom (1980), ExST insists that clients do not need an explanation, they need an experience. The deepest and the most profound form of knowing results from experience rather than dialogue or didactic instruction. ExST observes that people are not only thinking and verbal beings, they are also acting and feeling beings. Consequently, the potential intensity of the therapeutic experience is greatly limited by a passive physical stance provided for by verbal discourse alone. ExST is an active therapy which engages the client’s entire body in affectively laden and cognitively significant movement thereby increasing the intensity of the client’s therapeutic experience.

In ExST, clients externalize aspects of their internalized relational worlds, explore and change their substantive relational themes, and transform their relationship patterns. By dramatizing aspects of self-in-relationship, systemic experience
is intensified leading to greater awareness of self and alternative ways of being. Ultimately, the purpose of the experience is to provide the opportunity and motivation for the client to engage in relational novelty which involves the actual transformation of particular relationships in the here and now. This process engages the client in spontaneous and creative action in which the therapist acts as facilitator or process guide. In therapy, the client is encouraged to be self-attentive and to listen to the inner voice and the heart. Some therapeutic procedures are similar to the dramatic technique of the two chair developed by Perls (1973) in which the client enacts and interacts with different aspects of self. In this technique, the client moves from chair to chair and addresses aspects of self in dialogue with other aspects of self and others. ExST extends this technique to include the externalization of aspects of self in relationship to such issues as symptoms, problems, relational themes or relationship patterns. It is common in ExST to sculpt, to use empty chairs, to conduct role reversals, and to enact reciprocal metaphors. Clients are also often invited to imagine, to draw, make collages, paint and dance if they so desire. They are asked to engage in activities quite unlike their every day world. They are given a context to explore new ways of being, to challenge old recursive patterns and to emancipate themselves from the shackles that restrain them.

In ExST, we are concerned not only with intrapsychic exploration, but also with the exploration of couple and family dynamics including intergenerational legacies. This is in sharp
contrast to the work of Perls (1973) who focussed solely on the individual's intrapsychic process in order to increase awareness and contact with the world. ExST is a systemically sensitive therapy that pays considerable attention to the between-people process and the social conditions in which the client functions. As such, changes in the relationship are contextualized and understood as isomorphic to other levels of the system. Issues relating to social, interpersonal, intrapersonal and spiritual change are woven into the unfolding therapeutic story.

**Personality**

We agree with Sullivan (1953) that personality can best be understood as the result of the "relatively enduring pattern of recurrent interpersonal situations which characterize a human life" (p.11). It is within this interactive relational context that humans construct ways of being in the world. These ways of being arise and develop over time and are nourished by experiences with others to form personal identity. It is our identity which helps us to understand events, make plans and have expectations.

In addition to viewing personality relationally, ExST takes a wholistic perspective with respect to human functioning. Arguments over the primacy of cognition, affect and behaviour are avoided. The parcelling of human experience into fragmented parts and the resulting reductionistic therapy practice to which this compartmentalization gives rise, does little to integrate people's frequently disjointed existence (May, 1967). ExST
maintains that all three domains of experience namely cognition, affect and behaviour offer a wealth of information to awareness. From our perspective, streams of thought, feeling and behaviour flow concurrently. They are valued in concert and are equally emphasized in therapy. ExST works toward a harmonic balance of the domains that constitute experience. A peaceful co-existence of thoughts, feelings and behaviour is sought, while neglect, denial, suspicion and repression of any stream of experience is grist for therapy.

ExST holds that a person's personality structure must be flexible or plastic in order to both grow along with and influence changes in the environment. In regard to the relationship between structure and environment, Maturana (1978) has coined the term "structural coupling" to refer to the process of ongoing relationship building with the environment. Maturana (1978) has referred to the interlocking conduct of individuals resulting from mutual structural coupling, such as occurs in families, as a "consensual domain". It is in the consensual domain that people learn about self, the world around them, and the meaning of behaviour. In this way, people continue to learn how to punctuate the flow of experience. This punctuation ultimately determines the "reality" that is lived. Consequently, one's sense of personhood arises with experiences of others. These experiences inform each of us about who and what we are, and what we can and can not do without challenging the integrity of our sense of identity.
The Role of Symptoms

In ExST, symptoms are viewed as indications of relationship problems. Symptomatic relationships are generally characterized by restrictive, rigid and repetitive patterns of interaction. When using the term "relationship" in this context, we do not necessarily mean to infer only living human relations, although this may be the case. Rather, we mean to imply that the identified symptom-bearer has a relationship with the "problem" as do other members of the symptom bearer's family or community. For example a "problem drinker" has a particular relationship with alcohol as does his/her spouse, family, friends and society. These are critical relationships when a life course of sobriety is considered. It is the interpersonal and social context and the relationship between the client and this "other" that gives rise to symptomatic behaviour and makes the behaviour both meaningful and important.

The tendency in the past has been to limit the conceptual apprehension of "symptomatic behaviour", and to try and explain symptoms by referencing only one primary explanatory system. For example, individually oriented therapies frequently conceive of problems as existing strictly in the mental, emotional or behavioural domains of the individual client. Alternatively, family therapists have tended to construe problems as primarily disturbances in family organization and systemic rules of conduct, while medically oriental treatment models may view symptomatic behavior as expressing bio-chemical difficulties within the neural network.
It is our assertion that numerous levels of systemic relations (e.g. biochemical, individual, couple, family and social systems) co-exist in space and co-evolve through time. Each level of system influences every other level and as such, each is a dimension of being that shares in the process of becoming. Consequently, to fail to recognize the validity and integrity of each explanatory system and to ignore the contribution of each in the development, persistence, and eventual treatment of symptomatic behaviour, is to fail to comprehend the full meaning of the symptom and the complexity of human functioning.

Since symptomatic behaviour is seen as communicative of some relational difficulty, the matter of assessment becomes critical. Without an accurate assessment, the probability of promoting relational novelty in therapy is low. In addition, secondary relational disturbances, such as employment difficulties, may well be triggered in response to the symptomatic behaviour and must be taken into account during assessment. Frequently, more or less severe problematic relations may predate the emergence of the symptomatic behaviour and as a consequence may become exaggerated or suppressed in response to the symptom.

Symptoms are meaningful signs of distress. Many of these signs of distress can themselves become life threatening (e.g. anorexia nervosa, bulimia, alcoholism, drug addiction, and depression). The most pressing clinical need is to alleviate the symptom in order to ensure clients safety. In life threatening situations, this is an especially prudent course of clinical
action. Yet this cannot occur without perturbing the many systems that may have organized themselves around the symptom.

Symptoms are teachers, providing opportunities for clients to learn more about what it is to be alive. They are messengers calling out and analogically conveying information about relationships in need of attention. Symptoms herald to our awareness the unhappiness and distress of which we are all too frequently unaware. It is for this reason that we refrain from "shooting the messenger," and ridding our clients of their difficulties before the meaning of the message is adequately understood. In cases where immediate symptom alleviation is absolutely necessary to proceed with therapy, we continue to try to understand the symptom's meaning such that we still may receive the message it carried. For example, after a severely depressed battered woman obtains physical safety, she can begin to explore the message behind her depression. Only after she is safe can she come to understand how her outrage at being abused and traumatized, which was invalidated and punished by her abuser, had been turned inward and expressed as a depressive symptom. The symptom, in a sense, was calling to her to escape the abusive situation by impressing upon her how unhappy she had become.

Principles of Therapy

ExST is guided by a set of seven principles which define the treatment approach and serve as guides to therapy adherence and
treatment integrity. The following briefly outlines some important details of these principles.

**Therapy is Collaborative**

The first principle of therapy postulates the need for therapist and client collaboration. Therapy is viewed as a shared journey in which therapist and client collaborate in an I-Thou encounter which involves mutual trust, respect and caring. The therapist is a guide to the intrapersonal and interpersonal process, and as such must be flexible and respond genuinely as listener, coach, teacher, choreographer, advocate, and confronter as required.

Rather than imposing a rigid program of treatment on the client, therapists combine technical expertise with artistry to co-develop the therapeutic story with the client. Each therapeutic system represents a unique story of change and no one narrative fits the wide spectrum of clients who participate in therapy. Client and therapist share ownership of the therapeutic venture and jointly assume responsibility for the activities.

Therapists must enter the clients world and join with the client to develop a sense of togetherness in the therapeutic venture. Consequently, in the initial sessions, it is particularly important for the therapist to actively honour the clients' world and selectively adopt their language including unique metaphors and cadence. The therapeutic story begins with the formation of a therapist/client relationship that accepts the clients' current state of development. This relationship is best
established before the therapist introduces clients to different metaphors, frames, language and symbols.

ExST views client behaviour as neither compliant, adversarial or resistant. When the therapeutic process gets bumpy, or bogged down, ExST assumes that these moments are necessary but difficult part of the journey rather than as resistance from the client. ExST evokes images of melting reluctance, honoring hesitancy, respecting caution rather than fighting, blasting, tearing down or using resistance. We perceive the therapist as part of the therapeutic system, not as a distant neutral observer or someone doing something to other people. The therapeutic system has no subject or object but rather is a unified system of relationships, tasks and goals. The therapist does not assume an expert role but employs clinical wisdom while remaining committed to the spirit of cooperation in this deeply human activity.

Therapy Proceeds with a Therapeutic Mandate

A second principle of ExST is the importance of the therapeutic mandate. Participation in therapy is an act of courage for many clients and represents a desire for change. The therapeutic mandate is designed to honour the client’s risk, define the problem relationally and set therapy goals. At the onset of therapy, clients are invited to express their wishes regarding the final outcome of therapy through the use of a desired state metaphor which is also typically given concrete symbolic form. This important task is designed to develop a goal
around which the therapy is organized and to provide an initial experience of future change that both engenders hope and expands the pool of options open to the client. The outcome of this task is the development of the therapeutic mandate. While this mandate may be modified from session to session, it offers continuity to the therapeutic process and ensures that the therapist and client are working toward common ends.

**Therapy Maintains a Here and Now Focus**

The third principle of ExST involves the here-and-now focus. The past, present and future are perceived as events to be faced honestly and openly. Events of the past which are brought into the therapy session are experienced in the here-and-now. Similarly, anticipated events of the future are also experienced in the moment. Regardless of the time frame brought into the therapy session, the focus is always on increasing and intensifying the client’s experience of relational patterns, current feelings, perceptions and bodily states. The experience in the session is designed to let it happen more, more fully, and more deeply with greater depth, breadth and saturation (Bugental, 1976; Mahrer, 1975; Rogers, 1961). Clients are invited to experience events in the moment until they are deeply grasped and understood and a new relationship with the experiences is evoked. For example, a couple may sculpt themselves with their backs to one another. The therapist can deepen this experience through empathy, through focussing on the clients’ bodily experience and by having them repeat potent statements. As a result, the couple
can experience their deep isolation which in turn motivates them to tearfully face each other in an act that reveals their vulnerability and caring for one another.

The therapist must handle the client's ongoing experience, even if shameful and embarrassing, with respect and care. The therapist must honour the therapeutic event and orchestrate the action in the present so that the abstract becomes more fully grounded and so that novel patterns can emerge and be experienced directly in the moment.

Therapy is Developmental

Throughout the course of ExST, therapists remain committed to a developmental perspective. By this we mean that therapists regard clients experience both inside and outside of therapy as valid and necessary contributors to the unfolding change story. With a compassionate and unswerving confidence in the generative process of the therapeutic system, the therapist conveys appreciation and respect for the clients potential. In this way, all events and experiences are infused into the therapy and greeted by the therapist as welcome visitors along the road to the clients therapeutic destination. Consequently, ExST therapists understand the clients significant relational experiences, (be they with husbands, wives, employers, symptoms, or therapists, etc.) as important events to be accepted, explored, intensified and given therapeutic meaning.

ExST shares with Jung (1982) and Rogers (1961) in the assumption that people engaged in therapy are naturally oriented
toward healing. This developmental perspective underscores the importance of a life cycle orientation in therapy. That is, client relational themes often surface dramatically during life transitions and these transitions serve as the context for growth opportunities. Life cycle transitions such as marriage, birth, death, divorce, parenthood, coming out, and career changes, serve to increase the urgency of client pain and motivate them to seek transformation. As a result, ExST therapists affirm transition events as significant challenges, view painful mistakes as learning opportunities and as custodians of therapeutic meaning, connect the clients ongoing experience to the therapeutic story.

*Therapy is Novel and Creative*

The fifth principle of ExST is the role of novelty and creativity in the development of new relational themes, behaviours, cognitions and feelings. Each therapeutic moment calls for the exercise of choice and contains within it the opportunity for inventiveness. The rigid and recursive patterns of relationship that exist either at the level of the self as manifested by devastating self-talk, or between people in self-defeating patterns of interaction, have the potential to be transformed. ExST maintains that a vast reservoir of potential exists for individual, couple, family and social change. Novelty emerges spontaneously as old recursive patterns of relationships are modified, revised or replaced through processes of recognition, acceptance, negotiation, apology, forgiveness and grieving.
**Therapy is Generalizable**

A sixth principle to which ExST subscribes is that to be effective, therapy must generalize to the client's everyday experience outside of therapy. Along with Perls (1973), Rogers (1961), and Moreno (1959), ExST assumes that to be aware of one's immediate systemically based process is to be empowered with choice and self-direction. Novel options orchestrated in the therapeutic session may continue to be manifest between sessions by use of innovative invitations that link change themes to new behaviours and relationships. Clients may be invited to engage in extra-sessional activities that symbolically fuse therapeutic efforts with life out beyond the office walls. For example, therapists may invite clients, in the week between appointments, to pay attention to their relationship with the abused-child-within, or to go out on a date, or experiment with lovemaking, or write in a personal journal, or paint pictures. These invitations are designed to encourage clients to engage in novel activities outside of the therapy session and serve to integrate the therapeutic experience into the client's routine life.

**Therapy is Systemic**

A seventh principle of ExST is that therapy is systemic and has intrapersonal, interpersonal, familial, socio-political and spiritual relevance. The therapist engages with the client and his/her social network in an active, wholistic and dynamic way. Therapists help clients view the world systemically in order to aid them in understanding the interconnections between the
different spheres of their lives. Whereas some therapies accent the importance of autonomy and individuation of individuals, ExST is concerned with the quality of relations. It views individuals as systemic beings inextricably linked and interdependent and in need of community. Consequently, change is understood as having systemic implications that are not always obvious, but are none the less important to include in the scope of the therapy.

In order to provide a context for systemic transformation, ExST clinicians frequently turn to the symbolic externalization of salient aspects of the client's world including the externalization of parts of self and other symptoms, problems and relational themes. In externalization, clients are encouraged to treat their concerns as separate entities in order to accent the relational process in which they are engaged. For example, in a marital relationship in which alcohol dependency is a serious issue, the problem may be externalized by bringing a beer bottle into the session to represent excessive drinking. As a result of this activity, the couple may explore their relationships with abusive drinking and the manner in which they have organized themselves and their partnership around it. Alcohol dependency is thereby rendered less fixed and restrictive and more external to the couple allowing them to work together to deal with the trauma of its effects. Externalization provides the opportunity for clients to relate directly to the beer bottle without attacking each other or the alcoholic. The problem is now viewed as outside of self, and clients are free to create new solutions to the problem and its influence. No longer fused to alcohol,
clients are free to change their relationships with each other and to organize their lives without the influence of the substance.

Although the principle of externalization proposed by ExST is similar to that advocated by White and Epston (1990), it is extended in ExST to include the use of actual symbols and metaphors in the externalization process. That is, rather than discuss a metaphor and talk "about" the problem, clients are given the opportunity to actively interact "with" the problem in its symbolic form. They speak to the bottle, kick it, hug it, bury it, or hide it, and eventually say "goodbye" to it. Therapists may also externalize parts of the client's inner world as well as couple and family dynamics. This process may be accomplished by the use of dramatizations involving such techniques as sculpting, chair work and the playful use of metaphors, objects and symbols as previously described. Ultimately, changes in problematic relationships must be contextualized and seen as occurring within a systemic ecology. Externalization assists clients in the development of new ways of being in their worlds and empowers them with new experiences upon which to build their lives.

**Process of Therapy**

The ExST therapeutic story, presented below in figure 1, consists of four phases which include: (1) Forming the therapeutic system and setting a context for change; (2) Perturbing patterns and sequences; (3) Integrating experiences of
change and; (4) Disbanding the therapeutic system. These phases are interlocking and can occur cyclically over the course of therapy. The first phase entails the building of a therapeutic alliance or relationship in order to create a sense of trust between clients and therapist. The therapeutic mandate is also developed during this phase. The second phase centers on the evocation of new patterns of relationship with self, others and community, while the third phase focusses on integrating these changes into everyday life and consolidating the therapeutic gains. The fourth phase represents the end of the therapy and includes a celebration of the changes made and engages clients in a formal goodbye. Together the four phases constitute the therapeutic story and it is the shared responsibility of the therapist and client to weave the events which occur during therapy into the therapeutic tale.

Each therapy session, within the four phases, is a unique event with wholeness and integrity. Each session shares a common structure that provides a predictable rhythm to the therapeutic

![Figure 1. The Therapeutic Story](image-url)
While flexibility and spontaneity is encouraged, the rhythm of the beginning and ending of the sessions follows a characteristic format. At the start of each session, the therapist begins the process by connecting with the client, couple or family to reconstitute the therapeutic system. Both therapist and client return to the therapeutic system with relevant experiences that have occurred since their last meeting. The therapist explores these experiences and any pressing events in the life of the clients. The therapist then enquires about the invitation offered at the end of the previous session. Following this, the therapist requests information regarding events or experiences connected to the previous session that need exploration. Thereafter he or she overtly or implicitly reiterates the therapeutic mandate or invites its modification. Finally, the therapist and clients consider the present meeting and develop a plan of action which may involve the enactment of some characteristic relationship pattern or other therapeutic activity.

Near the end of the session, a closing format is initiated that provides a concluding rhythm to the session and sets a direction for upcoming therapeutic activities. The concluding in-session tasks involve a collaborative summary of the events that have transpired in the last hour and the linking of these events to the therapeutic mandate. In this respect, the therapist is ultimately responsible for therapeutic meaning and typically highlights the relevance of the session activity. Therapists then affirm the specific qualities of the clients'
behaviour during the session (e.g. the courage to cry, or humility in facing difficult feedback) and anticipate opportunities for growth in the coming week. Subsequently, the therapist suggests necessary steps to watch for in this part of the transformational journey. Clients are then invited to evaluate the meeting and to highlight moments of special significance. Finally, the therapist invites clients to participate in some activity during the week which links the session in some respect to their everyday functioning outside of therapy. This between-session activity also prepares them for the next session. The rhythm of therapy and the beginning and concluding session formats help to ensure that each session will connect with the others by providing a stylized pattern for entering and leaving the therapeutic space.

Transactional Classes

ExST distinguishes between the process and content of therapy. Process is concerned with the "how" and content with the "what" of therapy. Clients discuss the content or subject matter of their lives while in therapy. Therapists on the other hand, attend to both the content and process of the session. They observe how session events occur and the manner in which these sequences relate to the subject matter brought by clients. The therapist observes when clients switch content, block action, show anxiety, or withdraw and generally monitor clients' patterns of words and relationships. In addition to observing the therapeutic process, the therapist should be in touch with
his/her own internal process. This awareness facilitates the monitoring of the therapeutic process. The therapist’s own experience may be directly connected to that of the therapeutic system. For example, if the therapist experiences a sense of helplessness he/she can ask if anyone else in the family is having a similar experience. This may open the way for the exploration of how Dad’s blaming behaviour belies a sense of helplessness in the face of his son’s addiction.

ExST is centrally concerned with the interpersonal as well as intrapersonal process of therapy and uses a variety of techniques to facilitate movement and relational novelty. It is important that therapeutic experiences spontaneously grow out of sessions rather than being mechanically introduced. Therapy is a process of discovery with a focus on a central theme rather than a series of fragmented events and activities such as role plays, regressions, sculpts or genogram analyses.

There are seven transactional classes used to describe the activities of the therapeutic system. The term transaction is used instead of interaction since it denotes the complexity of the process of accommodation and influence engaged in by all members of the therapeutic system. Each class is designed to reflect the mutually interdependent relationships that form the therapeutic system.

**Therapist-client Relationship Enabling Transactional Class**

The focus of this class is on the creation maintenance, and utilization of the therapeutic alliance. This occurs throughout
the duration of the therapy and ensures that the client feels understood and safe with the therapist. The intention behind these transactions is to form a working alliance in which both therapist and clients trust and commit to the therapeutic process. Therapist-client Relationship Enabling Transactions engender a willingness to rely upon the therapeutic relationship as a source of exploration. These transactions can include empathy, self disclosure and immediacy to name only a few.

Process Facilitation Transactional Class

The relational patterns upon which therapists concentrate are the focus of this transactional class. Clients are encouraged to become directly involved with one another during the session. Therapists are interested in the recursive nature of the clients’ patterns as well as the cognitive, emotional and physical experiences that underlie these interactions. Clients engage in spontaneous dialogue with one another while the therapist utilizes this immediacy to shift otherwise static repetitive patterns of interaction. The techniques referred to in this class can include: blocking, coaching, marking boundaries, framing the expression of underlying feelings, role reversal and repetition.

Expressive Transactional Class

What was previously private is now made public through the process of exploration, naming and owning of experiences and by the use of both verbal and nonverbal means of expression. These
creative transactions are significant metaphorical events that draw up on the artistic resources of all the members of the therapeutic system. These transactions can include art, dance, storytelling, baking and metaphor.

Symbolic Externalizing Transactional Class

A symbolic representation of some problematic aspect of the clients' world is generated, developed and brought to life in therapy by this transactional class. For example, an alcoholic's relationship to the bottle may be externalized so that he/she can relate to it from a distance. A bottle is put on a chair and the alcoholic and his or her spouse are invited to discuss their separate yet connected relationships to the bottle. In short, any dilemma, person or thing can be externalized and brought into therapy. These transactions can include, among others, empty chair work, two chair work and symbolic representations.

Meaning Shift Transactional Class

Clients often make sense of their worlds in ways that leave little room for flexibility. The therapist can help clients expand their alternatives by aiding them in developing a view of the problem that implies a solution or that enhances clients' ability to be compassionate towards one another and themselves. Meaning shifts are important to therapy since they sometimes mark moments of irreversible progress. These transactions can include reframing, normalizing, circular questioning and regressions.
Invitational Transactional Class

These transactions typically occur at the end of the session and provide continuity between meetings. They also offer therapists and clients feedback as to how well clients are maintaining their changes and developing alternatives. Therapeutic tasks may perturb new behaviours and therein promote client self-confidence or they may serve to consolidate in-session changes outside of therapy. These transactions can include prescribing symptoms, suggestive homework, inviting quests, journal writing and self monitoring.

Ceremonial Transactional Class

These transactions focus on a formal acknowledgement of clients progress and change. These events are memorable occasions and are enacted with all due reverence. Ceremonies can demarcate endings from new beginnings, shifts in status and changes in role. They may be highly ritualized and jointly planned or spontaneous expressions on the part of therapists and/or clients. These transactions can include closing celebrations, burials, penance, confessions, and handshakes.

Training of Therapists

ExST is a challenging and demanding psychotherapy to learn. Therapists must attend to a variety of concerns such as the individual client and his/her substantive relational themes, the influence of other members of the interpersonal context such as the family and their respective substantive relational themes,
and the interaction between clients and the social context. Therapist must also learn how to collaboratively engage in action-oriented transactions and monitor their effects on clients. Such training is available through the Western Family Learning Institute and workshops have been conducted across the province of British Columbia. The training involves experiential activities, personal growth experiences and seminars with senior therapists as well as supervised practice designed to help trainees integrate theory with practice in the active performance of ExST.

**Research**

Several studies are presently being conducted to examine the process and outcome of ExST. A major study involving 150 families in which paternal alcohol dependency is a problem, is being undertaken by the developers of the model. An ExST treatment manual has been developed for the project that expands upon many of the notions presented in this overview (Friesen, Grigg, Peel & Newman, 1989). In addition, therapy integrity and adherence forms have been generated (Friesen, Grigg & Peel, 1989) to monitor treatment quality and fidelity. ExST has been shown to be clinically effective and the present research goal is an effort to systematically measure its efficacy. Publications from this research will be available as results become available.
References


APPENDIX C

Father and Mother Weekly Situations Diaries and
Reduced Versions of Supported Feedback Therapy Wall Charts
Please complete this diary on Sunday, put it in the envelope provided, and bring it to the Clinic at your earliest convenience. The contents of this diary will be treated as Confidential.

Week # ____  I.D. # ________
We ask you to fill out this diary so that we can get a sense of how you are doing on a weekly basis.

1. Consider the past week and think about how your life has changed, if at all. Consider whether it has changed for better or for worse. Rate your experience of change with respect to each of the following on the scale provided by circling the appropriate number. (Note: "family" means you, your spouse and your children):

(a) Your self -3 -2 -1 0 +1 +2 +3
(b) Your marriage -3 -2 -1 0 +1 +2 +3
(c) Your family -3 -2 -1 0 +1 +2 +3
(d) Your friendships -3 -2 -1 0 +1 +2 +3
(e) Your work -3 -2 -1 0 +1 +2 +3

2. Given your experiences of the past week, rate how satisfied you are with each of the following. (Circle the appropriate number):

(a) Your self 1 2 3 4 5 6 7
(b) Your marriage 1 2 3 4 5 6 7
(c) Your family 1 2 3 4 5 6 7
(d) Your friendships 1 2 3 4 5 6 7
(e) Your work 1 2 3 4 5 6 7

3. Considering the past week, rate how close each of the following came to your ideal. For example: how close did your marriage come to your view of an ideal marriage in the past week? (Circle the appropriate number):

(a) Your self 0 1 2 3 4 5 6 7 8 9 10
(b) Your marriage 0 1 2 3 4 5 6 7 8 9 10
(c) Your family 0 1 2 3 4 5 6 7 8 9 10
(d) Your friendships 0 1 2 3 4 5 6 7 8 9 10
(e) Your work 0 1 2 3 4 5 6 7 8 9 10
WEEKLY SITUATION DIARY: PART TWO

We ask you to fill out this diary so that we can get a sense of how you are doing in your recovery. You may also find it interesting to fill out this diary each week to get a sense of the quantity, frequency and pattern of your own drinking.

1. In the last week have you: (Circle your answer)
   a) consumed any alcohol? Yes No
   b) used any prescription drugs? Yes No
   c) used any over-the-counter drugs? Yes No
   d) used any type of drugs other than the above? Yes No

2. How much difficulty have you experienced in achieving or maintaining abstinence this week?

   No Difficulty Moderate Difficulty Extreme Difficulty
   0--------1--------2--------3--------4--------5--------6

3. i) Have you attended any kind of support group meeting in the last week?

   Yes No [If Yes, complete ii) and iii); if No go to #4.]

   ii) If you attended any of the following support group meetings, write in how many you attended in the last week:

      Alcoholics Anonymous ______ Narcotics Anonymous ______
      Adult Children of Alcoholics ______

   iii) Write in how many of the following support group meetings you attended in the last week:

      Groups: ______________________ No. of meetings attended: ____
      ______________________ No. of meetings attended: ____
      ______________________ No. of meetings attended: ____
4. Were you absent from work in the last week?
   Yes    No    Not Applicable

   If Yes, how much time did you miss (in hours)?   _______ hours

5. Were you in contact with any law enforcement agency in the last
   week? If Yes, write in the type of agency, the reason for contact
   and the number of contacts.

   Type of Agency       Reason for Contact       No. of Contacts

   1. ______________________  ______________________  ___________
   2. ______________________  ______________________  ___________
   3. ______________________  ______________________  ___________

6. Did you attend any medical (not dental) appointments in the last
   week?
   Yes    No

   If Yes, write in the number of times you attended:   _______ times

IF YOU DID NOT USE ALCOHOL AT ALL IN THE LAST WEEK PLEASE
SKIP PART THREE AND GO DIRECTLY TO PART FOUR
WEEKLY SITUATION DIARY: PART THREE

Please fill out the following alcohol use record as follows:

1. If you did not drink at all on a particular day, put a check mark for that day beside "didn't drink" in Part A.

2. If you did drink on a particular day, find the kind of drink you had and write in the number of drinks consumed on that day.

3. If you topped up or refreshed your drink, count this as a separate drink.

<table>
<thead>
<tr>
<th></th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer, Ale, Malt-Liquor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 oz. bottle or can (5%) (341 ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draft beer; home brew</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 oz. glass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 oz. pint</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light beer (2.5% - 4.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy beer (5.7% - 6.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cider, Coolers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 oz. bottle (4% - 6.0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wine (including Sangria)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard glass (4 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half-bottle (13.2 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottle (26.4 oz.) (750 ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litre (35.2 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### E. Distilled Spirits (40%) (Gin, Vodka, Whiskey, Scotch Rum, Brandy, Tequila, etc.)

<table>
<thead>
<tr>
<th>Type</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 shot (1 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jigger (1.5 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double (2 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed drink (e.g. Rum &amp; Cola 1 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mickey (12.5 oz.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 oz. bottle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 oz. bottle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### F. Miscellaneous Alcoholic Drinks

<table>
<thead>
<tr>
<th>Type</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sherry, Vermouth, Muscatel, Port, Sake, Fortified Wine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard-size glass (1.5 oz.) (20%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liqueurs, fruit flavoured brandies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard glass (1.5 oz.) (30%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special coffees (e.g. Irish, Spanish (1 oz.) (40%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shooters (1 oz.) (40%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### WEEKLY SITUATION DIARY: PART FOUR

The following chart is for you to record your use of drugs, if any. This includes prescription, over-the-counter and other kinds of drugs. If you used no drugs on a particular day, put a check under the column labelled "None". If you did use drugs on a particular day, specify the drug, how you took it and how much you took.

<table>
<thead>
<tr>
<th>Type of Drug</th>
<th>How Taken</th>
<th>How Much</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Completion of Part Five is Optional

Use this blank page to record any additional comments, thoughts, feelings, events, dreams or anything else you consider important about the past week.
Please complete this diary on Sunday, put it in the envelope provided, and bring it to the Clinic at your earliest convenience. The contents of this diary will be treated as Confidential.

Week # _____ I.D. # ________
We ask you to fill out this diary so that we can get a sense of how you are doing on a weekly basis.

1. Consider the past week and think about how your life has changed, if at all. Consider whether it has changed for better or for worse. Rate your experience of change with respect to each of the following on the scale provided by circling the appropriate number. (Note: "family" means you, your spouse and your children):

   (a) Your self  
      Much Worse -3  Verge -2  Somewhat Worse -1  No Change 0  Somewhat Better +1  Better +2  Much Better +3

   (b) Your marriage  
      Much Worse -3  Verge -2  Somewhat Worse -1  No Change 0  Somewhat Better +1  Better +2  Much Better +3

   (c) Your family  
      Much Worse -3  Verge -2  Somewhat Worse -1  No Change 0  Somewhat Better +1  Better +2  Much Better +3

   (d) Your friendships  
      Much Worse -3  Verge -2  Somewhat Worse -1  No Change 0  Somewhat Better +1  Better +2  Much Better +3

   (e) Your work  
      Much Worse -3  Verge -2  Somewhat Worse -1  No Change 0  Somewhat Better +1  Better +2  Much Better +3

2. Given your experiences of the past week, rate how satisfied you are with each of the following. (Circle the appropriate number):

   (a) Your self  
      Extremely Dissatisfied 1  Somewhat Dissatisfied 2  Somewhat Satisfied 3  Extremely Satisfied 4 5 6 7

   (b) Your marriage  
      Extremely Dissatisfied 1  Somewhat Dissatisfied 2  Somewhat Satisfied 3  Extremely Satisfied 4 5 6 7

   (c) Your family  
      Extremely Dissatisfied 1  Somewhat Dissatisfied 2  Somewhat Satisfied 3  Extremely Satisfied 4 5 6 7

   (d) Your friendships  
      Extremely Dissatisfied 1  Somewhat Dissatisfied 2  Somewhat Satisfied 3  Extremely Satisfied 4 5 6 7

   (e) Your work  
      Extremely Dissatisfied 1  Somewhat Dissatisfied 2  Somewhat Satisfied 3  Extremely Satisfied 4 5 6 7

3. Considering the past week, rate how close each of the following came to your ideal. For example: how close did your marriage come to your view of an ideal marriage in the past week? (Circle the appropriate number):

   (a) Your self  
      Ideal 0 1 2 3 4 5 6 7 8 9 10

   (b) Your marriage  
      Ideal 0 1 2 3 4 5 6 7 8 9 10

   (c) Your family  
      Ideal 0 1 2 3 4 5 6 7 8 9 10

   (d) Your friendships  
      Ideal 0 1 2 3 4 5 6 7 8 9 10

   (e) Your work  
      Ideal 0 1 2 3 4 5 6 7 8 9 10
Please answer the following questions which have to do with more specific activities in your life.

1. In the last week have you: (Circle your answer)
   a) consumed any alcohol? Yes No
   b) used any prescription drugs? Yes No
   c) used any over-the-counter drugs? Yes No
   d) used any type of drugs other than the above? Yes No

2. i) Have you attended any kind of support group meeting in the last week?
   Yes No [If Yes, complete ii) and iii); if No go to #3.]

   ii) Write in how many of the following support group meetings you attended in the last week:

       Alcoholics Anonymous ______ Narcotics Anonymous ______
       Adult Children of Alcoholics ______ Alanon ______

   iii) If you have attended any other kind of support group meetings in the last week, list the name of the group and the number of times you attended in the last week.

       Groups: ______________________ No. of meetings attended: ___
       ______________________ No. of meetings attended: ___
       ______________________ No. of meetings attended: ___

3. Were you absent from work in the last week?
   Yes No Not Applicable
   If Yes, how much time did you miss (in hours)? ______ hours

4. Did you attend any medical (not dental) appointments in the last week?
   Yes No
   If Yes, write in the number of times you attended: ______ times
Completion of Part Three is Optional

Use this blank page to record any additional comments, thoughts, feelings, events, dreams or anything else you consider important about the past week.
The Alcohol Recovery Project

Alcohol Consumption Chart for: ____________________

- 16
- 15
- 14
- 13
- 12
- 11
- 10
- 9
- 8
- 7
- Standard
Drinks
Alcohol

Average

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

#Days
THE ALCOHOL RECOVERY PROJECT

Level of Satisfaction Chart for: ____________________________

Key

Self
Marriage
Family
Friendships
Work

Extremely Satisfied

Somewhat Satisfied

Somewhat Satisfied

Extremely Dissatisfied

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 weeks
THE ALCOHOL RECOVERY PROJECT

Chart for: ____________________

Ideal

Proximity to Ideal

10 - 9 - 8 - 7 - 6 - 5 - 4 - 3 - 2 - 1 - 0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

WEEK
CUMULATIVE Change Chart for: ____________________________

<table>
<thead>
<tr>
<th>Change Units</th>
<th>Self</th>
<th>Marriage</th>
<th>Family</th>
<th>Friends</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>+20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>-5</td>
<td></td>
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<td></td>
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<tr>
<td>-10</td>
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<tr>
<td>-15</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>-20</td>
<td></td>
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</tr>
</tbody>
</table>
APPENDIX D

Project Consent Form
THE ALCOHOL RECOVERY PROJECT

PARTICIPANT FAMILY'S CONSENT FORM

1. We agree to participate in "The Alcohol Recovery Project", conducted by Dr. John D. Friesen, Department of Counselling Psychology, The University of British Columbia.

2. We understand that participation in this project is voluntary and involves a minimum of sixteen weeks and a maximum of thirty-six weeks participation.

3. We understand that we are free to withdraw from the project at any time or to refuse to answer any questions, without jeopardizing the treatment we are receiving.

4. We willingly consent to have therapy sessions videotaped if we are chosen for this part of the project.

5. We understand that we will be completing a series of questionnaires and that we will receive monetary compensation for their completion.

6. We understand that we will be required to answer questionnaires at various intervals over a minimum period of fifteen weeks and a maximum of twenty-seven weeks.

7. We commit to this project with the understanding that the information is to be kept strictly confidential, is to be used for research purposes only and is to be destroyed upon the project's completion.

8. We acknowledge receipt of a copy of this consent form.

9. We further understand that if we have any questions or require any further information, we may contact the project office at 228-3499.

Signed the ................................ day of .................................................., 19........
in ....................................................................................................................., B. C.

Father ..................................................... Mother .......................................................Child ..................................................... Child .....................................................

Child .....................................................

Witness ....................................................
APPENDIX E

Project Payment Schedule A and B
We acknowledge that we will receive financial recognition for participating in The Alcohol Recovery Project.

We understand that we will receive payment on four occasions after completion of project questionnaires.

We understand that the following payment formula will be followed:

<table>
<thead>
<tr>
<th>Time:</th>
<th>Husband</th>
<th>Wife</th>
<th>Children (each)</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Two</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Three</td>
<td>20</td>
<td>20</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Four</td>
<td>40</td>
<td>40</td>
<td>5</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>83</td>
<td>83</td>
<td>17</td>
<td>200</td>
</tr>
</tbody>
</table>

Please note that the project will donate the specified amount to a charity of your choice (including our project) should you wish.

Please make the cheques for participating in the project payable to:

[Signature]

Signed,

Husband _________________________

Wife ___________________________

Witness _________________________

Date ___________________________
We acknowledge that we will receive financial recognition for participating in The Alcohol Recovery Project.

We understand that we will receive payment on two occasions after completion of Project questionnaires.

We understand that the following payment formula will be followed:

<table>
<thead>
<tr>
<th>Husband</th>
<th>Wife</th>
<th>Children (each)</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>15</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Two</td>
<td>8</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Three</td>
<td>40</td>
<td>40</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>63</strong></td>
<td><strong>63</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Please note that the Project will donate the specified amount to a charity of your choice (including our project) should you wish.

Please make the cheques for participating in the project payable to:

__________________________

Signed,

Husband ________________________________

Wife ________________________________

Witness ________________________________

Date ________________________________
APPENDIX F

The Alcohol Recovery Project

Adherence Rating Scale Rating Form
### The Adherence Rating Scale -- Rating Form

**Tape #** __________ **Date Rated** __________ **Rater** __________

**Tape ID#** __________ **Session #** __________ **Date Coded** __________

<table>
<thead>
<tr>
<th>Extensiveness</th>
<th>Emulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = not at all</td>
<td>0 = not at all</td>
</tr>
<tr>
<td>1 = little</td>
<td>1 = slightly</td>
</tr>
<tr>
<td>2 = some</td>
<td>2 = some</td>
</tr>
<tr>
<td>3 = considerably</td>
<td>3 = close</td>
</tr>
<tr>
<td>4 = extensively</td>
<td>4 = very close</td>
</tr>
</tbody>
</table>

1. **Supportive Encouragement:**

   0 // 1 2 3 4

2. **Concrete Language:**

   0 // 1 2 3 4

3. **Developmental Focus:**

   0 // 1 2 3 4

4. **Advanced Empathy:**

   0 // 1 2 3 4

5. **Accepting and Validating Client's Experience:**

   0 // 1 2 3 4

6. **Spontaneity:**

   0 // 1 2 3 4

7. **Semi-Structured Session Format:**

   0 // 1 2 3 4

8. **Tracking Learning:**

   0 // 1 2 3 4

9. **Systemic/Relational Rationale:**

   0 // 1 2 3 4

10. **Timing:**

    0 // 1 2 3 4

11. **Warmth and Caring:**

    0 // 1 2 3 4

12. **Changes Desired in Relationships:**

    0 // 1 2 3 4

13. **Task Oriented:**

    0 // 1 2 3 4

14. **Primary Emphasis on Relationship Between Alcohol & Client System:**

    0 // 1 2 3 4

15. **Recovery Directed by Client:**

    0 // 1 2 3 4

16. **Generating Relational Novelty:**

    0 // 1 2 3 4

17. **Assessing General Functioning:**

    0 // 1 2 3 4

18. **Holistic Appreciation:**

    0 // 1 2 3 4

19. **Cumulative Learning Format:**

    0 // 1 2 3 4

20. **Appropriate Expression of Therapist's Feelings:**

    0 // 1 2 3 4

21. **Appropriate Intensification of Experience:**

    0 // 1 2 3 4
<table>
<thead>
<tr>
<th>FACTORS</th>
<th>EXTENSIVENESS</th>
<th>EMULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. COGNITIVE ORIENTATION</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>23. RECENT PAST ORIENTATION</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>24. CLIENTS DEFINE THEIR OWN EXPERIENCE</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>25. CLIENT CAPABILITY AND RESOURCES</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>26. COLLABORATION OR MUTUALITY</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>27. LOW TO MODERATE INTENSITY</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>28. RELATING INTERPERSONAL CHANGE TO THERAPY</td>
<td>0 // 1 2 3 4</td>
<td>0 // 1 2 3 4</td>
</tr>
<tr>
<td>29. FOCUS ON THE THERAPIST AND CLIENT RELATIONSHIP</td>
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Ecological Assessment and Measurement Occasions
ECOLOGICAL ASSESSMENT INSTRUMENTS
AND MEASUREMENT SCHEDULE

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I. ALCOHOL SYSTEM

- MAST: Michigan Alcohol Screening Test  
- IDS-42: Inventory of Drinking Situations  
- ADD: Alcohol Dependence Data Questionnaire  
- SCQ-39: Situational Confidence Questionnaire  
- WSD: Weekly Situations Diary

II. INTRAPERSONAL SYSTEMS

- SILS: Shipley Institute of Living Scale  
- SCL-90-R: Symptom Checklist-Revised  
- BDI: Beck Depression Inventory

III. COUPLES SYSTEM

- EMCS: Edmonds Marriage Conventinality Scale  
- DAS: Dyadic Adjustment Scale  
- AC: Areas of Change Questionnaire

IV. FAMILY SYSTEM

- FDF: Family Demographics Form  
- FS: Family Satisfaction  
- FACES III: Family Adaptability and Cohesion Evaluation Scale (Family Version)  
- FES: Family Environment Scale

Key

1 = Screening  
2 = Pre-Treatment  
3 = Post-Treatment  
4 = Follow-up
APPENDIX H

Summary of Analyses of Instrument Characteristics
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* Significant at alpha .05
** Significant at alpha .01
*** Significant at alpha .001