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Marital Interaction, Drinking Behavior, and Life Adjustment Following Treatment for Alcoholism

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MARITAL INTERACTION, DRINKING BEHAVIOR, AND LIFE
ADJUSTMENT FOLLOWING TREATMENT FOR ALCOHOLISM

By

Patrick E. Shields

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

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LIFE

Patrick E. Shields was born in Minneapolis, Minnesota on February 9, 1948.

He graduated from Hill High School, St. Paul, Minnesota in May, 1966. He graduated magna cum laude from the College of St. Thomas, St. Paul, Minnesota in May, 1970. In September, 1970 he enrolled in the Doctoral Program in Clinical Psychology at Loyola University of Chicago. He received the Master of Arts degree from Loyola in February, 1975. He completed a clerkship in Clinical Psychology at Hennepin County General Hospital, Minneapolis, Minnesota in August 1971. He completed an internship in Clinical Psychology at Presbyterian St. Luke's Medical Center between September, 1973 and September, 1974. He is currently working as a Clinical Psychologist at Chicago's Alcoholic Treatment Center.

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CHAPTER I

INTRODUCTION

There is a growing emphasis on the family in the treatment of alcoholism. This has been the result of the recognition by clinicians in recent years of the complexity and multidetermined nature of the disease. It has also been due to the increasing emphasis on marital and family interaction in the mental health field as a whole. Gurman (1973) points out that the frequency of publications on marital therapy has increased steadily from only five before 1940 to over 100 in the years 1967-1969.

However, as was the case with theoretical formulations concerning the relationship of intrapsychic phenomena to alcoholic symptoms, the complexity of interpersonal theories and constructs has made them difficult to operationalize. Thus clinical work has been based on clinicians' impressions more than on controlled research.

The problem of operationalizing constructs in order to assess marital interaction is a methodological problem. The present study addresses this problem. The purpose of the present study is to further develop a behavioral method of assessing marital interaction and to apply this

method in order to assess the relationship between marital interaction and drinking behavior and other indicators of life adjustment following treatment for alcoholism.

Some of the early theoretical formulations about alcoholism and marriage are examined. Therapeutic work currently being done with the alcoholic and spouse are also looked at. Various methods of assessing marital and family interaction are described, with particular attention to studies which employ methods involving direct observation of interpersonal behavior. The present research is based in part on the work of Gorad (1971) who employed a game interaction measure to examine the interaction of male alcoholics and their wives.

As early as 1954 Jackson pointed out the fact that the stress associated with alcoholism is an important determinant of both the husband's and the wife's behavior. An attempt is made in the present study to measure life stress and to relate this variable to the measures of marital interaction. The Minnesota Multiphasic Personality Inventory (MMPI) has been used extensively in research on alcoholism. This instrument is also used in the present study in order to examine the relationship between behavioral measures of interaction and standard measures of personality.

Since the present research is for the most part methodological in nature, the emphasis is on the technique

employed rather than on substantive findings. Future research may employ the technique developed here to further elucidate the processes of interaction in couples with an alcoholic member.

CHAPTER II

REVIEW OF RELATED LITERATURE

The emphasis on involving the family in treatment of chemically dependent individuals was evident at the September, 1975 meeting of the Alcohol and Drug Problems Association. In a paper presented at this meeting McElfresh (1975) pointed out this need.

Since the progression of chemical dependency includes the lives of other people, their involvement is crucial in this process. Not only is it necessary for the counselor to assess the patient, but the other persons as well. (p. 1)

Interpersonal factors have long been recognized as important in determining response to treatment in alcoholism. Early formulations, based on therapists' impressions tended to oversimplify the nature of interpersonal factors. Edwards, Harvey, and Whitehead (1973) report that research has refuted some of these clinical impressions.

The classical clinical picture propounded between 1937 and 1959, of wives of alcoholics as aggressive, domineering women who married to mother or control a man has been demonstrated to be inaccurate. None of the later experimental studies (1962-1966) have supported it. (p. 128)

These authors, in a review of the literature on the wives of alcoholics, pointed out a progression in the

literature in the way the wives of alcoholics have been viewed. The "disturbed personality" theory held that the wife was an aggressive woman who married an alcoholic to fulfill her need to be dominant. This theory was replaced by the "stress," or "sociological" theory, which held that the wife's personality fluctuated with the stresses involved in marriage to an alcoholic. The "psychosocial" theory describes the wife as a woman who may or may not have been experiencing personality dysfunction prior to her marriage and who may or may not react to the stress of her marriage with personality dysfunction. In other words, wives of alcoholics are not unique.

Theories of Etiology of Alcoholism

The early theoretical formulations stemmed from psychoanalytic approaches to the problem of alcoholism. Futterman (1953) said that clinical impressions demonstrated that wives unconsciously encouraged their husbands to drink. In a study which has been cited often, probably because of the author's humorous style of presentation, Whalen (1953) presented four types of wives of alcoholics. The types, based on the kind of intrapsychic need the wife married the alcoholic to satisfy are: Suffering Susan, Controlling Catherine, Wavering Winifred, and Punitive Polly.

Rossi (1966) and Kogan, Fordyce and Jackson (1963) pointed out that specific personality patterns or traits of the alcoholic, family, or spouse have not been useful in identifying alcoholics. Rossi commented:

With this brief overview of the species of alcoholism it is apparent that the etiology of alcoholism is a rather complex one involving certain aspects of the physiological state of the individual, certain aspects of the psychological state of the individual, and certain aspects of the sociological state of the individual interacting in peculiar ways to produce one or another of the species or types. (p. 5)

Learning theories have also been presented to explain the etiology of alcoholism. Rossi (1966) noted that learning theorists believe the process of behaving like an alcoholic is acquired because alcohol is associated with a rewarding reduction of tension. A criticism of learning theory arises from the difficulty of accounting for the pharmacological addiction. Also, it is plausible that if alcohol abuse is a learned habit, it can be unlearned and the alcoholic can return to controlled drinking. The issue of return to controlled drinking has been a controversial one. Sobell and Sobell (1975) reported that there are 71 references in the literature documenting the feasibility of return to controlled drinking in carefully selected cases. However, widespread acceptance of the validity of these studies is lacking.

More recently, systems theory has been applied to explain alcoholism. Ward and Faillace (1970) described

pathological drinking as ". . . an aspect of a large interactional system which perpetuates itself through circularity, lock-and-key relationships, and various behavioral reinforcers" (p. 690).

As with other theories, the interactional hypothesis is subject to the objection that the alleged etiological factor is a result, not a cause of the alcoholism. Psychoanalysts have said the wife picked the alcoholic because of his weakness while sociologists propose that the wife fell into a dominant role because the alcoholic husband abandoned this role.

It is clear, however, that predictable patterns emerge in alcoholic families. Bailey (1968) has described the following stages that alcoholic families go through: "(a) denial; (b) home remedies such as nagging, rescue operations; (c) disorganization and chaos; (d) realignment of roles" (p. 57). Burton (1966) and Bliss (1968) have provided graphic descriptions of the tragic kind of interaction that is found in alcoholic families.

Literature aimed at the families of alcoholics makes it clear that treatment personnel expect changes in the family interaction. Kellermann (Hazelden Foundation pamphlet, not dated) directs family members to do the following:

A wife, husband or family member needs to take a good look at their own involvement with the alcoholic before any steps should be taken to aid in abstinence

from alcohol. In most instances a change in the family is necessary before a change in the alcoholic may be anticipated. To do nothing is impossible. As a general rule, to do nothing means to give in to the situation, to be run over and exploited and to fight back in quiet, passive, destructive ways. The family always interacts with the alcoholic. The important thing is to learn which interactions are destructive and which might be creative and then have the courage to attempt a creative approach. The change must begin with the non-alcoholic. The alcoholic will not seek help in recovery as long as the alcoholic needs are met within the family. (p. 8)

Family Therapy with Alcoholics

This thrust has led to family therapy with alcoholics as a means to accomplish these goals. Olson (1970), in a review of marital and family therapy, pointed out the influence of system theory on family therapists. The principles of "circular causality" and "homeostasis" within this theory form the basis for focusing study on the couple or family rather than on the individual. Pioneers in the field of family therapy, such as Nathan Ackerman, Murray Bowen, Lyman Wynne, Ivan Boszormenji-Nagy, Don Jackson, Gregory Bateson, Jay Haley, Virginia Satir, Carl Whitaker, and Gerald Zuk have developed different techniques and approaches but share the practice of working with the marital pair or family as a unit. Some of the goals of family therapy set forth in Olson's (1970) review are (a) improved communication, (b) autonomy and individuation, (c) improved empathy. Concepts used to describe family pathology include: (a) double bind,

(b) pseudo-mutuality, (c) undifferentiated family ego mass, and (d) schism and skew. Olson pointed out that his review surveyed 200 articles on marital therapy but this included only 20 actual research studies. This is understandable because of the difficulty of operationalizing the constructs employed. Olson and Rabunsky (1972) reviewed some of the problems encountered in research on the double bind.

In summary, future research on the double bind should include measures of the intensity of the relationship among family members, and it should be sensitive enough to assess changes in the relationship over time. Secondly, it should be focused on the way in which communication patterns in families invalidate the definition of the relationship. The measures must, therefore, be obtained of actual family interaction. (p. 90).

Research done in the area of alcoholism has not attained the level of sophistication suggested by Olson, nor has it sampled actual family interaction in a structured way in most cases.

Cantanzaro, Pisani, Fox, and Kennedy (1973) describe an approach called "familization therapy" (p. 6). This inpatient treatment is not limited to alcohol or drug problems but includes persons with other mental health problems. Family members or even friends are admitted during part of a patient's stay in the treatment facility. A wide age range is represented to duplicate the situation found in families. The authors asserted that:

"familization therapy" as described in this paper appears to significantly help this group of patients reasonably quickly (average stay of about two months). Furthermore, the improvement appears to be a stable one partly because a key family member has been part of the therapy process and provides continued support long after discharge. (p. 6).

The authors have planned a two year follow-up study to document these impressions.

Finlay (1974) reviewed studies which he felt supported the hypothesis that an interactional approach to alcoholism produces better results than the traditional, individual approach. However, the treatment outcome data he presented were not conclusive. Case workers, whether working from an interactional model or an illness model, achieved approximately the same incidence of reduced drinking with their patients. Other studies reviewed used an interactionally based form of intervention for all patients, with the conclusion that their success rates were "good." Such studies do not demonstrate that an interactional approach is superior to an individual approach.

Pattison (1965) described a project in which Public Health nurses were trained for psychotherapeutic home visits with the families of alcoholic patients. Goals with these seven families who were experiencing multiple mental health problems were: "(a) the adaptive handling of the immediate stress so that it does not precipitate family disintegration; (b) the development of novel

responses which will enable the family to handle new role requirements demanded by the crisis, and (c) re-establishment of a stable healthy family equilibrium or life style" (p. 87). The author cautiously concludes that "the therapeutic resolution of the family crisis was noted to some degree in each case" (p. 90). As in the study cited above, this study suggests a treatment approach but does not demonstrate the role family interaction plays in alcoholism treatment.

Burton and Kaplan (1968) compared alcoholic patients' reactions to individual counseling and to group marital counseling. Seventy-six percent of those receiving group marital counseling, as opposed to 57 per cent of those receiving individual counseling, felt they had gained something from the experience. While this is a subjective measure, it is an important one because patients' feelings about treatment help to determine how long they remain in treatment, as well as the eventual outcome.

Burton (1962) and Scott (1959) also described experiences with group marital therapy with couples with an alcoholic member. Cadogan (1973), using a small sample but a good control group, found a greater rate of abstinence from alcohol among alcoholics whose treatment had included marital group therapy. The control group had also agreed to take part in the marital group therapy, but were told there was no room in the group and were put on a waiting

list. After six months the therapy group had nine abstinent members, four doing some drinking, and seven relapsed completely. The control group had two members abstinent, five drinking to some extent, and thirteen who had relapsed. Cadogan (1973) stated that "the difference in drinking between the control and therapy groups was significant at the .05 level (exact probability test), indicating that treatment effectively influenced the development of abstinence" (p. 1190). Questionnaire data indicated that spouses of alcoholics who resumed drinking had reported more problems related to acceptance and trust at the start of therapy than did spouses of alcoholics who remained abstinent. Other factors related to success in marital group therapy were "the stabilizing factors of employment, minimal evidence of organicity, freedom from severely disturbing or psychotic symptoms and early treatment" (p. 1194).

Cadogan makes a point that is interesting in terms of the length of the follow-up. Treatment failure occurred for the most part during the first three months after treatment, and patients involved in follow-up treatment and who were abstinent at three months tended to remain abstinent.

Smith (1969) invited wives of male, alcoholic inpatients to attend a therapeutic group. Considerable pressure was brought to bear on nonattending wives to attend. Fifteen wives took part in the group. The group met for

90 minutes once a week for approximately six months. There were generally about seven of the wives present at each meeting. At a six-month follow-up, 11 of the 15 men whose wives had attended the group were abstinent, while only one of the eight men whose wives had refused to attend were abstinent. A similar pattern was found at a 16-month follow-up. Treatment outcome was related separately to social stability and to wife's attendance at the group. The author made it clear that his design did not permit conclusions about the effectiveness of the group process. "One can only assume at this stage that attending wives may have more affection and concern or other positive attitudes towards their husbands, and the presence of these qualities in the marriage improves treatment outcome" (Smith, 1969, p. 1041). Testing such an assumption empirically is certainly a necessary step, and it is in part the purpose of the present research to examine the relationship of certain wife characteristics to various measures of the husband's drinking behavior after treatment.

Esser (1970) stated that alcoholism is exacerbated by family interaction and that treatment is less effective if significant family members are not involved in therapy. Jackson (1962) pointed out the following four early studies of alcoholic marriages: (a) Bullock and Mudd (1959) observed that both spouses tend to bring personality problems to

the marriage and these problems become intensified during marriage. The failure of each spouse to gratify the over-determined needs of the other may be seen as the major factor in the marital conflict; (b) Gliedman, Nash and Webb (1956), and (c) Gliedman, Rosenthal, Frank and Nash (1956), observed that wives of male alcoholics in treatment were better organized than their husbands. The wives were dissatisfied with themselves and their husbands generally, while the men when sober, were satisfied with their wives. (d) Strayer (1959) also addressed the topic of the same therapist seeing both members of an alcoholic couple.

Assessing Marital Interaction

Family therapy with alcoholics developed through innovative clinical practice. The empirical support for this technique has developed more slowly. Early studies were not based on structured observation of couples, but on psychological tests and other indirect measures of interaction.

Mowrer (1940) described some of the psychocultural factors influencing the alcoholic's behavior. Mitchell (1959) described ways that spouses in couples where the male is alcoholic perceive each other. Mitchell's impression was that power, control, and dominance appeared to be the problem areas of crucial significance. Both spouses viewed the wife as the most dominant figure in the marriage.

Also, both spouses seemed unclear about what they expected from each other.

Ballard (1959) using MMPI scores of alcoholics and their wives concluded that wives of alcoholics were better adjusted than wives in nonalcoholic but conflicted marriages. Also, Ballard found that in alcoholic marriages the wife was less disturbed than the husband, but in non-alcoholic conflicted marriages, the husband was less disturbed than his wife.

More recent investigations have combined test data and interpersonal perceptions. Drewery (1969) has proposed a method involving a systematic analysis of patterns of mutual perceptions within a dyadic relationship. The Edwards Personal Preference Schedule (Edwards, 1959) was used to measure how each member of a marital pair perceives himself, how each member perceives his partner, and how each member expects to be perceived by his partner. Another method taps a factor which Gorad, McCourt, and Cobb (1971) have labeled "personal style" (p. 666). Rae and Forbes (1966) found that wives who had a low score on scale 4 (a scale suggesting nonconformity and impulsivity) of the MMPI had supportive and realistic attitudes towards their alcoholic husbands while wives with higher scores on scale 4 displayed negative attitudes toward their spouse. Rae (1972) and Rae and Drewery (1972) have shown that individuals with high scale 4 scores have a poor prognosis for

treatment of alcoholism when compared to individuals with low scale 4 scores. Also, a high scale 4 score for a wife was associated with a poor prognosis for an alcoholic husband. Interpretations of these findings take into account the descriptions of individuals with high scale 4 scores as impulsive, socially extroverted, nonconformist individuals who fail to modify their behavior even when such a change would result in a reduction of discomfort for them. Such individuals might be expected to engage in interpersonal behavior that is antagonistic to, rather than consistent with, the goals of a therapeutic program.

The studies cited above do make attempts to assess the effects of marital interaction. However, the use of interpersonal perceptions is an indirect means of assessing interaction. Olson (1969) and Suran (1970) point out a number of studies which demonstrate that marital partners' descriptions of themselves and each other differ from behavioral measures of their interaction.

Behavioral Measures of Interaction

Research measuring family interaction directly has generally been done with families containing a schizophrenic member and suitable control families. Riskin and Faunce (1972) present a lengthy review of 286 research articles on quantifiable family interaction research. These authors categorize and evaluate these studies and

present a description of methodological issues that influence the outcome of such studies. Some of these issues are: purposes, setting, tasks generating interactional data, the naturalistic-experimental continuum, expectations of observer and observed, socioeconomic status, the unit of analysis (i.e., act or speech), mode of communication (verbal only or verbal plus tonal), analyzing the data (what categories are selected for analysis), controls, vocabulary (interactional terms), use of data from small-group studies, independent and dependent variables (these are relevant to a linear causality model, but may not fit the family as a system, or circular causality model), group comparability, reliability and validity and significance (as opposed to trivial research), coding manuals and replication studies, the observer's perspective, and computer technology.

Riskin and Faunce (1972) reported agreement about the importance of the following variables in interaction research: humor, agreement/disagreement, support--especially positive affect, acknowledgement-commitment-affirmation, and clarity of communication.

Jacob (1975) reviewed studies of family interaction in disturbed and normal families. He pointed out that direct observation procedures are superior to studies which evaluate self-report data because the former rest on fewer assumptions and inferences. Jacob listed the following

six standards for judging the methodological adequacy of direct observation studies: (a) experimental and control families should be comparable on demographic variables, (b) raters should be ignorant of the family's diagnostic status, (c) considerable agreement should exist among independent judges as to the presence and frequency of the behavior to be rated, (d) data including male and female children should be analyzed separately, (e) experimental and control families should be observed and assessed in the same experimental setting, and (f) experimental and control families should be comparable on hospital or treatment status.

Strodtbeck (1951) presented a technique of measuring interaction that has been used by a good number of researchers over the years. His procedure called "the revealed differences technique," involves a decision-making process. In an early application, Strodtbeck asked mathematics students to recommend jointly the best of three possible solutions to particular problems. While talking they were asked to record privately the alternative they personally favored. Later, Strodtbeck asked married couples to pick three reference families with whom they were well acquainted. Each spouse was separately asked to answer a series of questions about these families such as: "which family had the happiest children?" and "which family is the most religious?"

Then the couple was asked to talk over their choices, reconcile their differences, and indicate a final "best choice" from the standpoint of their family. The balance of power in the couples was determined from a count of how many times each spouse convinced the other to adopt his or her choice. Navaho, Texan, and Mormon cultural groups were selected to determine whether the technique would pick up observed differences in the power balance between husband and wife in these cultures. Strodtbeck concluded that the technique revealed the balance of power in a couple, and also produced a sample of interaction in which modes and techniques of influence can be studied by methods of content and process analysis.

Farina (1960), Barger (1963), and Suran (1970) have reported further development and applications of this technique.

Ferreira and Winter (1974) have used a related measure termed "spontaneous agreement." Subjects are given material and asked to make judgments about it. The degree of agreement before discussion is termed "spontaneous agreement." The researchers found that scores were higher (more agreement) for couples who had been married longer than for recently married couples. In another study, Winter, Ferreira, and Bowers (1973) compared the interaction in married and unrelated couples. They used the following variables: spontaneous

agreement, decision time, choice fulfillment, silence, interruptions, explicit information, and politeness (a global rating on a scale from 1 to 4). The results showed that in married couples there was greater spontaneous agreement prior to discussion, less politeness, more intrusive interruptions, and a lesser exchange of explicit information than in unrelated couples.

Lennard and Bernstein (1969) present extensive studies of family interaction. A useful distinction that they make is the categorization of disagreements according to how explicit they are. An explicit disagreement is defined as an overt denial of the validity of a previous statement or contradiction of a previous statement's content. More circuitous ways in which disagreements can be made manifest are negative evaluation of a previous statement's content or substance, qualification of the content or substance of a previous statement's content or substance as unnecessary or irrelevant, and sarcasm referring to a previous statement. Similar distinctions in explicitness are made for "affirmation of self" statements ranging from the direct "I am not lazy," to the sarcastic "Mike is really good at painting; so good that I had to hire Bill to finish the job."

Schuham (1970) had families discuss problem situations. The transcripts of interaction were scored according to (a) acts of support; (b) contributions, and

(c) acts of nonsupport. The interrater reliability for these categories ranged from .53 to .82 with a mean of .63; all were significant at the .01 level. These ratings were used to draw conclusions about the power relations in normal families as compared to families with a prepsychotic child.

Smith (1971) used a notepassing task to assess family interaction. He concluded that notepassing "cannot be substituted for the representation of role structure obtained from verbal discussion tasks" (p. 182).

O'Connor and Stachowiak (1971) used the following measures of family interaction: (a) adaptation or changes in opinion following discussion; (b) stability of interaction patterns over consecutive discussion periods; (c) productivity, or speeches per unit time; (d) specificity, or whether a speaker directed his speech to a specific family member; (e) overt power, or number of times a member convinced another to change their view; (f) covert power, or the number of times a person was spoken to; (g) conflict score, which was the number of interruptions; (h) cohesion, when the person interrupting was responded to; (i) emotionality, such as laughing, hugging, use of feeling words. The results showed significant differences between low adjusted and high adjusted families on a number of these variables.

As mentioned earlier, Olson (1969) and others have shown that married couples' subjective accounts of their interaction differs from behavioral measures of such interaction. A series of studies by Olson has focused mainly on the variable of family power. Olson (1972) concluded that "individuals are very poor at reporting 'objective reality' regarding family power dynamics. What individuals do report is their 'subjective reality,' which is not a very accurate representation of what is objectively there" (pp. 145-6). Olson and Rabunsky (1972) found that individuals are not able to report who makes decisions in their family. Olson (1969) hypothesized several reasons for the discrepancies in power estimates. Empathy was found to be a necessary but not sufficient condition for congruence. Also, husbands tended to overestimate their actual power while wives underestimated their actual power in cases where there were discrepancies between subjective and behavioral measures. Such findings must be considered when one attempts to explain the early impressions of clinicians that the wife of the alcoholic was always dominant.

Another method of quantifying marital interaction in a couple with an alcoholic spouse was presented by Hersen, Miller, and Eisler (1973). This study employed videotape equipment to record discussions between

alcoholics and their wives. The results indicated that wives tended to look at their alcoholic husbands more during discussion of his drinking problem than when discussing other topics. The husbands tended to look away when discussing alcohol related problems. This use of videotape should serve to extend knowledge of husband-wife interaction in future research.

Game Interaction Measures

Several interaction measures based on competitive game behavior have been developed to measure marital power, dominance and conflict. The Ravich Interpersonal Game Test (Ravich, 1970) utilizes a miniature locomotive train to represent a competitive situation for a couple. Hottel and Kahn (1974) have used the Prisoner's Dilemma game to measure such things as cooperation, imitation, and strategy. Epstein and Santa-Barbra (1975) compared the Prisoner's Dilemma game behavior to interpersonal perceptions. They found that couples who cooperated in the game perceived themselves as cooperative. "Game destructive" couples perceived each other as competitive and expressed exploitative and defensive intentions.

Olson and Straus (1972) describe an interaction technique called SINFAM. This is a game-like task yielding reliably coded variable scores for assertiveness, effective power, support, creativity, problem

solving ability, and activity level. The technique may be used in family or couple diagnosis as well as for research purposes.

Gorad (1971) has used an interaction game with alcoholics and their wives. The theoretical framework of this approach is presented in an article by Gorad, McCourt, and Cobb (1971). In the interaction game, each spouse picks one of three cards, labelled Win, Share, or Secret Win. If both pick Share, both earn equal, moderate amounts of money. If one person picks Win or Secret Win and the other picks Share, the former earns a large amount of money and the spouse loses money. If both pick Win or Secret Win, both earn nothing. The subjects can not see each other's choices, but can see the cumulative amount of money won by the couple at all times. The subjects are told that the experimenter can substitute Secret Win, so the partner never knows if their partner has played this. Subjects are given 50 trials during the game. Gorad theorizes that drunkenness is a way of not being responsible for one's acts. It gives the drunken person unusual interpersonal control.

In the study utilizing this interaction approach, Gorad tested 20 alcoholic men and their wives, with 20 nonalcoholic men and their wives as controls. The husbands averaged age 38, the wives 36. They had been married an average of 13 years, had four children, were

Roman Catholic, and had a modal income between \$4,000 and \$6,000 per year.

Results of Gorad's study were (a) the alcoholics used a style of communication characterized by responsibility avoidance when interacting with the wife; the difference was significant between experimental and control males; (b) the wives of the alcoholics used a more direct, responsibility-accepting style of communication than the husbands when interacting with them; (c) interaction between the alcoholics and their wives was marked by inability to function as a unit for mutual benefit and an escalation of symmetry pattern (rigidly responding to each other in a similar fashion). The alcoholics were actually slightly dominant over their wives, but the wives sometimes appeared to be dominant because of their responsibility-accepting pattern of interacting. The alcoholic couples entered the interaction with the intention of gaining the "one up" position. Risk taking was missing. Gorad proposed that the lack of belief in change helps perpetuate the chronic battle over control.

Gorad's study is related directly to the present study because of the focus on married couples with an alcoholic member and also because of the behavioral method of assessing interaction. However, the present study uses variable ratings based on categories of verbal statements rather than nonverbal game scores as the measure of

interaction. There are advantages to both methods. The nonverbal games (or combination verbal-nonverbal) games are less subject to distortion because of the subjects responding in a socially desirable fashion. Researchers report that subjects become so engrossed in the game that they forget it is an artificial situation. Thus the procedure is capturing behavior that is "real" in the sense that the subjects are not disguising their typical patterns of interacting. However, one drawback of the game procedures is that the behavior involved is not necessarily typical of marital interaction exhibited by the couple every day, at least on an overt level. The interaction procedure employed in the present research involved verbal interaction. The Inventory of Marital Conflicts developed by Olson and Ryder (1970) is described in chapter III.

The MMPI and Alcoholics

A number of the studies cited above used the MMPI to draw conclusions about the characteristics of alcoholics (Ballard, 1959; Rae & Forbes, 1966; Rae, 1972; Rae & Drewery, 1972). Apfeldorf (1974) pointed out different uses of the MMPI in research on alcoholism, and encouraged researchers to search for traits characteristic of alcoholics. A note of caution on use of the MMPI during treatment was given by Rohan, Tatro, and Rotman (1969).

These researchers administered the MMPI to 58 male alcoholics who were in treatment a mean of 72 days. The MMPI was administered to these men within a week of admission and within a week of discharge. It was found that significant drops in scale scores were common over this period of time. This points out the need to administer the MMPI to subjects at the same time during treatment if results are to be comparable.

Life-Stress and Alcoholism

As early as 1954 Jackson pointed out that the stress associated with alcoholism is an important determinant of both husband's and wife's behavior. Jackson (1962) states:

The writer has also raised questions in an earlier report (1954) about the ways in which the nature, extent, and duration of the stressful situation contribute to the extent and nature of the wife's disturbance. The behavior of both the alcoholic and his wife is similar in many ways to that of people who are involved in situations characterized by marked and rapid role changes, by social disapproval, by lack of clear-cut definitions for appropriate behavior, by social isolation, by situational ambiguity, and by recurrent auxiliary crises--all of which are ingredients of the family alcoholism crisis. (p. 481)

Holmes and Rahe (1967) presented a means of quantifying stress stemming from life changes. Striking evidence has been presented that high levels of stress are associated with physical disease and psychiatric disorder. Dohrenwend and Dohrenwend (1974) have edited a volume dealing with research on life stress in a variety of

situations and populations. In the present study, the Social Readjustment Rating Scale (Holmes & Rahe, 1967) is employed to control for life stress as a factor influencing treatment outcome.

Design and Hypotheses

Alcoholic husbands and their wives were administered the Inventory of Marital Conflicts, the MMPI, the Social Readjustment Rating Scale, and personal history form shortly after the husband's admission to an inpatient treatment center. Prognostic predictions by patient, spouse, and counselor were made at the time of discharge. Follow-up information was collected three months after discharge. The major variables of interest in this study were conflict indicators derived from the Inventory of Marital Conflicts.

Hypotheses tested in the present study are:

1. The quality of each couple's interaction as assessed by the Inventory of Marital Conflicts is related to drinking behavior following treatment for the alcoholic. More specifically, it is predicted that in couples where the interaction is marked by conflict and lack of mutual support, the alcoholic husband engages in post treatment drinking more often than in couples where the interaction is less conflictual and more mutually supportive. This hypothesis is based on the studies which assumed that this hypothesis is true, but have not tested it empirically

(McElfresh, 1975; Cantanzaro, Pisani, Fox, & Kennedy, 1973; Finlay, 1974; Pattison, 1965, and Smith, 1969).

2. The Inventory of Marital Conflicts Win Score (the number of times a subject persuades his/her partner to change his/her mind on choices made independently) is the same for husbands and wives (no significant difference). This hypothesis is based on the work of Gorad (1971) who showed that male alcoholics and their spouses made equal attempts to win a game with their partner.

3. Alcoholics use less direct means of persuading their partner than their partner uses. Rather than state and restate their choice and supporting reasons openly, alcoholics read from and quote the stories, ask rhetorical questions, and add content to the stories to a greater degree than their partner does. This hypothesis is also based on the work of Gorad (1971) who found that while alcoholics made equal attempts to win a game with their spouse, the alcoholics made more attempts to hide their win choices and wives accepted responsibility for choosing the win option.

4. In couples marked by less open communication (fewer direct statements or urging of choice), the husband engages in post treatment drinking more often than in couples who use a more direct style of communication. This hypothesis is related to Hypothesis 3, and based on the work of Gorad (1971). Gorad felt that the alcoholic's

tendency to not take responsibility for his actions is the factor that leads to addiction to alcohol. From this it would follow that in couples who find it difficult to state their choices openly the husbands would have greater difficulty remaining sober than in couples who are more open.

In addition, relationships will be examined between the conflict indicators and MMPI scores and also life stress scores to determine what other variables the conflict indicators might be related to.

CHAPTER III

METHOD

Subjects

Subjects were 29 male alcoholic inpatients at Chicago's Alcoholic Treatment Center and their spouses.

Chicago's Alcoholic Treatment Center is an inpatient facility for the treatment of patients who request treatment for alcoholism. The Center operates under the auspices of Chicago's Commission for Rehabilitation of Persons and is supported by the City of Chicago.

The treatment program at the Center consists of a milieu therapy approach utilizing a democratic patient government and an emphasis on group therapy. The patient government involves the residents in the process of making responsible decisions about passes (from the hospital), discharges, and other recommendations. A daily ward meeting is attended by all patients. This meeting is the focus of the patient government process and also is a forum for discussion of issues concerning the milieu. Elections are held regularly for a secretary and co-secretary who conduct the ward meeting. Elections are also held for chairman of each floor who coordinate

activities on their respective floors. Other patient jobs include sports coordinator and various work details.

Therapy groups are closed groups; a group is formed and sessions begin after 12 patients have been admitted (this usually takes about a week). No new members enter the group after it begins. The member of the mental health staff (social worker, psychologist) who is a patient's group therapist also serves as that patient's individual counselor and meets with the patient and his spouse or family to plan treatment and make discharge arrangements. The groups meet for 1-1/2 hours, four times a week. After approximately 20 sessions, the groups are terminated. At that time, patients are discharged and the group therapist begins intake interviews to form a new group.

Other aspects of treatment include medical and nursing services, a complete physical and laboratory examination upon admission, psychiatrist's diagnostic evaluation, psychological testing, vocational counseling, educational tutoring, Alcoholics Anonymous meetings, religious activities, and daily calisthenics. New patients attend orientation meetings. In addition to the regular therapy groups, there are specialized therapy groups for married patients and other demographically defined groups.

Patients at the Center are required to attend the following activities: (a) all orientation meetings;

(b) daily ward meetings; (c) group therapy sessions, (d) educational meetings; (e) psychological testing sessions; (f) one social security meeting; (g) daily calisthenics; (h) election of chairman, held once a week; (i) work details. Patients may attend the following activities:

(a) Alcoholics Anonymous meetings; (b) American Legion Auxiliary Program (diversional activity); (c) Board of Education Program (tutoring); (d) recreational and craft activities; (e) religious discussions; (f) single men's group; (g) vocational counseling sessions.

Patients are eligible for day-time passes from the Center two weeks after admission. Their request for a pass is discussed in their group therapy session and then at the ward meeting where it is voted on by patients.

All patients who were married or living common-law marriages admitted to the Center between March 1 and August 31, 1975 were approached by the experimenter and asked to participate in the research project.

The first 24 male subjects were approached during the first three weeks of treatment and began participation in the research during the first four weeks of treatment. This group served as a pilot study.

The main group of 29 male subjects was approached during the first week of treatment and began participation in the project during the first two weeks of treatment. They were the subjects of the present study.

In total, 100 male patients were asked to take part in the project. Patients who were separated from their spouses for periods of 3 months or less but who continued to see their spouse and had plans to re-unite after the patient's discharge were included in the study.

Of the 100 patients approached, many were excluded for various reasons. Nine married men who had not learned how to read were not asked to take part for this reason. Four married men did not take part because they were unable to read due to lack of reading glasses. Seven married men's wives agreed to come for an appointment but either cancelled their appointment or did not show up. Sixteen married men and/or wives refused to take part in the study. Ten married men left treatment before an appointment could be arranged. One couple got into an argument during the project and refused to complete the project. Thus, a total of 47 male patients who were asked to take part did not participate in the study.

The 53 male patients who took part in the project as pilot or actual subjects were 53 per cent of the total number of married patients asked to take part in the study.

Instruments

The Inventory of Marital Conflicts (see Appendix A) developed by Olson and Ryder (1970) is based on the revealed differences technique which was first used by

strodbeck (1951). In the Inventory of Marital Conflicts (this will be referred to as the Inventory) each member of a couple is given a set of case descriptions of couples having marital conflicts. They are asked to decide (without conferring with each other) which spouse is primarily responsible for the conflict. Following this the couple is brought together and asked to come to a mutual decision about who is responsible for the conflict and how the conflict should be resolved. This discussion is tape-recorded and rated on a number of variables which are used to characterize marital interaction. Olson and Ryder's rating system consists of 35 codes representing three main categories: process statements, assertive statements, and positive and negative support statements. Olson and Ryder (1970) reported that the interrater reliability of these codes averaged .85 to .95, and the split half reliability was .75. Two adaptations of the Inventory were made for the present study. First only 15 of Olson and Ryder's codes were selected for use in this study. Codes were selected which appeared to best represent marital conflict. Secondly, two additional codes, interrupts, and speaks last were used. These codes were taken from work reported by Farina (1960) and Barger (1963). The 17 codes used in this study were scored separately for husbands and wives, giving a total of 34 scores for each couple. The analysis for these codes is described in Chapter IV.

The following is an example (paraphrased) of one of the case descriptions that couples read when taking the Inventory. John provides a modest but adequate income for himself and his wife Jean. Jean has been excited about their planned vacation. John has been a stereo enthusiast and wants to improve his stereo by buying new speakers. They do not have enough money for both the speakers and the vacation. John says that he is the breadwinner in the family and deserves a luxury. He insists that he should make the decision.

Both husband and wife read the case description paraphrased above. Twelve of the 18 case descriptions in the Inventory are worded one way in the copy given to the husband and another way in the copy given to the wife. Because of this the husbands (subjects in this study) are more likely to say that the wife (in the case description) is responsible for the conflict while the wives are more likely to say that the husband is at fault. The Inventory was constructed this way to set up a disagreement between the husband and wife and then observe how the couple resolves the disagreement.

In addition to the ratings, two other scores are obtained from the Inventory. The Win Score is the number of times each spouse convinces the partner to change his/her mind about who is responsible for the conflict. The Deadlock Score is the number of times the couple is not able

to come to an agreement about who is responsible for the conflict.

The Minnesota Multiphasic Personality Inventory developed by Hathaway and McKinley (1943) is a widely used and heavily researched measure of personality traits. The standard administration and scoring described in the manual were used in the present study.

The Alcoholism Life Assessment Questionnaire (see Appendix B) consists of items adapted from instruments used by Foster, Horn, and Wanberg (1972), Kammeier (1974), and Meshboum (1974). These items cover drinking behavior, other drug abuse, and a number of life adjustment variables including work adjustment, family adjustment, social adjustment, medical and police problems, Alcoholics Anonymous attendance, and additional treatment. Pattison (1966) discussed the abstinence criteria as a meaningful measure of life adjustment. Although it appears that it is necessary to look at other indicators of life adjustment, there is justification for considering abstinence a valid measure of life adjustment for the alcoholic.

The husbands' and wives' reports of drinking by the husband were recorded on items 1, 3, 4 and 5 of the Alcoholism Life Assessment Questionnaire. For purposes of this study the responses to each of these items were divided into two groups. For items 1 and 3, the responses have not drunk at all, occasional light drinking, and light

or moderate drinking one or two days a week, were grouped together and called No or light drinking. The four remaining responses to items 1 and 3 were called Heavy drinking (see Table 5 and Appendix B). For items 4 and 5 which detail periods of abstinence, the responses 0 to 3 weeks, and 3 to 5 weeks were grouped together and contrasted with responses 6 to 8 weeks, 9 to 11 weeks, and 12 to 14 weeks (see Table 5 and Appendix B). While it would be desirable to contrast subjects who were totally abstinent during the entire three month follow-up period with subjects who drank during this time, this would create an imbalance, with most subjects in the second group. Therefore, the present method of handling data from the Alcoholism Life Assessment Questionnaire was adopted.

When there was a discrepancy between husband's and wife's report of husband's drinking, the report indicating more drinking was chosen. This was done because of the alcoholic's tendency to deny drinking.

The Social Readjustment Rating Scale (Holmes & Rahe, 1967) (see Appendix C) consists of a list of stressful life events ordered from the most stressful, "death of a spouse," to less debilitating events, such as "change in eating habits," and "minor violations of the law." This scale (also referred to as the life stress scale) was developed through research into the effects of stress on physical

health. It has been found that individuals whose total score for a two year period exceeds a score of 300 have a 80 per cent chance of physical illness within the year. Scores for the Social Readjustment Rating Scale were obtained by adding up the total points circled (items carry different weights, depending on the severity of the stress an items produces.

The tape recorder used was a Wollensak T-1550 twin track recorder. Only one track was used for this research. Scotch brand magnetic tape, one quarter inch by 1800 feet was used.

Procedure

The experimenter introduced himself to each potential subject and said that he was working with married couples at the Center in an attempt to learn more about alcoholism and the family. It was explained that the experimenter would talk with the couple to get to know them and then ask them to fill out questionnaires, a personality inventory, and take part in a discussion of some stories the experimenter would provide, and that this discussion would be tape recorded. It was explained that the experimenter would talk to each spouse at the time of the patient's discharge to ask their opinion about how the patient had done in treatment. Also, three months after the patient's discharge the experimenter would talk to each spouse on the phone to find out the patient's condition at that time.

Each patient was asked for his home phone number. Spouses of those patients who provided their phone number were called and asked to come to the Center to take part in the project. If the potential subject had no phone, he was asked to tell his wife to call the experimenter (if she could be contacted).

Each couple was seen together to get history data including age, years married, age at marriage, previous marriages, number of children and their ages, education, employment, parents' ages and city of residence, and number of brothers and sisters and their ages.

Following the history interview, each spouse filled out the Social Readjustment Rating Scale. Husband and wife sat across from each other at a desk. Next the couple was given instructions for the MMPI and began working on it. After completing several items, the patient took the MMPI to another room and continued working on it while the experimenter asked the spouse the questions on the Alcoholic Life Adjustment Questionnaire and recorded the responses. When this was completed, the couple was brought together again to complete the Inventory of Marital Conflicts. Husband and wife sat at a desk across from each other. The male sat in front of the desk, but each sat in the same kind of chair. This seating arrangement might be interpreted as putting the male in a position of more control. This was consistent with the Inventory directions

which direct the male to record answers which the couple jointly agrees on. Thus, while the effect of these factors did not appear to be great, it might be said that the procedure and instrument slightly favored the male.

The experimenter read the instructions (appendix A) to the couple while they read a copy of these instructions. It was explained that the Inventory was not developed at the Center, but at another facility. The couple was then given the individual answer sheets and the stories. An 8-inch high barrier, consisting of two boxes for the magnetic tape, was placed on the desk between the couple so that they could not see each other's responses. The individual part of the Inventory usually took 20 to 30 minutes for the couple to complete. Next the experimenter read the instructions for the joint part of the Inventory while each spouse looked at a copy of these instructions. The experimenter then pointed to the answer sheets and repeated that there were two things to check off for each story--part A and part B. The couple was again urged to come to a joint agreement before the husband marked down their answer. They were also urged to speak clearly so that the tape recorder would pick up their voice.

The experimenter turned on the tape recorder and left the room. Before closing the door, he listened to the discussion of the first story to make sure the couple

was discussing both part A and part B, and reminded them to do so if they were not.

As stated in the instructions, the experimenter opened the door and gave a 5-minute warning after 25 minutes. The door was again opened after 30 minutes, but 3 more minutes were allowed if the couple was not finished. Some of the couples finished the discussion before the time was up.

After the couple had completed the Inventory, the experimenter played back a 30-second segment of their discussion, randomly selected from among the last few stories. Most subjects commented that their own voice sounded different, but that their spouse sounded the way they always do.

Following this the couple was asked to respond to the post Inventory questions (see appendix A) which ask how they experienced the procedure. A short discussion of the procedure followed. Most couples said they found the procedure interesting and helpful.

Finally, the Alcoholic Life Adjustment Questionnaire was completed for the alcoholic patient. The experimenter marked down the patient's answers to the questions. The patient's spouse finished up the MMPI in a separate room at this time. The patient completed the MMPI after the spouse left.

Two days before the patient's discharge the experimenter asked the patient to give the information on the Treatment Record (see appendix D) and the Discharge Rating (see appendix E). The experimenter recorded each patient's responses. Each patient's spouse was called on the telephone at that time and asked to respond to the Discharge Rating questions. The experimenter recorded the spouse's responses. Also, the patient's counselor was given a Discharge Rating and asked to record his responses to this.

Three months after the patient's discharge from the Center, the experimenter called the patient and spouse on the telephone. Husband and wife were each asked to respond to the items of the Alcoholism Life Assessment Questionnaire. After this was completed, the results of the Social Readjustment Rating Scale, the Inventory Win Score, and the MMPI were given to husband and wife separately. If the former patient had returned to drinking, he was urged to seek further treatment by calling the Center during the hours the admission office is open, and also by going to Alcoholics Anonymous meetings.

Data preparation. The procedure and rationale for handling the data from the Inventory interviews are presented here. The results of these analyses are presented in Chapter IV, RESULTS. Three undergraduate students who were naive as to the hypotheses of the study were trained to use Olson and Ryder's (1970) ratings for the Inventory.

The experimenter spent 10 hours with the students listening to recordings from the pilot study until it appeared that consistent judgments were being made about which categories to assign statements to. The students then made independent ratings of five of the pilot tapes and product-moment correlation coefficients were computed to determine if similar judgments were being made by all three raters. The two students who showed good agreement with each other then rated the 29 tapes in the main part of the study. At this point a decision was made concerning the manner of combining ratings to make conflict indicators. I considered selecting ratings based on their face value--ratings that appeared to best represent marital conflict. However, I decided to select ratings based on the results of a factor analysis for several reasons. Factor analysis is an efficient method of handling large amounts of data. It is a more objective method for combining data than the subjective method based only on face validity. Also, while the factor analysis reduces the number of analyses that would be required if each rating were looked at separately, it increases the possibility of deriving meaning from small and perhaps trivial bits of behavior. There is one problem with the use of the factor analysis in this study. Ideally, a larger sample size should be utilized in order to satisfy the assumptions upon which the method of factor analysis

is based. However, the problems caused by failure to meet these assumptions were judged to be less important than the reduction in meaning and efficiency that would obtain through not using the factor analysis.

CHAPTER IV

RESULTS

Introduction to Results

Descriptive data for the subjects who participated in the research are presented first. These are followed by the presentation of the interrater reliability coefficients and the factor analysis for the Inventory of Marital Conflict variables. Next, the derivation of factor scores and description of the resulting factors are presented. The major part of this chapter deals with the relationship between the factors (conflict indicators) and reports of drinking behavior during the three months following discharge. This portion of the analysis is related to Hypothesis 1. The relationship between the factors and other life-adjustment indicators is also presented. The data are examined to find possible relationships between the factors and the descriptive variables. Finally, the results for Hypotheses 2, 3, and 4 are presented.

Descriptive Data for Subjects

The subjects of this study were 29 alcoholic male inpatients at Chicago's Alcoholic Treatment Center and their spouses. The descriptive data for these subjects

are grouped according to historical variables, descriptive categories, variables derived from measures, and treatment experiences (see Appendix F, Tables 17-A, 18-A, and 19-A).

Historical Variables

The average age for husbands was 40, and the average age for wives was 39. The couples were married an average of 13.5 years and had an average of three children. The husbands averaged 10.8 years of education and the wives 11.4 years. The couples had experienced an average of 3.5 months of marital separation at some time prior to the current admission (Table 17-A).

Descriptive Categories

Four of the 29 couples were married by common-law. About half the men were employed at the time of admission. Fifty-five per cent of the wives were employed at the time of the husband's admission. Sixty-nine per cent of the men were laborers, 24 per cent were tradesmen and the remaining 6 per cent were professional or owned their own business. Seventy-six per cent of the wives had worked as laborers, 10 per cent in trades, and 14 per cent were never employed. Thirty-five per cent of the couples owned their own home, 48 per cent rented, and 17 per cent lived with family. Forty-one per cent of the men were born in Illinois, and 59 per cent in other states. Slightly more than half the men had lost a parent before age 15 due to death or separation.

The couples were 69 per cent black and 31 per cent white, with no interracial couples. Thirty-six per cent of the men had a parent, brother, or sister who was alcoholic while 64 per cent reported no alcoholics among these relatives. About a third of the men had been married previously. About half the men had been treated in in-patient alcoholism programs previously (Table 18-A).

Variables Derived From Measures

Life stress, as measured by the Social Readjustment Rating Scale, was quite high, especially for the husbands. The Social Readjustment Rating Scale norms (Appendix C) indicate that subjects with scores exceeding 300 have an 80 per cent chance of experiencing a major illness during the year in which the ratings are obtained. The husband's mean score was 331.5, and the wives' 252.8. (See Appendix F, Table 17-A for the descriptive statistics for this variable as well as those described below.) Husbands and wives had quite similar scores for the Inventory of Marital Conflict Win Scores. The husbands averaged 3.8 Wins, and the wives 4.6 Wins. These scores are discussed further in the section in which results for Hypothesis 2 are presented. Prognosis for the husband remaining sober during the three months following discharge was rated by husband, spouse, and counselor at the time of discharge. Sixty-six per cent of the husbands rated their prognosis as Very Good,

59 per cent of the wives rated their husband's prognosis as Very Good, but only 10 per cent of the counselors rated the husband's prognosis as Very Good. It is clear that the husbands were the most optimistic, the counselors were the least optimistic, and the wives were in between (see Appendix F, Table 18-A).

Treatment Experiences

The inpatient treatment program was described in Chapter III. The amount of treatment the subjects received varied because subjects elected to leave inpatient treatment at different points during treatment. Status as inpatients was the one factor that all husbands shared while in treatment. Relationships between treatment variables and the main variables of interest in this study, the factor scores (conflict indicators), are presented in a later section. The men attended an average of 15.3 group therapy sessions, 1.0 Married Men's Group session, 0.5 Re-Admission Group session, 1.6 Individual Counseling sessions, 0.2 Conjoint Marital Therapy session, and 17.3 Alcoholics Anonymous meetings. The men's stay in the Center ranged from 16 to 49 days, with a mean of 34.1 days. During the three months following discharge, the men returned to the Center for Outpatient Therapy and Alcoholics Anonymous meetings an average of 3.2 times. The men reported that during the three months following discharge

they attended an average of six Alcoholics Anonymous meetings (at the Center or elsewhere), but the wives reported that the men attended an average of only four Alcoholics Anonymous meetings during this time. Only three of the wives attended Alanon meetings during the three months following their husband's discharge. None of the men received any inpatient treatment for alcoholism during the three months following discharge (see Appendix F, Table 19-A for a summary of Treatment Experiences).

Inventory of Marital Conflicts: Reliability and Factor Analysis

The main variables of interest in this study were the conflict indicators and the reports of drinking behavior after discharge. This and the following section deal with the derivation of the conflict indicators.

The Inventory of Marital Conflicts was administered to all subject couples as described in Chapter III. Interrater reliabilities were computed for all interview variables from ratings made by three raters for five Inventory of Marital Conflicts interviews collected in the pilot study. These five interviews had not been used in the raters' training sessions. One of the raters disagreed considerably with the other two, with many interrater correlations below .70. The other two raters achieved satisfactory interrater agreement with all but 8 of the 34 interrater correlations over .80. The

ratings of the interviews used in the analyses presented here were done by the two raters who achieved satisfactory interrater reliability. Table 1 shows the product-moment correlation coefficients for these two raters.

Each couple received a total score on each of the 34 variables employed in this study and listed in Table 1. These scores were factor analyzed by means of the Statistical Package for the Social Sciences (SPSS) Program PA2, with the Verimax rotation. The initial factor analysis identified five factors with an eigen value greater than 2.19. A second factor analysis was done, limiting the analysis to these first five factors. Table 2 shows the results of the second analysis.

Derivation and Meaning of Factor Scores

Variables were selected for use in computing a factor score according to the following rules. Variables with factor loadings greater than .35 were selected. Variables with unacceptable interrater reliability (shown on Table 1) were excluded. Disapproval of Other (63) was included in Factor IV even though the factor loadings were .33 for husbands and .34 for wives. This variable was included in Factor IV because it appears to be directly related to marital conflict and the values obtained were very close to the cutoff scores.

Table 1
Interrater Reliabilities for Inventory
of Marital Conflicts

Variable	Product-Moment Correlation	
	Husband	Wife
01 Initiation	.99	.99
09 Noise	.93	.89
11 Outcome Question	.97	.99
13 Procedural Question	.80	.32 ^a
14 Rhetorical Question	.90	-.12 ^a
22 Content Information	.99	.98
26 Relevancy Information	.90	.82
31 Self Disclosure	.99	.99
34 Partisan Opinion	.58 ^a	.99
44 Reiteration	.94	-.74 ^a
51 Outcome Agreement	.89	.49 ^a
52 Process Agreement	.87	.58 ^a
61 Outcome Disagreement	.94	.94
62 Process Disagreement	.83	.70 ^a
63 Disapproval of Others	.92	1.00
SL Speaks Last	.95	.94
Int Interrupts	.84	.54 ^a

^aVariables not used in the derivation of factor scores because of unacceptable interrater reliability.

Table 2

Factor Analysis of Interview Variables: Verimax Rotated Factor Matrix

Variable	Factor									
	I		II		III		IV		V	
	H	W	H	W	H	W	H	W	H	W
01 Initiation	.33	-.33	-.35 ^c	.35 ^a	-.69 ^c	.69 ^a	-.24	.24	.00	.00
09 Noise	.22	.41 ^a	-.04	.02	.17	.01	.75 ^a	.69 ^a	.02	-.10
11 Outcome Question	.73 ^a	-.19	-.14	-.04	-.01	.76 ^a	-.14	.06	-.16	.26
13 Procedural Question	-.08	-.18	.12	.06	.06	-.09	.26	.27	-.51 ^a	-.02
14 Rhetorical Question	.65 ^a	.15	.13	-.04	-.09	.40 ^b	.04	-.04	-.10	-.08
22 Content Information	.82 ^a	.66 ^a	.17	.18	-.14	.15	.05	.37 ^a	-.07	.09
26 Relevancy Information	.53 ^a	.41 ^a	-.08	-.14	-.25	-.21	.07	.21	.15	.31
31 Self Disclosure	-.30	.30	.85 ^a	-.86 ^c	.15	-.14	-.08	.02	-.06	.06
34 Partisan Opinion	.11	.75 ^a	.69 ^b	-.18	-.27	.01	.39 ^b	.18	-.07	.09
44 Reiteration	-.09	.02	.59 ^a	.10	.00	-.01	.28	.77 ^b	.01	-.20
51 Outcome Agreement	.53 ^a	.24	-.25	.61 ^b	.07	-.05	.09	.06	.17	.04
52 Process Agreement	.68 ^a	.56 ^b	-.05	.16	-.20	-.23	.02	-.08	.39 ^a	.52 ^b

Table 2 (Continued)

Variable		Factor									
		I		II		III		IV		V	
		H	W	H	W	H	W	H	W	H	W
61 Outcome Disagreement		.74 ^a	.03	-.21	.83 ^a	.08	.24	.00	-.16	-.02	.15
62 Process Disagreement		.71 ^a	.47 ^b	-.15	.41 ^b	.21	-.20	-.01	-.13	-.02	.08
63 Disapproval of Others		.59 ^a	.31	.19	-.06	.24	.72 ^a	-.33 ^a	-.34 ^a	-.23	.05
SL Speaks Last		.10	-.08	-.03	.05	-.20	.14	.07	-.04	-.84 ^c	.81 ^a
Int Interrupts		.44 ^a	.39 ^b	.29	.24	-.07	-.17	.27	.09	.05	.46 ^b

^aLoading used to calculate a derived score for this factor.

^bLoading not used in factor score because of unacceptable interrater reliability.

^cLoading not used in the factor score because it was inversely related to the loading for the spouse.

A factor score was computed for each subject for each of the five factors. First, z scores were computed for each subject for each variable by subtracting the subject's score on the variable from the mean score for that variable and dividing by the standard deviation. The factor score was then derived by multiplying the z scores by the square of the factor loading for the variable. The square of the factor loading is the amount of variance accounted for.

Factor 1. Factor I consisted of the 14 variables listed in Table 3. The following formula provided a Factor I score for each couple: Factor I Score = $(09-W \times .1671) + (11-H \times .5310) + (14-H \times .4235) + (22-H \times .6664) + (22-W \times .4412) + (34-W \times .5683) + (51-H \times .2771) + (52-H \times .4606) + (61-H \times .7365) + (62-H \times .5048) + (63-H \times .3491) + (Int-H \times .1936) + (26-H \times .2812) + (26-W \times .4107)$, where the 2-digit code for the variable represents the z score for the variable code, H represents Husband, W represents Wife, and the decimal number is the square of the Factor I loading (these are rounded to 2 places in Table 2). The resulting Factor I scores ranged from -5.32 to 10.77, with a mean of 0.0 and a standard deviation of 4.18.

The interaction represented by Factor I consisted mainly of statements by the husband. The wife gives information about the couple (26) and about the stories (22),

Table 3

Factor I Variables: Descriptive Statistics
for Untransformed Scores

Variable	Minimum	Maximum	Mean	Std. Dev.	Mode
09-W Noise, Wife	0.0	12.0	2.1	2.9	0.0
11-H Outcome Question	0.0	35.0	5.9	7.8	0.0
14-H Rhetorical Question	0.0	11.0	2.2	3.2	0.0
22-H Content Information	0.0	47.0	12.3	11.3	0.0
22-W Content Information	0.0	31.0	9.4	8.4	0.0
26-H Relevancy Information	0.0	12.0	2.4	2.8	0.0
26-W Relevancy Information	0.0	16.0	3.2	4.0	0.0
34-W Partisan Opinion	0.0	57.0	18.3	15.2	4.0
51-H Outcome Agreement	3.0	15.0	9.4	3.3	12.0
52-H Process Agreement	0.0	29.0	10.1	7.5	0.0
61-H Outcome Disagreement	0.0	8.0	2.6	2.4	0.0
62-H Process Disagreement	0.0	25.0	3.4	5.8	0.0
63-H Disapproval of Others	0.0	5.0	0.5	1.2	0.0
Int-H Interrupts	0.0	13.0	3.7	3.9	1.0

and states an opinion (34). She makes statements that cannot be understood (09) because the husband interrupts her. The husband asks the wife to give her decision (11), states an opinion indirectly with a rhetorical question (14), gives information about the stories (22) and about the couple (26), disagrees with the wife's decision (61), and disagrees with other matters in the process of the discussion (62). He then agrees with the wife about her decision (51) and agrees with the process of the discussion (52), but ridicules her (63) and interrupts her (Int). Table 4 displays statements which would be scored as representative of the variables included in Factor I.

Based on the type of interaction these variables suggest, Factor I was labeled "Irritable Husband."

Factor II. Factor II consisted of the following variables: Wife Initiates (01-W), Self-Disclosure Husband (31-H), Reiteration, Husband (44-H), Outcome Disagreement, Wife (61-W). The formula for the Factor II was derived in the same manner as the formula for Factor I (see Appendix G). The resulting Factor II scores ranged from -1.92 to 4.43, with a mean of 0.0 and a standard deviation of 1.59. The type of interaction represented by Factor II appears to be quite open and balanced. The wife begins the discussion, the husband gives his opinion, the wife disagrees without disguising her opposition, and the husband reiterates his position. Factor II was labeled "Open Disagreement."

Table 4

Examples of Statements Scored for Items Comprising Factor I (Irritable Husband)

Variable	Statement
09-W Noise	(Statements that can not be understood)
11-H Outcome Question	Whose fault do you think it was?
14-H Rhetorical Question	Shouldn't a man be allowed to watch football on Sunday?
22-H Content Information	It said the man used the bathroom first.
22-W Content Information	It was the man was late.
26-H Relevancy Information	Your mother calls you as often as mine.
26-W Relevancy Information	You always throw your clothes around at home.
34-W Partisan Opinion	I think the man should take care of the car.
51-H Outcome Agreement	O.K. then, lets say it was the husband's fault.
52-H Process Agreement	I'll go along with that idea.

Table 4 (Continued)

Variable	Statement
61-H Outcome Disagreement	No, it is not the husband's fault, she said she would take care of it.
62-H Process Disagreement	No, I wasn't even talking about that question.
63-H Disapproval of Others	You don't know what you're talking about.
Int-H Interrupts	(Breaks in when spouse is speaking)

Factor III. Factor III consisted of the following variables: Initiates, Wife (01-W), Outcome Question, Wife (11-W), Disapproval of Others, Wife (63-W). The procedure for derivation of the formula for this factor was the same as for Factors I and II (see Appendix G). The resulting Factor III scores ranged from -1.02 to 4.77, with a mean of 0.0 and a standard deviation of 1.20. The following are examples of statement which were given Factor III weights: (a) "The next story is the one about the wife cutting down on her smoking," rated 01-W; (b) "Which do you think is the best solution," rated 11-W; (c) "You probably don't remember it, as usual," rated 63-W. It appears that couples with scores above the mean on Factor III were couples in which the wife took the lead, prompted the husband to give his opinion, and then ridiculed him. The wife did not openly state her opinion or contradict the husband directly. Factor III was labeled "Covert Conflict: Wife."

Factor IV. Factor IV consisted of the following variables: Noise, Husband (09-H), Noise, Wife (09-W), Content Information, Wife (22-W), Disapproval of Others, Husband (63-H), Disapproval of Others, Wife (63-W). The procedure for derivation of the formula for the Factor IV score was the same as for the preceding factors (see Appendix G). The resulting Factor IV scores ranged from -1.00 to 4.66, with a mean of 0.0 and a standard deviation of 1.09. High scores on this factor represent

interactions in which the husband and wife talk at the same time, the wife asks about the content of the stories, but both refrain from ridiculing each other (note that 63-W and 63-H have negative factor loadings). Factor IV and Factor V were not labeled because of the lack of a clearly appropriate label.

Factor V. Factor V consisted of the following variables: Procedural Question, Husband (13-H), Process Agreement, Husband (52-H), and Speaks Last, Wife (SL-W). The procedure for the derivation of the formula for the Factor V score was the same as for the preceding factors (see Appendix G). The resulting Factor V scores ranged from -2.19 to 1.23, with a mean of 0.0 and a standard deviation of 0.84. The interaction represented by Factor V might be characterized by dominance of the wife. The husband asks the wife how to proceed, agrees with her suggestion, and the wife speaks last.

Factor Scores, Reported Drinking Behavior, and Other Life Adjustment Indicators

Table 5 presents data on the couples' reports of drinking and other life experiences during the three months following discharge. As was stated in Chapter III, in cases where there were discrepancies between husband's and wife's report of husband's drinking, the report suggesting more drinking was accepted.

Table 5

Reported Drinking Behavior and Life Adjustment Indicators

Variable	Status	<u>N</u>	Per Cent
Reported Drinking During Three Months Following Discharge	None	7	24
	Occasional Light		
	Drinking	0	0
	Light Two Days		
	Per Week	3	10
	One or Two Slips	3	10
	Heavy One or Two		
	Times/Week	0	0
	Heavy Every Day	14	48
	Binges	2	7
Reported Drinking During the Two Weeks Preceding the Follow- up	None	10	35
	Occasional Light	0	0
	Light Two Days		
	Per Week	2	7
	One or Two Slips	3	10
	Heavy One or Two		
	Times/Week	0	0
	Heavy Every Day	13	45
	Binges	1	3
Length of Time Since Last Drink	0 to 2 Weeks	21	72
	3 to 5 Weeks	1	3
	6 to 8 Weeks	0	0
	9 to 11 Weeks	0	0
	12 to 14 Weeks	0	0
	Before Admission	7	24
Longest Period Without a Drink Between Discharge and Follow-up	0 to 2 Weeks	9	31
	3 to 5 Weeks	10	35
	6 to 8 Weeks	1	3
	9 to 11 Weeks	2	7
	12 to 14 Weeks	7	24

Table 5 (Continued)

Variable	Status	<u>N</u>	Per Cent
Drinking Interfering With Responsibilities	Yes	14	48
At Follow-up, Reported by Husband or Wife	No	15	52
Husband's Hours on Job Since Discharge,	Less than 20/Week	14	48
Reported by Wife	More than 20/Week	15	52
Husband's Monthly Income Since	Less than \$337	14	48
Discharge	More than \$337	15	52
Wife's Monthly Income Since	Less than \$350	15	52
Discharge	More than \$350	14	48
Husband's Satisfaction With Life at Followup	Very Good	11	38
	Good	4	14
	Fair	6	21
	Bad	6	21
Wife's Estimate of Husband's Satisfaction	Very Good	5	17
With Life at Follow-up	Good	9	31
	Fair	7	24
	Bad	7	24
Relationship With Wife Since Discharge, as	Very Good	13	45
Rated by Husband	Good	5	17
	Fair	7	24
	Bad	2	7
Relationship with Husband Since Discharge,	Very Good	7	24
as Rated by Wife	Good	7	24
	Fair	7	24
	Bad	7	24

Most of the men (76 per cent) used alcohol to a certain extent during the follow-up period, but somewhat fewer (65 per cent) reported drinking in the two weeks prior to the follow-up. About half the couples reported that the husband was drinking daily during the three-month follow-up period and during the two weeks preceding the follow-up. There is a slight discrepancy between two of the summaries of the men's drinking behavior. Ten couples agreed that the husband had not been drinking during the two weeks preceding the follow-up. However, when asked about the length of time since the husband's last drink 21 couples reported that the husband had been drinking within two weeks (thus two couples were not consistent in their response to these two questions).

While most of the men used alcohol during the follow-up period, 20 of the men were able to stay sober for longer than two weeks at some time during the follow-up period (10 of these men were sober for three to five weeks and the others longer). About half the couples reported that the husband's drinking was interfering with the performance of his responsibilities at the time of the follow-up (see Table 5 for these and other life-adjustment indicators).

Hypothesis 1

As noted in Chapter III, Hypothesis 1 states that the quality of each couple's interaction as assessed by

the Inventory of Marital Conflicts is related to reports of post treatment drinking by the alcoholic. More specifically, it is predicted that in couples where the interaction is marked by conflict and lack of mutual support, the alcoholic husband drinks more after treatment than in couples where the interaction is less conflictual and more mutually supportive. To convert this hypothesis to operational terms, high scores on Factors I, III, IV, and V were considered indicators of conflict and lack of mutual support, while low scores on Factor II suggest conflict and lack of mutual support.

Factors I and III were found to be related to reports of drinking behavior after discharge. These are discussed first, followed by Factors II, IV, and V which are not related to drinking behavior.

Factor I.

Factor I, Irritable Husband, appeared to represent the conflict and lack of mutual support described in Hypothesis 1. To test this hypothesis, couples were divided into two groups based on Factor I scores. One group consisted of the 15 couples below the median of -1.08 . The other group consisted of the 14 couples with scores above the median. Table 6 presents four measures of reported drinking behavior for groups high and low on Factor I.

Table 6

Drinking Patterns Reported at the Three-Month Follow-Up
and Relationships With Factor I

Time Period	Drinking Behavior	Factor I		Fisher's
		Low	High	
Three months following Discharge	No or Light	8	2	.03
	Heavy	7	12	
Two weeks preceding Follow-Up	No or Light	9	3	.04
	Heavy	6	11	
Time since last drink	0--5 weeks	9	13	.05
	6-12 weeks	6	1	
Longest period without a drink	0--5 weeks	8	11	.15
	6-12 weeks	7	3	

N = 29

Subjects were divided into two groups based on the reports of drinking behavior where none, occasional light and light two days per week were classified as "no or light drinking" and other reports (see Table 5) as heavy drinking. The results are consistent with the prediction made in Hypothesis 1. Three of the four measures reached the .05 level of significance. Fisher's Exact Test, which gives the probability of results occurring by chance, is reported in Table 6. Husbands in couples with Factor I scores above the median did more drinking during the follow-up period than husbands in couples with Factor I scores below the median. Similar results were found for the two weeks preceding the follow-up. Also, husbands in couples with Factor I scores above the median reported more recent drinking than husbands in couples with Factor I scores below the median. While the same trend was obtained for the longest period without a drink between discharge and follow-up Fisher's Exact Test did not reach the .05 level (see Table 6). It is clear from these measures that high scores on the Irritable Husband factor (as opposed to low scores) were associated with reports of heavy drinking following discharge.

Factor I and additional life adjustment indicators.

Table 7 shows three indicators which tend to support the results described above. Couples high on Factor I reported that the husband's drinking was interfering with his performance of his responsibilities at the time of the

Table 7

Factor I (Irritable Husband) and Additional
Life Adjustment Indicators

Variable	Fisher's Exact Test
Drinking Interfering with Responsibilities at Follow- up (reported by Husband or Wife)	.002
Husband's Hours on the Job Since Discharge	.17
Husband's Monthly Income Since Discharge	.42
Wife's Monthly Income Since Discharge (of husband)	.58
Husband's Satisfaction with Life at Follow-up	.09
Wife's Estimate of Husband's Satisfaction with Life at Follow-up	1.00
Relationship with Wife Since Discharge (rated by Husband)	.04
Relationship with Husband Since Discharge (rated by Wife)	.35

follow-up (Fisher's Exact Test = .002). Also, high Factor I men reported less satisfaction with the marital relationship since discharge than did low Factor I men (Fisher's Exact Test = .04). Husband's satisfaction with life at follow-up showed similar trends, but did not reach the .05 level of significance. Factor I, which was significantly related to abstinence, was not related to employment or income variables.

Factor III.

Factor III, Covert Conflict: Wife, also appears to represent the conflict and lack of mutual support described in Hypothesis 1. Couples were again divided into two groups based on Factor III scores. One group consisted of the 13 couples below the median of -0.47. The other group consisted of the 16 couples above the median. Table 8 presents the reported drinking behavior for couples high and low on Factor III. The results are consistent with the prediction made in Hypothesis 1. Couples high on Factor III reported heavy drinking more often than couples low on Factor III during the follow-up period, but the trend did not reach the .05 level of significance (Fisher's Exact Test = .21). High Factor III couples reported heavy drinking for the husband more often than low Factor III couples for the period two weeks preceding the follow-up, and this finding was significant at the .05 level. Almost all of

Table 8

Drinking Patterns Reported at the Three-Month
Follow-up and Relationships With Factor III

Time Period	Drinking Behavior	Factor III		Fisher's Exact Test
		Low	High	
Three months fol- lowing discharge	No or Light Heavy	6	4	.21
		7	12	
Two weeks pre- ceding follow-up	No or Light Heavy	8	4	.05
		5	12	
Time since last drink	0--5 weeks	8	14	.12
	6-12 weeks	5	2	
Longest period without a drink	0--5 weeks	5	14	.01
	6-12 weeks	8	2	

N = 29

the 16 husbands of couples high on Factor III reported drinking within five weeks of the follow-up, but the opposite did not hold true for low Factor III couples (Fisher's Exact Test = .12). In high Factor III couples, reports of sober periods for the men were of shorter duration than in low Factor III couples (Fisher's Exact Test = .01). While these results are somewhat less conclusive than the results for Factor I, they tend to be consistent with the prediction made in Hypothesis 1.

Factor III and additional life adjustment indicators.

Table 9 shows that none of the additional life adjustment indicators was significant at the .05 level. However, two of these indicators, wife's estimate of husband's satisfaction with life at the follow-up and relationship with husband since discharge as rated by wife, fell between the .05 and the .10 level. The trend on these indicators was for less satisfaction among high Factor III couples.

Other Factors

As mentioned previously, the remaining factors were not related to reports of drinking behavior during the follow-up period. Results for these factors are reported because these factors were judged to be relevant to the prediction made in Hypothesis 1.

Factor II. Factor II, Open Disagreement, lacks more of the subtle ridicule found in the previous two factors.

Table 9
Factor III (Covert Conflict-Wife) and Additional
Life Adjustment Indicators

Variable	Fisher's Exact Test
Drinking Interfering with Responsibilities at Follow- up, Reported by Husband or Wife	.28
Husband's Hours on the Job Since Discharge	.28
Husband's Monthly Income Since Discharge	.28
Wife's Monthly Income Since Discharge	.57
Husband's Satisfaction with Life at Follow-up	.55
Wife's Estimate of Husband's Satisfaction with Life at Follow-up	.06
Relationship with Wife Since Discharge (Rated by Husband)	1.00
Relationship with Husband Since Discharge (Rated by Wife)	.06

Therefore, one might expect that high scores on Factor II would be associated with abstinence during the follow-up period. As with the prior analysis, couples were divided into two groups based on Factor II scores, (15 couples with scores below the median of -0.20 , 14 couples with scores above the median). Table 10 presents the reported drinking behavior of husbands for couples high and low on Factor II. None of these relationships was significant at the $.05$ level.

Factor IV. Based on the composition of this factor, one might expect high scores would be associated with drinking after treatment. As with the prior analyses, couples were divided into two groups based on Factor IV scores, (14 couples with scores below the median of -0.39 , 15 couples with scores above the median). Table 11 presents the reported drinking behavior for couples high and low on Factor IV. None of these relationships was significant at the $.05$ level.

Factor V. Based on the composition of this factor one might expect that high scores would be associated with drinking after treatment. Couples were divided into two groups based on Factor V scores (14 couples with scores below the median of 0.09 , 15 couples with scores above the median). Table 12 presents the reported drinking behavior for couples high and low on Factor V. None of these relationships was significant at the $.05$ level.

Table 10
 Drinking Patterns Reported at the Three-Month
 Follow-up and Relationships With Factor II

Time Period	Drinking Behavior	Factor II		Fisher's Exact Test
		Low	High	
Three months fol- lowing discharge	No or Light	5	5	.60
	Heavy	10	9	
Two weeks pre- ceding follow-up	No or Light	6	6	.59
	Heavy	9	8	
Times since last drink	0--5 weeks	12	10	.46
	6-12 weeks	3	4	
Longest period without a drink	0--5 weeks	11	8	.30
	6-12 weeks	4	6	

N = 29

Table 11
 Drinking Patterns Reported at the Three-Month
 Follow-up and Relationships With Factor IV

Time Period	Drinking Behavior	Factor IV		Fisher's Exact Test
		Low	High	
Three months fol- lowing discharge	No or Light	3	7	.15
	Heavy	11	8	
Two weeks pre- ceding follow-up	No or Light	5	7	.41
	Heavy	9	8	
Time since last drink	0--5 weeks	11	11	.54
	6-12 weeks	3	4	
Longest period without a drink	0--5 weeks	9	10	.60
	6-12 weeks	5	5	

N = 29

Table 12
 Drinking Patterns Reported at the Three-Month
 Follow-up and Relationships With Factor V

Time Period	Drinking Behavior	Factor V		Fisher's Exact Test
		Low	High	
Three months fol- lowing discharge	No or Light Heavy	5	5	.60
		9	10	
Two weeks pre- ceding follow-up	No or Light Heavy	5	7	.41
		9	8	
Time since last drink	0--5 weeks	11	11	.54
	6-12 weeks	3	4	
Longest period without a drink	0--5 weeks	11	8	.15
	6-12 weeks	3	7	

N = 29

Factor Scores and Descriptive Variables

In order to further elaborate the meaning of the two factors which were found to be related to drinking behavior prior to the follow-up, the data were examined to determine what other trends might be found. Because of the data-scanning nature of this search, all relationships significant at the .10 level were noted.

Factor I. Tables 13 through 15 show the following trends for Factor I. High Factor I couples had fewer children than low Factor I couples. High Factor I men were more often born in Illinois while low Factor I men were more often born in other states (Fisher's Exact Test = .02). High Factor I couples took part in the research several days later than low Factor I couples (Fisher's Exact Test = .05).

Several things might explain this. These couples may have been less cooperative, putting off the experimenter's request for an appointment as long as possible. It is also possible that the husbands changed during the second week of treatment and began to behave more like an "irritable husband," thus obtaining higher Factor I scores. The experimenter chooses the former explanation because the patterns of interaction measured by Factor I appear to be long standing patterns, and also because the same result was not found with Factor III, which also was found to be related to treatment outcome.

Table 13
Factors I and III, and Descriptive
Information for Subjects

Variable	Fisher's Exact Test	
	Factor I	Factor III
Historical Variables		
Age, Husband	.43	.40
Age, Wife	.57	.40
Years Married	.42	.28
Age Married, Husband	.59	.54
Age Married, Wife	.58	.18
Children	.10	.18
Length of Marital Separation	.39	.62
Education, Husband	.17	.09
Education, Wife	.56	.33
Siblings, Husband	.46	.37
Variables Derived from Measures		
Life Stress, Husband	.42	.28
Life Stress, Wife	.29	.28
Win Score, Husband	.28	.40
Win Score, Wife	.42	.09
Deadlocks in Discussion	.64	.44

Table 14

Factors I and III, and Descriptive Categories

Variable	Fisher's Exact Test	
	Factor I	Factor III
Marital Status	.27	.03
Employment, Husband	.29	.57
Employment, Wife	.43	.40
Type of Employment, Husband	.64	.03
Type of Employment, Wife (Past or Present)	.19	.64
Residence Arrangement	.14	1.00
Birthplace, Husband	.02	.54
Loss of Parent in Childhood, Husband	.18	.02
Race of Couple	.45	.35
Alcoholic in Husband's Family	.65	.44
Husband Married Previously	.56	.64
Husband Treated Previously	.40	.37
Prognosis at Discharge by Husband	.06	.60
Prognosis at Discharge by Wife	.54	.19
Prognosis at Discharge by Counselor	.64	.64

Table 15

Factors I and III, and Treatment Experiences for Subjects

Variable	Fisher's Exact Test	
	Factor I	Factor III
Inpatient Treatment		
Group Therapy Sessions	.29	.57
Married Men's Group	.54	.07
Re-Admission Group	.67	.62
Individual Counseling Sessions	.57	.60
A.A. Meetings	.43	.31
Days in Center	.42	.28
Days Between Admission and Tape Recording	.05	.40
Days Between Tape Recording and Discharge	.58	.43
Conjoint Marital Therapy Sessions	.29	.44

Table 15 (Continued)

Variable	Fisher's Exact Test	
	Factor I	Factor III
Aftercare Treatment		
Outpatient Therapy and AA Meetings at Center Attended by Husband, as Reported by Husband	.17	.18
Outpatient Therapy and A.A. Meetings at Center Attended by Husband, as Reported by Wife	.57	.31
A.A. Meetings Attended by Husband (including those at Center), as Reported by Husband	.40	.20
A.A. Meetings Attended by Husband (including those at Center), as Reported by Wife	.10	.26

A trend was found toward less attendance at Alcoholics Anonymous meetings following discharge by high Factor I men (Fisher's Exact Test = .10). High Factor I men were overconfident at the time of discharge rating their chances for sobriety as Very Good (Fisher's Exact Test = .06). Only two scales on the MMPI were found to differ significantly at the .10 level when couples high and low on Factor I were compared. Husbands who scored low on Factor I had a mean score of 25.1 on Scale 4, Pd (a scale related to impulsive, nonconformist behavior), of the MMPI, and husbands high on Factor I had a mean score of 28.2 on Scale 4, t(26) = 1.78, p = .09 (two-tailed test). Husbands low on Factor I had a mean score of 21.3 on Scale 9, Ma of the MMPI. Husbands high on Factor I had a mean score of 24.9, t (26) = 2.11, p = .05 (two-tailed test). None of the MMPI mean scores differed significantly for the women. The husbands' MMPI scores suggest that husbands high on Factor I were slightly more impulsive and nonconformist than husbands low on Factor I (see Appendix H for MMPI profiles).

To summarize, the high Factor I men differed from low Factor I men (p ≤ .10) in the following ways. High Factor I men were more likely to drink heavily during the follow-up period, had fewer children, were born in Illinois, were more impulsive and nonconfirmist, were overconfident at the time of discharge, were less likely to attend Alcoholics Anonymous meetings during the follow-up period,

were unable to attend to responsibilities during the follow-up period because of drinking, and were not satisfied with their life in general or their marital relationship at the time of the follow-up. On the other hand, the couples did not differ on most of the identifying and treatment variables presented above with the exception of days between admission and tape recording, which was discussed above. This excludes the interpretation that the differences in interaction observed might be attributed to experimental artifact or sampling bias.

Factor III. Tables 13 through 15 show the following trends for Factor III. A trend of fewer years of education for husbands in couples with high Factor III scores was found. Wives in couples above the median on Factor III had a higher Win Score for the Inventory of Marital Conflict. All four of the couples who were common-law rather than legally married were below the median on Factor III. Husbands above the median on Factor III were more likely to be laborers rather than tradesmen. In couples above the median on Factor III the husbands had a greater incidence of parent loss due to separation or death. More husbands above the median on Factor III attended more than one married men's group sessions. This might be due to a greater perceived need for professional help with their marriage. In couples above the median on Factor III, wives were more likely to say they thought their husbands were dissatisfied

with life at the time of the follow-up. In couples above the median on Factor III the wives were more likely to be dissatisfied with their marital relationship at the time of follow-up.

Only two scales on the MMPI were found to differ at the .10 level when couples high and low on Factor III were compared. Husbands low on Factor III had a mean score of 24.6 on Scale 5 (Mf) of the MMPI. Husbands high on Factor III had a mean score of 21.6 on Scale 5, $t(22) = 1.80$, $p = .09$. Thus husbands high on Factor III had interests that were less aesthetic or "cultural" than low Factor III men. Wives in couples low on Factor III had a mean score of 20.9 on Scale 9 (Ma) (a scale suggesting impulsive, energetic behavior) of the MMPI. Wives in couples high on Factor III had a mean score of 17.60 on Scale 9, $t(25) = 2.71$, $p = .01$. Thus wives in couples high on Factor III were less active and energetic than wives in couples low on Factor III.

To summarize, the high Factor III couples differed from the low Factor III couples in the following ways. High Factor III men were more likely to drink heavily during the follow-up period, had fewer years of education, were more likely to be laborers rather than tradesmen, had interests that were less aesthetic or cultural, had a greater incidence of parental loss in childhood, were legally married rather than common-law, and attended more

married men's group sessions. Wives of high Factor III couples differed from those of low Factor III couples in that they were less active and energetic (but achieved higher Win scores), perceived their husbands as dissatisfied with life at the time of the follow-up, and were themselves dissatisfied with their marital relationship during the three months after discharge from the Center.

Other Factors. Table 16 shows the relationship of variables significantly related to Factor I or III with Factors II, IV, and V. Only two significant relationships occurred, thus these factors appeared to be relatively independent of each other. This was expected since the Varimax rotation in the factor analysis produces independent factors.

Other Hypotheses

Hypothesis 2

Hypothesis 2 stated that the Inventory of Marital Conflicts Win score is the same for husbands and wives. This hypothesis was confirmed. The mean Win score for husbands was 3.8, the mean Win score for wives was 4.6, $t(28) = 1.17$, $p = .27$ (two tailed test).

Hypothesis 3

Hypothesis 3 stated that alcoholics use "less direct" means of persuading their partner than the partner will

Table 16

Variables Significant at the Ten Percent Level on Factors I or III
 Compared With the Same Variables on Factors II, IV, and V

Variables	Factor I	Factor III	Factor II	Factor IV	Factor V
Marital Status	.27	.03*	.33	.33	.33
Children	.10*	.18	.17	.58	.58
Type of Employment, Husband	.64	.03*	.22	.45	.30
Education, Husband	.17	.09*	.58	.58	.42
Birthplace, Husband	.02*	.54	.30	.59	.16
Loss of Parent in Childhood, Husband	.18	.02*	.43	.43	.57
Win Score, Wife	.42	.09*	.58	.58	.42
Married Men's Group Sessions	.54	.07*	.27	.54	.03*
Days Between Admission and Tape Recording	.05*	.40	.28	.57	.43
Husband's Attendance at A.A. Since Discharge, reported by Wife					

Table 16 (Continued)

Variables	Factor I	Factor III	Factor II	Factor IV	Factor V
Prognosis at Discharge, Rated by Husband	.06*	.60	.26	.50	.50
Drinking Interfering With Responsibilities, reported by Either Husband or Wife at Follow-Up	.002*	.28	.17	.58	.58
Husband's Satisfaction With Life at the Time of Follow-Up	.09*	.55	.58	.26	.58
Wife's Estimate of Husband's Satisfaction With Life at the Time of Follow-Up	1.00	.06*	.50	.13	.50
Relationship With Wife Since Discharge, as Rated by Husband	.04*	1.00	.07*	1.00	.44
Relationship With Husband Since Discharge	.35	.06*	.50	1.00	.50

*Significant at .10 level, based on Fisher's Exact Test.

use. Rather than state and restate their choice and supporting reasons openly, alcoholics will read from and quote the stories, ask rhetorical questions, and add content to the stories to a greater degree than their partner does. The one comparison that was significant for this hypothesis was for the rating Content Information. Husbands (22-H) had a mean of 12.3, Wives (22-W) had a mean of 9.4, $t(28) = 2.21$, $p = .04$. Husbands tended to ask more Outcome Questions (11-H) mean = 5.9, than wives (11-W) mean = 3.8. However, this difference was not significant at the .05 level, as $t(28) = 1.20$, $p = .24$. Procedural Question: Wife (13-W) and Rhetorical Question: Wife (14-W) had very low interrater reliability and so were not used in this analysis.

Hypothesis 4. In couples marked by less "open" communication (fewer direct statements or urging of choice) the husbands drink more than in couples who use a more direct style of communication. There was some support for this hypothesis. As noted for Factor I (Irritable Husband), the husband disagrees with his wife, but rather than hold to his position he agrees with her decision and then ridicules her. In Factor III (Covert Conflict-Wife) there is an absence of direct arguing about the decision, but the wife ridicules the husband. Both of these factors were related to greater reports of drinking behavior.

However Factor II, which was judged to represent open communication and might have contributed support to this hypothesis was not related to drinking behavior.

Additional Data Scanning. No consistent differences were found for socio-economic status. For Factor I, high and low conflict couples did not differ significantly on education, income, or type of work. However, husbands in couples with high scores on Factor III had fewer years of education and were more likely to be laborers than husbands in couples with low scores on Factor III.

Wives did not differ on Scale 4 (scale suggesting impulsive, nonconformist behavior) for either Factor I or Factor III. Wives did not differ on Scale 9 (scale suggesting impulsive energetic behavior) for Factor I. Wives in couples high on Factor III were less impulsive and energetic than wives in couples low on Factor III. Also, husbands who were high on Factor I were more impulsive (Scales 4 and 9) and nonconformist (Scale 4) than were husbands low on Factor I.

CHAPTER V

DISCUSSION

The main contribution of this study to the literature in the field of alcoholism and marriage is the demonstration of the feasibility of utilizing behavioral measures of marital interaction to examine the relationship between marital factors and relevant variables relating to drinking behavior.

There are a number of advantages to using behavioral measures (Olson, 1969; Jacob, 1975). An important advantage is the fact that such measures minimize the influence of observer and respondent bias. In addition, the judges listening to the tape recorded interviews were unaware of the experimental hypotheses, had no knowledge about the characteristics of the subject other than the fact that the men were in treatment for alcoholism, and had no knowledge about the subjects' behavior during the follow-up period.

Another advantage of the method of assessing interaction employed in this study is the efficiency achieved through use of the factor analysis. The factor analysis reduced the 34 discrete ratings to five conflict indicators, the five factors. Although it is recognized that

such factors are constructs derived statistically to organize the data, the use of these factors greatly reduced the number of analyses that would have been required had each of the ratings been examined independently and increased the possibility of deriving meaning from otherwise small and perhaps trivial bits of behavior.

Mishler and Waxler (1975) have pointed out a possible problem with methods such as the Inventory employed in this study. They question the assumption that summing the frequency of occurrence of a variable over an entire interview period provides a valid representation of the interaction process. As an alternative they proposed a method called the "Moving window." This is a time sampling procedure which yields a score for statements 1 to 50, 2 to 51, and so on. Each sample differs by only one statement. Such a method was devised because of negative results with procedures similar to those used in the present study. The advantage of such a procedure is that it provides the opportunity to examine the sequential patterning of interaction rather than representing the interaction by a single score.

Although neither the present study nor Mishler and Waxler's demonstrate definitively the validity of the methods of representing interaction, both appear to be tapping behavior that tends to recur and is relevant to interesting theoretical constructs and independent reports

of behavior. Further research might test the assumption that summed scores are valid indicators of interaction.

Another advantage of the method employed is that the Inventory of Marital Conflicts (Olson & Ryder, 1970) was developed with nonalcoholic couples, and thus it is possible to compare results obtained with alcoholic couples (couples with a male alcoholic) to the general population of married couples. This is in keeping with the recommendation of Orford (1975) that researchers investigating marriages with an alcoholic member take note of the vast literature on other troubled marriages. It seems likely that alcoholics' marriages do not differ significantly from other problematic marriages (Orford, 1975).

Another advantage of the behavioral measure used in this study is the possibility of predictive clinical application with patients. As was stated in Chapter II, clinicians are advocating family involvement in alcoholics' treatment (Cantanzaro et al. 1973; Finlay, 1974; Cadogan, 1973). Development and refinement of the method employed in this study might provide a means of identifying the couples who would benefit most from joint treatment. The identification of a factor which weighed heavily on the husband's statements (Factor I) and another which weighed heavily on the wife's statements (Factor III) suggests that treatment might even focus on one spouse or the other rather than the couple. The measure employed

might be improved by examining reasons for poor interrater agreement on many of the ratings of wife's statements. Determining the reason for this might further elucidate the process of interaction observed.

Some interesting inconsistencies were found in this study. The conflict indicators, as represented by the factor scores, were found to be related to reports of drinking behavior. In addition, subjective measures of satisfaction were related to the conflict indicators. However, commonly used indicators of adjustment such as employment and income were not related. Additional research might further examine the relationship among measures of life adjustment. Different relationships among these variables might be found during different time periods. Drinking during the first three months after treatment might not interfere with employment as much as drinking at six months or a year after treatment, at which time the effects of extended drinking might "catch up."

Objective measures of drinking behavior would greatly enhance the validity of this type of research. However, such measures would be difficult to develop because of the practical problems involved. Even if objective and reliable observers could be with the subject 24 hours per day, they would still have to deal with the alcoholic's tendency to procure and consume alcohol in ways that are difficult to detect. The problem of the observer influencing

the behavior observed would remain (subjects in the present study were quite conscious they were being observed, and this probably had some effect on their behavior).

As with any research, there are limitations to the generalizability of these findings. The subjects were mainly working class, or "blue collar," and the majority was black. Slightly more than half the subjects were born outside Illinois (suggesting a rural or smaller city population) and the remainder were born in Illinois (mainly in Chicago). These facts should be recalled when these findings are applied to different populations. Before such applications are made, other populations should be studied. Because all the assumptions upon which factor analysis is based were not met, it would be valuable to replicate the factor analysis with a larger number of subjects. Also, it would be valuable to replicate this study with female alcoholics and their spouses, outpatients, subjects of higher socio-economic status, and predominantly white subjects. Concerning race, it is interesting to note that no differences were found between black and white subjects on the conflict indicators. This negative finding is relevant because of the importance attributed to this variable by researchers and the general public in recent years, leaving one with the impression that there are always differences on this variable.

If this study has an impact on research on alcoholism and marriage it may be to continue the trend toward less simple explanations of the relationship between marital interaction and drinking behavior (Edwards, Harvey, & Whitehead, 1973). Alcoholic marriages, as seen in this study, are characterized by more than one type of interaction. A variety of patterns of interaction may be related to drinking behavior, and it is possible that none of these patterns are limited to alcoholic couples only; in nonalcoholic marriages such patterns of interaction might be related to other problem behaviors.

It may be profitable to turn to the processes through which styles of relating are acquired early in life to better understand the relationship between conflict and drinking behavior. As stated in Chapter IV, slightly more than half the men in the present study had lost a parent before the age of 15. This variable, loss of parent in childhood, was significantly related (at the .02 level) to marital conflict as defined by high scores on Factor III. Bowlby (1969, 1973) has authored a two volume work on Attachment and Loss in which he describes in careful detail the processes through which humans and animals establish and maintain contact with each other. Feedback systems and other computer based mechanisms are used to illustrate instinctual behavior, which he viewed as the basis of the establishment of attachment and relationships. Further

investigation along these lines (including longitudinal research) may be helpful in elucidating the processes of human interaction.

CHAPTER VI

SUMMARY

The purpose of the study was to further develop a behavioral method of assessing marital interaction and to apply this method in order to assess the relationship between marital interaction and drinking behavior and other indicators of life adjustment following treatment for alcoholism.

A review of the literature showed that mental health professionals working in the field of alcoholism accept the premise that marital conflict and failure to maintain sobriety are related. Family involvement, including group therapy for wives of male alcoholics has been advocated by clinicians working with alcoholics. However, these therapeutic activities have been justified by citing clinicians' impressions of the interaction between the alcoholic and his spouse rather than by more objective measures, since research has been sparse.

The subjects of the study were 29 male alcoholics who were inpatients at Chicago's Alcoholic Treatment Center and their wives. The average age for husbands was 40, for wives 39. The couples were married an average of 13.5 years. Sixty-nine per cent of the couples were black, the remainder

white. A majority of the men were laborers. About half the men were employed at the time of admission. The men spent an average of 34.1 days as inpatients. Days in treatment ranged from 16 to 49. The average attendance at Alcoholics Anonymous meetings during the three months following discharge was four meetings.

The Inventory of Marital Conflicts, the Minnesota Multiphasic Personality Inventory, and the Social Readjustment Rating Scale were administered to each couple during the husband's first 15 days in treatment. Historical data for each couple were also gathered at that time. Predictions by patient, spouse, and counselor of the patient's probability of remaining sober for three months after discharge were made at the time of discharge from inpatient treatment. A questionnaire covering reports of drinking behavior, subjective reports of satisfaction with life, employment, income, attendance at Alcoholics Anonymous meetings, and ratings of family relationships was completed through a telephone interview three months after the husband's discharge.

The main variables of interest in this study were conflict indicators derived from the Inventory of Marital Conflicts in the following manner. Ratings of each couple's tape-recorded discussion were made by naive raters. A high level of interrater reliability was established.

A factor analysis of the ratings yielded five factors which were used to categorize each couple's interaction as either high conflict or low conflict.

Hypothesis 1 was: that couples whose interaction is marked by conflict and lack of mutual support experience failure to maintain sobriety after treatment. Factor I consisted mainly of statements by the husband. The husband interrupted the wife, and ridiculed her rather than support his own opinion. Factor I was labeled "Irritable Husband." High scores on this factor were found to be related to failure to maintain sobriety after treatment, as well as to subjective measure of life adjustment. Factor III "Covert Conflict-Wife" was also found to be related to failure to maintain sobriety after treatment. This factor consisted of statements by the wife in which she opened the discussion, prompted the husband to give his opinion, and then ridiculed him. No significant relationships between Factor III and subjective measures of life adjustment were found, but several trends were noted. The other three factors were not related to reports of drinking behavior after treatment. Hypothesis 1 was supported.

Subjective measures of satisfaction with life were related to the Factor I conflict indicators, but reports of income were not related to the conflict

The results for Hypotheses 2, 3, and 4 are as follows:

Hypothesis 2: that alcoholic husband and non-alcoholic wife were equally successful in "winning" discussions, was confirmed.

Hypothesis 3: that husbands show a greater use of indirect means of persuading their wives than the wives use, was given minimal support.

Hypothesis 4: that couples showing indirect means of communicating experience failure to maintain sobriety, was supported.

High and low conflict couples did not differ consistently on socio-economic status.

Personality traits, as measured by MMPI scores, did not differ significantly for wives in high and low conflict couples.

Methodological problems and possible improvements, possible clinical applications, and suggestions for further research were discussed.

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APPENDICES

APPENDIX A

INVENTORY OF MARITAL CONFLICTS

COURTSHIP AND MARRIAGE STUDY

INTRODUCTION TO IMC PROCEDURE

Tonight, you will be involved in a procedure centering around your joint discussion of some real cases where couples are having various types of marital conflicts. These case descriptions have been incorporated into what we call the "Inventory of Marital Conflict" or the IMC.

Let me tell you more about this inventory. After collecting information from about 2,000 couples like yourselves, we have found certain things that have frequently caused disagreements or conflicts. We have provided brief case descriptions of couples having some of these conflicts. These have been written up to form a test of your ability to resolve disagreements between spouses. Your task is to read each of these case descriptions and decide which spouse is primarily responsible for the conflict.

It is very important to us that you take this task seriously because your recommendations will be combined with others so that couples with these problems might be helped. In some cases you may have experienced the conflict yourselves. In others you may know friends who have had similar problems. In all the cases, these are serious problems for some couples.

As in any conflict situation, there are two points of view presented in these case descriptions. In some of the cases, one of you will learn about the conflict from the point of view of the husband. The other person will learn the wife's point of view regarding the same situation. In each case, however, both of you will be given the same essential facts.

It is very important that for every case you decide who is at fault in the conflict even though this might be difficult at times. You should not indicate that both are to blame or leave any question blank.

I am now going to take you to separate rooms so that you can read and evaluate these cases. After you have finished filling out the Inventory of Marital Conflict, bring these materials out to us. Later in the evening we will bring you and your spouse to a room where you can jointly discuss these case descriptions.

COURTSHIP AND MARRIAGE STUDY
INSTRUCTIONS FOR THE IHC DISCUSSION SESSION

Now we would like you to fully discuss the conflict each couple is having and decide who is primarily responsible for the problem. As was previously mentioned, in some cases the descriptions you each read represented different points of view. For example, if you and your spouse were involved in a disagreement and subsequently you each were to relay to me what happened during the conflict, it is highly probable that each of you would present different points of view regarding your marital conflict. However, please do not be distracted by such differences, for in every case each point of view contains all the essential facts, and our primary concern is how you resolve the conflict each couple is having.

In discussing these cases it is important that you use only the information provided. Also, it is important that you resolve each disagreement before going on to the next case.

Once again I want to stress the importance of this task for helping couples who are having conflicts. It is vital to our research that your answers be thoroughly discussed.

We will have a tape recorder on so that no one will have to be present in the room while you are discussing these items.

You will have about 30 minutes to discuss these cases. I will come in and remind you 5 minutes before your time is up. If you finish before that time, please bring the materials to the research assistant in the lobby.

These are your individual response sheets (GIVE TO EACH SPOUSE) to help you recall your answers to each item. However, while discussing these cases, do not show your spouse your answer sheet. You will not have the case descriptions to refer to, so do the best you can remembering the details of the cases.

This is the sheet (JOINT DISCUSSION FORM) for recording your joint answers (GIVE TO HUSBAND). The brief sentence for each item should help you recall the cases. As you can see, on Part A you must decide which spouse is primarily responsible for the problem and on Part B you must choose one of the two alternatives.

On both Part A and Part B do not leave any question blank and do not answer both.

INVENTORY OF MARITAL CONFLICTS (IMC)
CASE DESCRIPTIONS

1. Bob and Frank are good friends. Janis, Bob's wife, likes Frank but is becoming increasingly annoyed with his unannounced and excessively long visits to their apartment, especially at mealtimes. She has suggested to Bob that he ask Frank to please phone before visiting, but her husband feels this would be insulting to his friend. Janis suggests that she might ask Frank to please phone before visiting, but this only makes her husband angry. After accusing his wife of interfering with his friendship, he refuses to discuss the matter further.
2. Cora doesn't really enjoy sexual relations. When she was first married she would avoid love making by telling her husband it was painful. More recently she has pretended to be tired when her husband has approached her. Now she has resorted to retiring earlier than her husband. Cora believes sex is an unpleasant subject that one does not discuss unless absolutely necessary, and she becomes furious when Jack insists they should talk about this problem.
3. When Don finally gets home from work he takes off his jacket, tie and shirt, and makes himself comfortable with a can of beer. After dinner Don has a little more energy, so he goes back and puts away the various articles of clothing he has taken off. One day Francine tells Don he is sloppy and lazy and demands that he not leave clothes lying around, even for a short period of time. Two days later, Don forgets to do as his wife had demanded, and she angrily repeats her complaint. An argument develops.
4. Nina has been looking for a pair of shoes to wear with her favorite dress. Upon finding a pair of shoes on sale, Nina just cannot resist and purchases them. Later that evening she shows her new purchase to Peter. He remembers that she already has many pairs of shoes and asks about the necessity of such a purchase at this time. Nina becomes outraged and accuses him of being cheap and inconsiderate.
5. Mark and Elaine have both been working since their marriage in order to live at a level which they feel to be comfortable. Occasionally, Elaine becomes depressed because she wants to have a child but knows that on Mark's salary alone this would be extremely difficult. Elaine's emotions get the best of her and she accuses Mark of not being aggressive enough, implying that he is an inadequate provider. Mark was advised not to go to college because of scholastic difficulties and has done as well as could reasonably be expected, but his wife continually compares him unfavorably to his college-educated friends. Mark's self-esteem is injured and an argument begins.
6. A conflict has arisen between Jack and Colleen following a party with friends. During the party, Jack talked to another woman, resulting in his wife becoming very angry. Following the party, Colleen angrily accuses Jack of intentionally ignoring her for the entire evening and becomes argumentative.
7. Betty and Phil have been having marital difficulties for the past year. One of the problems has been Betty's extravagance. Now Betty insists on immediately seeking costly professional counseling. Phil points out that there simply is no money to pay for such an expensive venture until they can cut down their expenses some place else. Betty will not hear of waiting until money is available, and many arguments arise in the weeks to come.
8. Jim routinely arrives home from work at 5:00 PM and enjoys his dinner soon after his arrival. Susan has been a full-time housewife since the birth of their first child one year ago but still leaves her domestic chores undone. Jim has asked Susan if she would have the house clean and dinner prepared when he returns home. Upon arriving home, Jim again finds the looming board with a pile of clothes in the living room, a dining table that has not been set, and his wife sitting on the sofa reading a magazine. Upon viewing the situation Jim appears discouraged, whereupon Susan accuses him of always finding fault with her and angrily storms into the kitchen.
9. It's Friday evening, and the Carter family have a dinner engagement, which had been made the previous week. Frank comes home a half hour early so he can be sure to be ready on time. He showers, shaves and is dressed and ready to leave on time. But when it is time to go, Mary is still in the bathroom combing her hair and putting on makeup. Since Mary almost always makes them late this way, Frank becomes upset. Mary retorts that she isn't very concerned about being late since they always get where they are going sooner or later.
10. Linda and Steve plan to take a weekend trip by car. While Linda is driving Steve to work on Friday morning, Steve hears a "pinging" noise and realizes that the spark plugs should be changed along with other minor adjustments. Since they plan to leave Friday evening and Steve has to work, he has to ask his wife to take the car to the garage. Linda complains about the other preparations she says she has to make for them and their two children but says she will have time to take the car to the garage, and agrees to do so. Later on the trip, Steve hears the "pinging" noise and realizes the spark plugs have not been changed. It turns out that Linda took the car to the garage but did not bother to mention the spark plugs. Linda says that if Steve doesn't like the way she does things he can do them himself. Steve points out that he was unable to take the car to the garage and that when she agrees to do something she should do it.
11. When Charlotte and Richard were living with Charlotte's family, a lot of ill will developed between Richard and his in-laws. Charlotte told her parents just about everything that happened, and when Richard told her to stop, his mother-in-law said she was hurt and told Charlotte to keep Richard in his place. Richard and Charlotte now have their own home, but the situation continues. Richard will rarely visit his in-laws, but whenever he is not around Charlotte is on the phone with her mother, passing on information and receiving advice. When Richard tells Charlotte again that she should stop telling things to her mother, Charlotte becomes enraged.

Please Continue on Reverse Side

12. Each night Larry promises Judy that he will throw the garbage out after they finish dinner. Invariably, Larry forgets and leaves the kitchen without doing what he has promised. Judy has felt that the best thing to do is to throw the garbage away by herself and has been doing this later in the evening. When he notices this, Larry becomes angry with Judy, stating that this is his job. As Larry continues to follow his old habits, Judy begins to do the chore herself, only to be angrily criticized by her husband.
13. At parties that Bob and Nancy attend, Nancy spends most of her time with the men present and obviously enjoys being with them. Bob is very concerned and has tried to tell Nancy that her behavior is interpreted as flirtatious and could lead to a romantic involvement with another man. Nancy denies this, but Bob knows from his own experience that this type of thing does frequently happen and feels that she is being inconsiderate of his feelings by not giving up this behavior.
14. When Jerry comes home from work in the evening he is tired and likes to relax over a pleasant meal. After dinner he prefers to be alone with his wife. However, Betty does not understand Jerry's unwillingness to go out after a hard day's work, and she is after him to go out partying in the evenings. She tells Jerry he is a lazy do-nothing.
15. Dick and Diane have been married for three years. Dick likes his job and is anxious to get ahead. For the past year he has been voluntarily spending a great deal of extra time at his work. Diane has repeatedly accused Dick of caring more about his job than he cares for her. Dick explains that his career is important to both of them and that it is necessary for him to work additional hours if he expects to get promoted. Diane refuses to listen to Dick's explanations and unreasonably demands that he substantially cut down his hours of over-time work.
16. Tom is very concerned about his wife's smoking habits. Betty is a very heavy smoker and has a severe cough. Although Tom used to be a heavy smoker himself, he has now quit completely, so he is convinced that Betty could at least cut down. He has told her in detail about the health hazards involved in smoking and he has asked her to stop or at least cut down, if not for herself then because of her love for him. Betty's usual reaction has been to get sarcastic. She says she is trying but doesn't change. As a result there has been a series of arguments.
17. Chuck is a football fan who likes to watch the pro games on Sunday afternoons. His wife Betty is upset at this, so she plans a series of activities for them together on Sundays and tells him he will have to give up the football games. Chuck feels that this is an unreasonable demand. He points out that he works all week and should be entitled to a couple of hours of relaxation watching TV on Sunday. He reminds her that she watches many hours of soap operas during the week when he is at work. Chuck also reminds Betty that the other wives they know do not get so upset just because their husbands watch football. Betty, however, continues to be annoyed and insists that he stop watching games.
18. John has been out of college for three years and is able to provide a modest but adequate income for himself and his wife, Jean. They have been planning a vacation, which Jean has been enthusiastically anticipating. John has always been a stereo enthusiast and presently feels that he wants to improve his stereo by buying new speakers. If John proceeds with his plan, the vacation they have planned would be impossible. John states that he is the breadwinner in the family and deserves a luxury. He insists that as the man in the family, he should make the decision.

INVENTORY OF MARITAL CONFLICTS (IMC)
CASE DESCRIPTIONS

1. Rob and Frank are good friends. Janis, Rob's wife, likes Frank but is becoming increasingly annoyed with his unannounced and excessively long visits to their apartment, usually at mealtimes. She has suggested to Rob that he ask Frank to please phone before visiting, but her husband feels this would be insulting to his friend. Janis suggests that she might ask Frank to please phone before visiting, but this only makes her husband angry. After accusing his wife of interfering with his friendship, he refuses to discuss the matter further.
2. Cora doesn't really enjoy sexual relations. When she was first married she would avoid love making by telling her husband it was painful. More recently she has pretended to be tired when her husband has approached her. Now she has resorted to retiring earlier than her husband. Cora believes sex is an unpleasant subject that one does not discuss unless absolutely necessary, and she becomes furious when Jack insists they should talk about this problem.
3. When Don finally arrives home from work he immediately sits down and makes himself comfortable with a can of beer and scatters his jacket, tie and shoes on the furniture and/or floor, where they stay until some time after dinner. After putting up with this sloppiness for a while, Francine asks Don to stop tossing his clothes around the apartment, even if he does eventually pick them up. Two days later, Don repeats his usual performance as if Francine had said nothing. When she mentions it again, an argument develops.
4. Nina has been shopping around carefully for some time to find a pair of shoes she can afford that will go with her favorite dress. She finally finds a satisfactory pair of shoes and is happy to discover that they are on sale. She purchases the shoes and takes them home to show her husband, Peter. He does not care whether or not the shoes are satisfactory. He doubts that they are necessary at all and fails to understand their importance to her or how much trouble she has gone to in order to save money.
5. Mark and Elaine have both been working since their marriage in order to live at a level which they feel to be comfortable. Occasionally, Elaine becomes depressed because she wants to have a child but knows that on Mark's salary alone this would be extremely difficult. Elaine's emotions get the best of her, and she accuses Mark of not being aggressive enough, implying that he is an inadequate provider. Mark was advised not to go to college because of scholastic difficulties and has done as well as could reasonably be expected, but his wife continually compares him unfavorably to his college-educated friends. Mark's self esteem is injured and an argument begins.
6. A conflict has arisen between Jack and Colleen following a party with friends. During the party, Jack becomes involved with another woman and ignores his wife. Colleen feels hurt and attempts to discuss her feelings of being neglected but feels like she is not understood.
7. Betty and Phil have been having marital difficulties for the past year. Betty is no longer reassured by having her husband minimize her unhappiness and wants to seek professional counseling. Phil, on the other hand, insists on holding off indefinitely before spending money on counseling. He says she is far too extravagant. In the weeks to come, many arguments arise because of their differing opinions.
8. Jim routinely arrives home from work at 5:00 PM and enjoys his dinner soon after his arrival. Susan has been a full-time housewife since the birth of their first child one year ago but still leaves her domestic chores undone. Jim has asked Susan if she would have the house clean and dinner prepared when he returns home. Upon arriving home, Jim again finds the ironing board with a pile of clothes in the living room, a dining table that has not been set, and his wife sitting on the sofa reading a magazine. Upon viewing the situation Jim appears discouraged, whereupon Susan accuses him of always finding fault with her and angrily storms into the kitchen.
9. It's Friday evening, and the Carter family has a dinner engagement, which had been made the previous week. Frank surprises his wife by getting home from work a half hour early and uses the bathroom continuously until it is almost time to leave. Since it takes Mary more than the few minutes Frank has left her to wash, comb her hair, and put on her makeup, it becomes obvious that they will be late for their appointment. Frank raises his voice and accuses her of always making them late. Mary tries to calm Frank down by saying that being a little late is not all that serious, but Frank just becomes more enraged and an argument develops.
10. Linda and Steve plan to take a weekend trip by car. While Linda is driving Steve to work on Friday morning, Steve decides that the spark plugs need changing and that other minor adjustments should be made. He tells his wife to get the work done in time for them to leave that evening. Linda also has all the other preparations to manage for them and their two children but she manages to get the car to the garage and asks for a tuneup. On the trip, Steve hears a "pinging" noise, discovers that the spark plugs are the same ones he had been using, and blames his wife for the spark plugs not being changed. Linda feels that if he is going to be so picky about how things are going to be done, he should assume some responsibility for doing them himself. Steve tells her he was too busy.
11. When Charlotte and Richard were living with Charlotte's family, a lot of ill will developed between Richard and his in-laws. Richard told his wife to stop talking so much with members of her family. When Charlotte's mother found out how Richard felt, she was hurt and said she thought Richard was out of place to make such a demand. Richard and Charlotte now have their own home but the situation continues. Richard will rarely visit his in-laws, so Charlotte's only regular contact with them is by phone. Charlotte usually speaks only to her mother and only phones her mother when her husband is not around, but Richard is still not satisfied. Richard insists that Charlotte stop speaking with her mother.

Please Continue on Reverse Side

12. Each night Larry promises Judy that he will throw the garbage out after they finish dinner. Invariably, Larry forgets and leaves the kitchen without doing what he has promised. Judy has felt that the best thing to do is to throw the garbage away by herself and has been doing this later in the evening. When he notices this, Larry becomes angry with Judy, stating that this is his job. As Larry continues to follow his old habits, Judy begins to do the chore herself, only to be angrily criticized by her husband.
13. At parties Nancy prefers the company of men to the other women and spends much of the evening with them because she finds them intellectually stimulating and shares many of their interests. Nancy finds at parties that the women's conversations are limited to housekeeping, children, etc. Nancy is upset by Bob's accusations that her behavior may lead to involvement in an affair or, at the very least, misinterpretation of her behavior by other people, which would cause gossip. She is deeply hurt by his lack of trust since she is a devoted wife and would not consider an involvement with another man.
14. Jerry regularly comes home from work, eats, and sits down in front of the television screen for the entire evening. Betty is cramped up in the house all day and feels that she will go crazy if she can't get out and have some sort of contact with other human beings. Jerry refuses to go out and so there is a disagreement between Betty and Jerry.
15. Dick and Diane have been married for three years. Dick likes his job and is anxious to get ahead. For the past year he has been voluntarily spending a great deal of time at his work. Diane feels that their marital relationship is deteriorating due to the lack of time they are able to spend together. She attempts to explain to Dick that financial success will be meaningless if their marriage is destroyed in the process. Dick coolly tells his wife that her response is so immature that it is pointless to discuss the subject further.
16. Tom claims to be worried about Betty's health because she smokes so much and has a cough. He gives her endless detailed lectures about health hazards and is always demanding that she stop or cut down. Betty realizes that she smokes too much and is trying to cut down, but Tom's continued badgering is no help. Tom apparently feels that because he stopped smoking without any difficulty, everybody else should quit too and should have no trouble doing so. He seems unable to understand that it is difficult for her to change her smoking habits and he says that if she really loved him she would quit. Betty has tried to control herself and not get angry at Tom's continuous comments, but Tom goes right on lecturing to her and eventually there are a series of arguments.
17. Chuck is an ardent sport fan who spends every Sunday afternoon glued to the television screen watching football. His wife Betty is getting tired of being left by herself every Sunday, so she asks him to give up this part of his football watching and plan some Sunday activities for them together. Chuck not only refuses to give up any football, but he launches into a whole series of arguments to defend himself. He tells Betty that no one else's wife is as unreasonable as she is. He accuses her of spending her time watching soap operas while he is at work. He also tells her that since he works hard he should be able to watch football games if he wishes. Betty is upset by his attitude but continues to want him to spend Sunday with her.
18. John has been out of college for three years and is able to provide a modest but adequate income for himself and his wife, Jean. They have been planning a vacation, which Jean has been enthusiastically anticipating. John has always been a stereo enthusiast and presently feels that he wants to improve his stereo by buying new speakers. If John proceeds with his plan, the vacation they have planned would be impossible. John states that he is the breadwinner in the family and deserves a luxury. He insists that as the man in the family, he should make the decision.

COURTSHIP AND MARRIAGE STUDY INVENTORY OF MARITAL CONFLICTS (IMC) ANSWER SHEET	NAME _____	
	DATE _____	COUPLE NO _____
	SEX: <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	

INSTRUCTIONS: Please read each case description and answer questions a, b, c and d for each case.
 Check the appropriate box in each column and **do not leave any questions unanswered.**

Item No.	(a) Who is primarily responsible for the problem?		(b) Have you had a similar problem?		(c) Have you known other couples who have similar problems?		(d)
	Check One		Check One		Check One		
	HUSBAND	WIFE	YES	NO	YES	NO	
1							Should Bob ask Frank to phone before visiting? <input type="checkbox"/> Yes <input type="checkbox"/> No
2							Is Cora being reasonable in refusing to discuss their sexual problems? <input type="checkbox"/> Yes <input type="checkbox"/> No
3							Should Don be able to relax this way before dinner? <input type="checkbox"/> Yes <input type="checkbox"/> No
4							Is it reasonable for Peter to question the necessity of Nina's purchase? <input type="checkbox"/> Yes <input type="checkbox"/> No
5							Is Elaine justified in accusing Mark of being an inadequate provider? <input type="checkbox"/> Yes <input type="checkbox"/> No
6							Should Jack be permitted to talk to another woman at a party without Collen becoming upset? <input type="checkbox"/> Yes <input type="checkbox"/> No
7							Is Phil justified in worrying about starting counseling without being able to afford it? <input type="checkbox"/> Yes <input type="checkbox"/> No
8							Should Susan be reading a magazine when her household duties are not completed and dinner is not prepared? <input type="checkbox"/> Yes <input type="checkbox"/> No
9							Should Mary make a greater effort to be ready on time? <input type="checkbox"/> Yes <input type="checkbox"/> No
10							Should Linda thoroughly carry out her responsibilities once she has accepted them? <input type="checkbox"/> Yes <input type="checkbox"/> No
11							Is Richard justified in becoming upset with Charlotte discussing matters with her mother? <input type="checkbox"/> Yes <input type="checkbox"/> No
12							Is Larry neglecting his responsibilities by not carrying out the garbage? <input type="checkbox"/> Yes <input type="checkbox"/> No
13							Should Nancy realize that her behavior can be interpreted by other men as flirtatious and could unintentionally lead to further involvements? <input type="checkbox"/> Yes <input type="checkbox"/> No
14							After working hard all day should Jerry be allowed to spend a quiet evening at home with his wife? <input type="checkbox"/> Yes <input type="checkbox"/> No
15							Should Dick continue to devote the time that he knows is necessary to obtain advancement in his career? <input type="checkbox"/> Yes <input type="checkbox"/> No
16							Should Tom feel he has the right to concern himself with his wife's health? <input type="checkbox"/> Yes <input type="checkbox"/> No
17							Should Chuck be able to watch football on Sunday afternoon? <input type="checkbox"/> Yes <input type="checkbox"/> No
18							Is it John's prerogative to decide how the family money will be spent? <input type="checkbox"/> Yes <input type="checkbox"/> No

PLEASE MAKE SURE YOU HAVE ANSWERED ALL THE QUESTIONS AND HAVE CHECKED ONE ANSWER IN EACH COLUMN.
 When you have completed this answer sheet, return this and the case descriptions to the research assistant in the lobby before completing the other material.

COURTSHIP AND MARRIAGE STUDY INVENTORY OF MARITAL CONFLICTS (IMC) ANSWER SHEET	NAME _____ DATE _____ SEX: <input type="checkbox"/> Male <input type="checkbox"/> Female
COUPLE NO _____	

INSTRUCTIONS: Please read each case description and answer questions a, b, c and d for each case. Check the appropriate box in each column and *do not leave any questions unanswered.*

Item No.	(a) Who is primarily responsible for the problem?		(b) Have you had a similar problem?		(c) Have you known other couples who have similar problems?		(d)
	Check One		Check One		Check One		
	HUSBAND	WIFE	YES	NO	YES	NO	
1							Should Bob ask Frank to phone before visiting? <input type="checkbox"/> Yes <input type="checkbox"/> No
2							Is Cora being reasonable in refusing to discuss their sexual problems? <input type="checkbox"/> Yes <input type="checkbox"/> No
3							Should Don be more considerate of Francine by not scattering his clothes around? <input type="checkbox"/> Yes <input type="checkbox"/> No
4							Should Peter try to understand Nina's well-planned purchase of these particular shoes? <input type="checkbox"/> Yes <input type="checkbox"/> No
5							Is Elaine justified in accusing Mark of being an inadequate provider? <input type="checkbox"/> Yes <input type="checkbox"/> No
6							Should Jack be more attentive to his wife at parties? <input type="checkbox"/> Yes <input type="checkbox"/> No
7							Is Betty justified in feeling that their marriage is more important than any financial considerations? <input type="checkbox"/> Yes <input type="checkbox"/> No
8							Should Susan be reading a magazine when her household duties are not completed and dinner is not prepared? <input type="checkbox"/> Yes <input type="checkbox"/> No
9							Should John have a greater understanding of why she is late? <input type="checkbox"/> Yes <input type="checkbox"/> No
10							Is Steve being unreasonable in blaming his wife for the work not getting done? <input type="checkbox"/> Yes <input type="checkbox"/> No
11							Should Charlotte be able to speak freely with her mother? <input type="checkbox"/> Yes <input type="checkbox"/> No
12							Is Larry neglecting his responsibilities by not carrying out the garbage? <input type="checkbox"/> Yes <input type="checkbox"/> No
13							Should Bob trust his wife and not be upset that she is enjoying the company of other men? <input type="checkbox"/> Yes <input type="checkbox"/> No
14							Should Jerry understand and respond to Betty's boredom by going out in the evening? <input type="checkbox"/> Yes <input type="checkbox"/> No
15							Should Dick spend more time with his wife? <input type="checkbox"/> Yes <input type="checkbox"/> No
16							Should Tom leave Betty alone and quit pressuring her? <input type="checkbox"/> Yes <input type="checkbox"/> No
17							Should Chuck spend more time on Sundays with his wife? <input type="checkbox"/> Yes <input type="checkbox"/> No
18							Is it John's prerogative to decide how the family money will be spent? <input type="checkbox"/> Yes <input type="checkbox"/> No

PLEASE MAKE SURE YOU HAVE ANSWERED ALL THE QUESTIONS AND HAVE CHECKED ONE ANSWER IN EACH COLUMN. When you have completed this answer sheet, return this and the case descriptions to the research assistant in the lobby before completing the other material.

COURTSHIP AND MARRIAGE STUDY		NAME	
INVENTORY OF MARITAL CONFLICT (IMC)		DATE	COUPLE NO.
JOINT DISCUSSION		DISCUSSION: START _____ FINISH _____	
INSTRUCTIONS: It is very important that for EACH case you decide which spouse, either the husband or wife, is primarily responsible for the problem. You should make ONE response for both PART A and PART B. Do not leave any questions unanswered. Complete each case before going on to the next item.			
Case	PART A		PART B
	Who is primarily responsible for the problem?		Which of the following would be a better way to resolve the conflict?
	Check One		Check Only One
	Husband	Wife	
1. Conflict over frequent visits by husband's friend and wife's annoyance.			<input type="checkbox"/> Should Bob ask Frank to phone before visiting? OR <input type="checkbox"/> Should Janis stop interfering in her husband's friendship?
2. Conflict regarding satisfaction during sexual relations.			<input type="checkbox"/> Is Cora being reasonable in refusing to discuss the problem of sex? OR <input type="checkbox"/> Is Jack justified in suggesting they discuss the problem of sex?
3. Conflict concerning husband's distributing his shirt, tie, jacket and shoes around the apartment when he gets home from work.			<input type="checkbox"/> Should Don be able to relax this way before dinner? OR <input type="checkbox"/> Should Don be more considerate of Francine by not scattering his clothes around?
4. Conflict about wife's purchase of a pair of shoes to wear with new dress.			<input type="checkbox"/> Is it reasonable for Peter to question the necessity of Nina's purchase? OR <input type="checkbox"/> Should Peter try to understand Nina's well-planned purchase of these particular shoes?
5. Conflict between Mark and Elaine stemming from their desire to have a child but recognizing the financial burden.			<input type="checkbox"/> Is Elaine justified in accusing Mark of being an inadequate provider? OR <input type="checkbox"/> Should Elaine be more understanding concerning Mark's ability and achievements?
6. Conflict caused by wife feeling ignored by husband while at a party.			<input type="checkbox"/> Should Jack be permitted to talk to another woman at a party without Colleen becoming upset? OR <input type="checkbox"/> Should Jack be more attentive to his wife at parties?
7. Conflict over when to seek professional help for the marital difficulties between Betty and Phil.			<input type="checkbox"/> Is Phil justified in worrying about starting counseling without being able to afford it? OR <input type="checkbox"/> Is Betty justified in feeling that their marriage is more important than any financial considerations?
8. Conflict concerning wife's inability to have house clean and dinner ready upon husband's arrival.			<input type="checkbox"/> Should Susan be reading a magazine when her household duties are not completed and dinner is not prepared? OR <input type="checkbox"/> Should Susan try to be a better housekeeper?
9. Conflict over wife's lateness for dinner engagement.			<input type="checkbox"/> Should Mary make a greater effort to be ready on time? OR <input type="checkbox"/> Should John have a greater understanding of why she is late?
10. Conflict over car breakdown while taking a short weekend trip.			<input type="checkbox"/> Should Linda thoroughly carry out her responsibilities once she has accepted them? OR <input type="checkbox"/> Is Steve being unreasonable in blaming his wife for the work not getting done?

JOINT DISCUSSION - (Continued)

Case	PART A		PART B
	Who is primarily responsible for the problem?		Which of the following would be a better way to resolve the conflict?
	Check One		Check Only One
	Husband	Wife	
11. Conflict over wife's conversations with her mother.			<input type="checkbox"/> Is Richard justified in becoming upset with Charlotte discussing matters with her mother? OR <input type="checkbox"/> Should Charlotte be able to speak freely with her mother?
12. Conflict about the responsibility for throwing the garbage away.			<input type="checkbox"/> Is Larry neglecting his responsibility by not carrying out the garbage? OR <input type="checkbox"/> Is Judy expecting too much by asking her husband to carry out the garbage?
13. Conflict over wife's conversations with men at parties.			<input type="checkbox"/> Should Nancy realize that her behavior can be interpreted by other men as flirtatious and could unintentionally lead to further involvements OR <input type="checkbox"/> Should Bob trust his wife and not be upset that she is enjoying the company of other men?
14. Conflict regarding evening entertainment.			<input type="checkbox"/> After working hard all day should Jerry be allowed to spend a quiet evening at home with his wife? OR <input type="checkbox"/> Should Jerry understand and respond to Betty's boredom by going out in the evening?
15. Conflict over husband spending time at the office.			<input type="checkbox"/> Should Dick continue to devote the time that he knows is necessary to obtain advancement in his career? OR <input type="checkbox"/> Should Dick spend more time with his wife?
16. Conflict over wife's smoking.			<input type="checkbox"/> Should Tom feel he has the right to concern himself with his wife's health? OR <input type="checkbox"/> Should Tom leave Betty alone and quit pressuring her?
17. Conflict over TV football games.			<input type="checkbox"/> Should Chuck be able to watch football on Sunday afternoons? OR <input type="checkbox"/> Should Chuck spend more time on Sundays with his wife?
18. Conflict of vacation vs. stereo speakers.			<input type="checkbox"/> Is it John's prerogative to decide how the family money will be spent? OR <input type="checkbox"/> Should financial expenditures be a joint decision?

PLEASE TAKE A MINUTE TO RECHECK YOUR ANSWERS ON EACH QUESTION.
YOU SHOULD HAVE ONE CHECK FOR PART A AND ONE CHECK FOR PART B.
AFTER RECHECKING YOUR RESPONSES, RETURN THIS FORM TO A RESEARCH
ASSISTANT IN THE LOBBY.

IMC - POST DISCUSSION

Date _____ Couple Number _____

Name _____ Male () Female ()

Check one:

1. How much did you enjoy discussing these cases?
 - ☐ very enjoyable
 - ☐ somewhat enjoyable
 - ☐ slightly enjoyable
 - ☐ not enjoyable
2. How personally involved did you feel in discussing the cases which were somewhat relevant or similar to your life versus those not relevant?

<u>Relevant to you</u>	<u>Not relevant to you</u>
<input type="checkbox"/> very involved	<input type="checkbox"/> very involved
<input type="checkbox"/> somewhat involved	<input type="checkbox"/> somewhat involved
<input type="checkbox"/> slightly involved	<input type="checkbox"/> slightly involved
<input type="checkbox"/> not involved	<input type="checkbox"/> not involved
3. Did you feel the cases described situations that are real problems for families?
 - ☐ all seemed real
 - ☐ most seemed real
 - ☐ some seemed real
 - ☐ few seemed real
 - ☐ none seemed real
4. How satisfied were you about the final decisions that were made in these cases?
 - ☐ very satisfied
 - ☐ somewhat satisfied
 - ☐ slightly satisfied
 - ☐ not satisfied
5. Did your spouse react pretty much as you expected he/she would in resolving your differences?
 - ☐ very similar to usual
 - ☐ somewhat similar
 - ☐ slightly similar
 - ☐ not very similar
6. Did you feel that this technique is useful (helpful) for a couple to participate in?
 - ☐ very useful
 - ☐ somewhat useful
 - ☐ slightly useful
 - ☐ not very useful

(Please answer questions on back of page)

7. What do you think was the major purpose of your discussing these cases?

8. Feel free to add any other comments about the general procedure.

Revised IMC Coding System^aInter-Rater and Split-Half Reliabilities

I. ASSERTIVE ACTS

A. <u>Information</u>			<u>%</u>	<u>Inter-Rater</u>	<u>Split-Half</u>
Requests Information or Opinion				<u>Reliability</u>	<u>Reliability</u>
<u>H</u>	<u>W</u>				
01	51	Content Question	1.9	82 ^b	66 ^b
02	52	Outcome Question	3.4	80	72
<u>Gives Information</u>					
03	53	Content Information	15.5	91	78
05	55	Reads	11.6	98	92
B. <u>Opinion</u>					
<u>Gives Opinion</u>					
10	60	Rhetorical Questions	2.1	68	74
11	61	Partisan Opinion	8.2	76	62
12	62	General Opinion	7.1	73	78
<u>Self Disclosure</u>					
14	64	Part A	4.7	96	74
15	65	Part B	4.7	94	73
C. <u>Suggestions</u>					
16	66	Rational Suggestion	1.7	85	76

II. SUPPORTIVE ACTS

A. <u>Positive</u>					
<u>Agreement</u>					
21	71	Outcome Agreement	8.0	94	70
22	72	Process Agreement	2.5	74	70
B. <u>Negative</u>					
<u>Disagreement</u>					
33	83	Disapproval of Spouse	.4	66	70
C. <u>Ambiguous</u>					
35	85	Laughter	5.0	95	86

III. STRUCTURAL ACTS

41	91	Initiation	5.1	98	92
45	95	Relevancy	4.3	96	78
49	99	Noise	.4	73	60
		Total Number of Statements		89	77
		Total Percentage	86.6 ^c		
		Mean Reliability		86	75

-2-

FOOTNOTES

- a) The following categories have been dropped because of insufficient number of responses or inadequate inter-rater or split-half reliability. They are categories: 04-54 General Information; 13-63 Reiteration; 17-67 Irrational Choice; 23-73 Approval of Spouse; 24-74 Self Assurance; 31-81 Outcome Disagreement; 32-82 Process Disagreement; 34-84 Self Doubt; 42-92 Procedural Comments; 43-93 Item Structure Analysis; 44-94 Role Specification; 48-98 Uncoded Statements.
- b) The data reported on the IMC are based on data collected from 64 couples and the codings were done by two independent raters. There was a total of 16,125 statements from these 64 couples which were coded for this analysis. Decimal points have been omitted from all the reliability data and numbers have been rounded to the nearest whole number. The husband and wife reliability scores have been combined and averaged for each code.
- c) The Percentage does not add up to 100% because several variables are not included in the analysis (re: Footnote a).

IFC CODING SYSTEMI. Process Statements

- 01 Initiation
- 02 Topic Change
- 03 Focus
- 04 Laughter
- 08 Uncoded Statements
- 09 Noise (Overlap)

II. Assertive StatementsQuestions

- 11 Outcome Questions
- 12 Content Questions
- 13 Procedural Questions
- 14 Rhetorical Questions
- 15 General Questions

Information

- 21 Reads
- 22 Content Information
- 23 Procedural Information
- 25 General Information
- 26 Relevancy Information

Opinions

- 31 Self Disclosure
- 33 Procedural Opinions
- 34 Partisan Opinions
- 35 General Opinions
- 36 Relevancy Opinions
- 37 Role Specification Opinions

Suggestions

- 41 Outcome Suggestions
- 43 Procedural Suggestions
- 44 Reiteration
- 45 General Suggestions & Commands

III. Supportive StatementsPositive

- 51 Outcome Agreement
- 52 Process Agreement
- 53 Approval of Others
- 54 Approval of Self

Negative

- 61 Outcome Disagreement
- 62 Process Disagreement
- 63 Disapproval of Others
- 64 Disapproval of Self

APPENDIX B

ALCOHOLISM LIFE ASSESSMENT QUESTIONNAIRE

CATC 73

ALCOHOLISM LIFE ASSESSMENT QUESTIONNAIRE

Respondent _____ DATE _____

Please circle the number of only one item for each question.

1. What has been your drinking pattern in the last three months?
 1. Have not drunk at all.
 2. Occasional light drinking.
 3. Light or moderate drinking one or two days a week.
 4. Heavy drinking several times (one or two slips).
 5. Heavy drinking one or two times a week.
 6. Heavy drinking almost every day or evening.
 7. Heavy drinking for a time, and then dry for a time (binge drinking).
2. Describe the kinds and amount of alcoholic beverages you have drunk in the last three months:

3. What is your drinking pattern right now?
 1. Do not drink at all.
 2. Occasional light drinking.
 3. Light or moderate drinking one or two days a week.
 4. Heavy drinking several times (one or two slips recently).
 5. Heavy drinking one or two times a week.
 6. Heavy drinking almost every day or evening.
 7. Heavy drinking for a time and then dry for a time (binge drinking).
4. How long ago did you last take a drink?

1. Zero - two weeks	2. Three - five weeks	3. Six - eight weeks
4. Nine - eleven weeks	5. Twelve - fourteen weeks	
5. What has been your longest period without a drink in the last three months?

1. Zero - two weeks	2. Three - five weeks	3. Six - eight weeks
4. Nine - eleven weeks	5. Twelve - fourteen weeks	

page 2

6. Have you received any kind of treatment at CATC in the last three months?

1. Yes Describe _____
2. No

7. Have you received treatment for alcoholism anywhere other than CATC in the last three months?

1. Yes Place _____
Length of treatment _____
Kind of treatment _____

8. Have you received help for emotional problems other than drinking in the last three months?

1. Yes Describe _____
2. No

9. Does your drinking now interfere with your performance of your responsibilities to yourself or others (such as job attendance, family responsibilities)?

1. Yes
2. No

10. Would you like assistance with your drinking problem at this time?

1. Yes
2. No

11. Would you like assistance with any other personal problem at this time?

1. Yes Describe _____
2. No

12. Have you been arrested for drunkenness in the last three months?

1. Yes Number of times _____
2. No

page 3

13. Describe you spouses drinking in the last three months (how much and how often):
-

14. Describe the drinking of others you live with (how much and how often):
-

15. Describe your use of drugs other than alcohol that change your mood in the last three montas (how much and how often):
-

16. How long ago did you last use drugs other than alcohol to change your mood?

- | | | |
|------------------------|----------------------------|----------------------|
| 1. Zero - two weeks | 2. Three - five weeks | 3. Six - eight weeks |
| 4. Nine - eleven weeks | 5. Twelve - fourteen weeks | |

17. What drugs other than alcohol have you used in the last three months?
-

18. If working, how long have you been employed on your present job?

- | | | |
|-----------------|-----------------------------|---------------|
| 1. Not working | 2. One month | 3. Two months |
| 4. Three months | 5. Longer than three months | |

19. In the past three months, how many hours did you spend on the job per week?

- | | | |
|-------------------------|--------------------------|--------------------------|
| 1. Zero - ten hours | 2. Ten - twenty hours | 3. Twenty - thirty hours |
| 4. Thirty - forty hours | 5. More than forty hours | |

20. If working, how would you describe your adjustment in your job?

1. Unable to adjust to job and must quit, or did quit.
2. Not good, but able to get by.
3. As good as most workers.
4. Very good.

page 4

21. What has been the source of your income in the past three months?

- | | |
|-----------------------------|------------------------------|
| 1. Wages, salary, tips | 2. Unemployment compensation |
| 3. Social Security benefits | 4. Pension |
| 5. Family and friends | 6. Welfare |
| 7. Investments and interest | 8. Other _____ |

22. What has been your personal income per month during the past three months?

- | | |
|---------------------------|-----------------------|
| 1. Less than \$250/month | 2. \$250 - 500/month |
| 3. \$500 - 750/month | 4. \$750 - 1000/month |
| 5. More than \$1000/month | |

23. What has been your employment pattern in the last three months?

1. Never employed
2. Day labor only
3. Sometimes employed other than day labor
4. Employed regularly, not at day labor

24. Do you have a telephone at your residence?

1. Yes
2. No

25. How would you describe your overall health?

- | | | | |
|---------|---------|---------|----------------------------|
| 1. Poor | 2. Fair | 3. Good | 4. Better than most people |
|---------|---------|---------|----------------------------|

26. When you become angry, what do you do?

1. Hold it in
2. Tell others you are angry
3. Lose your temper and become violent

page 5

27. Are you generally anxious and tense?

1. Yes
2. No

28. Do you find yourself extremely nervous around people?

1. Yes
2. No

29. In the past three months have you found yourself becoming depressed?

- | | |
|-------------------------|---------------------|
| 1. Never | 2. Several times |
| 3. Once or twice a week | 4. About once a day |
| 5. All the time | |

30. In the past three months have you found yourself feeling guilty?

- | | |
|-------------------------|---------------------|
| 1. Never | 2. Several times |
| 3. Once or twice a week | 4. About once a day |
| 5. All the time | |

31. In the past three months have you found yourself feeling resentful?

- | | |
|-------------------------|---------------------|
| 1. Never | 2. Several times |
| 3. Once or twice a week | 4. About once a day |
| 5. All the time | |

32. In the past three months have you found yourself feeling lonely?

- | | |
|-------------------------|---------------------|
| 1. Never | 2. Several times |
| 3. Once or twice a week | 4. About once a day |
| 5. All the time | |

33. How do you feel about yourself now (how satisfied are you with how your life is going)?

- | | | | |
|--------|---------|---------|--------------|
| 1. Bad | 2. Fair | 3. Good | 4. Very good |
|--------|---------|---------|--------------|

page 6

34. Are you satisfied that you are doing the things that you would expect a man to do? (or woman, for women)
1. Yes 2. No
35. With whom do you talk about personal problems (mark the one you talk to most)?
1. Spouse 2. Parents 3. Children 4. Friend
5. AA person 6. Clergyman 7. Other _____
8. No one
36. Is it easy for you to talk about your personal problems with this person?
1. Yes 2. No 3. Does not apply (if answered "no one" above)
37. How would you describe your relationship with old drinking friends?
1. Bad 2. Fair 3. Good 4. Very good
38. How would you describe your relationship with other friends?
1. Bad 2. Fair 3. Good 4. Very good
39. How would you describe your relationship with your spouse during the last three months?
1. Bad 2. Fair 3. Good 4. Very good
5. No contact
40. How would you describe your relationship with your spouse now?
1. Bad 2. Fair 3. Good 4. Very good
5. No contact
41. How would you describe your relationship with your children during the last three months?
1. Bad 2. Fair 3. Good 4. Very good
5. No contact 6. I have no children

page 7

42. How would you describe your relationship with your children now?

1. Bad
2. Fair
3. Good
4. Very good
5. No contact
6. I have no children

43. What are your present living arrangements?

1. Living with spouse
2. Living with family other than spouse
3. Living with friends
4. Living in apartment
5. Living in hotel
6. Living in halfway house
7. Other _____

44. Do you attend any social groups or clubs other than A.A.?

1. Yes Describe _____
2. No

45. How often do you attend A.A. at present?

1. More than once a week
2. About once a week
3. About two or three times a month
4. About once a month
5. I do not attend

46. How often does your spouse (or you if you are the alcoholic's spouse) attend Al-Anon meetings?

1. More than once a week
2. About once a week
3. About two or three times a month
4. About once a month
5. Does not attend

APPENDIX C

SOCIAL READJUSTMENT RATING SCALE

Name _____ Date _____

Please circle the number of Life Crisis Units for each of the following events that have happened to you in the last two years.

Life Event		Life Crisis Units
1	Death of spouse	100
2	Divorce	73
3	Marital separation	65
4	Jail term	63
5	Death of close family member.....	63
6	Personal injury of illness	53
7	Marriage	50
8	Fired at work	47
9	Marital reconciliation	45
10	Retirement	45
11	Change in health of family member	44
12	Pregnancy	40
13	Sex difficulties	39
14	Gain of new family member	39
15	Business readjustment	39
16	Change in financial state	38
17	Death of close friend	37
18	Change to different line of work	36
19	Change in number of arguments with spouse	35

20	Mortgage over \$10,000	31
21	Foreclosure of mortgage or loan	30
22	Change in responsibilities at work	29
23	Son or daughter leaving home	29
24	Trouble with in-laws	29
25	Outstanding personal achievement	28
26	Wife begins or stops work	26
27	Begin or end school	26
28	Change in living conditions	25
29	Revision of personal habits	24
30	Trouble with boss	23
31	Change in work hours or conditions	20
32	Change in residence	20
33	Change in school	20
34	Change in recreation	19
35	Change in church activities	19
36	Change in social activities	18
37	Mortgage or loan less than \$10,000	17
38	Change in sleeping habits	16
39	Change in number of family get-togethers..	15
40	Change in eating habits	15
41	Vacation	13
42	Christmas	12
43	Minor violations of the law	11

Social Readjustment Rating Scale Norms

Score	Prediction
0 - 150	No Significant Problems
150 - 199	33% Chance of Illness
200 - 299	50% Chance of Illness
300 or Over	80% Chance of Illness

Pt. # _____

APPENDIX D
TREATMENT RECORD

Group Therapy _____

Married Person's Group _____

Readmission Group _____

Individual Counseling Sessions _____

A.A. Meetings _____

Admission date _____

Discharge date _____

Days in treatment _____

Joint session (Husband, wife, and counselor): date _____

APPENDIX E
DISCHARGE RATING

Please rate each of the following for: _____
Patient

Patient's acceptance of alcoholism as a disease and motivation to maintain sobriety:

1 Very Good 2 Good 3 Fair 4 Poor

Patient's involvement in treatment:

1 Very Good 2 Good 3 Fair 4 Poor

Definite plans for housing, job, A.A.:

1 Very Good 2 Good 3 Fair 4 Poor

Resources such as family and friends who will help the patient to maintain sobriety:

1 Very Good 2 Good 3 Fair 4 Poor

Plans for followup treatment as outpatient:

1 Very Good 2 Good 3 Fair 4 Poor

Based on the areas rated above, I rate the patient's chances of maintaining his/her sobriety during the three months following discharge as:

1 Very Good 2 Good 3 Fair 4 Poor

Rater's name _____ Date _____

Rater is: 1 Patient 2 Spouse 3 Counselor

APPENDIX F

ADDITIONAL TABLES

Table 17-A

Descriptive Information for Subjects

Variable	Minimum	Maximum	Mean	Standard Deviation
<u>Historical Variables</u>				
Age, Husband	25.0	65.0	39.9	11.9
Age, Wife	21.0	64.0	39.3	11.5
Years Married	1.0	41.0	13.5	11.4
Age Married, Husband	17.0	48.0	26.4	8.8
Age Married, Wife	16.0	45.0	25.7	9.1
Children	0.0	9.0	2.9	2.4
Education, Husband	4.0	14.0	10.8	2.1
Education, Wife	5.0	14.0	11.4	2.0
Siblings, Husband	0.0	21.0	4.3	4.4
Length of Marital Separation ^b	0.0	50.0	3.5	9.6
<u>Variables Derived From Measures</u>				
Life Stress, Husband ^a	126.0	636.0	331.5	134.6
Life Stress, Wife	0.0	673.0	252.8	151.3
Win Score, Husband	0.0	9.0	3.8	2.2
Win Score, Wife	0.0	8.0	4.6	2.3
Deadlocks in Discussion	0.0	1.0	0.2	0.4

N = 29 except a where N = 28

^bMonths of marital separation, before admission

APPENDIX F

Table 18-A

Descriptive Categories for Subjects

Variable	Status	<u>N</u>	Per Cent
Marital Status	Married	25	86
	Common-Law	4	14
Employment, Husband	Employed	14	48
	Unemployed	15	52
Employment, Wife	Employed	16	55
	Homemakers	13	45
Type of Employment, Husband (past or present)	Labor	20	69
	Trade	7	24
	Own Business	1	3
	Professional	1	3
Type of Employment Wife (past or present)	Labor	22	76
	Trade	3	10
	Never Employed	4	14
Residence Arrangement	Own Home	10	35
	Rent	14	48
	Live with Family	5	17
Birthplace, Husband	Illinois	12	41
	Other States	17	59
Loss of Parent in Childhood, Husband	Lost Parent	16	55
	No Loss	13	45
Race of Couple	Black	20	69
	White	9	31
Alcoholic in Hus- band's Family	No Alcoholics	16	64
	Parent or Sib	9	36
Husband Married Previously	Never	20	69
	Once	8	28
	Three Times	1	3

APPENDIX F

Table 18-A (Continued)

Variable	Status	<u>N</u>	Per Cent
Husband Treated for Alcoholism Previously	Never	15	52
	Once	10	35
	Twice	3	10
	Four Times	1	3
Prognosis at Discharge, Husband	Very Good	19	66
	Good	7	24
	No Response	3	10
Prognosis at Dis- charge, Wife	Very Good	17	59
	Good	5	17
	Fair	4	14
	Poor	1	3
	No Response	2	7
Prognosis at Dis- charge, Counselor	Very Good	3	10
	Good	18	62
	Fair	5	17
	Poor	1	3
	No Response	2	7

APPENDIX F

Table 19-A

Treatment Experiences for Subjects

	Minimum	Maximum	Mean	Standard Deviation
<u>Inpatient</u>				
Group Therapy Sessions	6.0	20.0	15.3	3.6
Married Men's Group	0.0	4.0	1.0	1.3
Re-Admission Group	0.0	5.0	0.5	1.4
Individual Counseling Sessions	0.0	4.0	1.6	1.0
A.A. Meetings	8.0	27.0	17.3	4.4
Days in Center	16.0	49.0	34.1	7.4
Days Between Admission and Tape Recording	6.0	15.0	10.8	2.6
Days Between Tape Recording and Dis- charge	1.0	37.0	23.3	8.1
Conjoint Marital Therapy Sessions	0.0	1.0	0.2	0.4
<u>Outpatient</u>				
Outpatient Therapy and A.A. Meetings at Center attended by Husband	0.0	12.0	3.2	3.4
Total A.A. Meetings Attended by Husband (including those at Center, reported by Husband)	0.0	18.0	6	
Total A.A. Meetings Attended by Husband (including those at Center, reported by Wife)	0.0	18.0	4	

APPENDIX G

Formulas for Derivation of Factor Scores
for Factors II, III, IV, and V

$$\text{Factor II Score} = (01\text{-W} \times .1236) + (31\text{-H} \times .7199) + \\ (44\text{-H} \times .3428) + (61\text{-W} \times .6955)^a$$

$$\text{Factor III Score} = (01\text{-W} \times .4825) + (11\text{-W} \times .5715) + \\ (63\text{-W} \times .5104)^a$$

$$\text{Factor IV Score} = (09\text{-H} \times .5598) + (09\text{-W} \times .4801) + \\ (22\text{-W} \times .1334) - (63\text{-W} \times .1154) - \\ (63\text{-H} \times .1053)^a$$

$$\text{Factor V Score} = (52\text{-H} \times .1538) - (13\text{-H} \times .2622) + \\ (SL\text{-W} \times .6587)^a$$

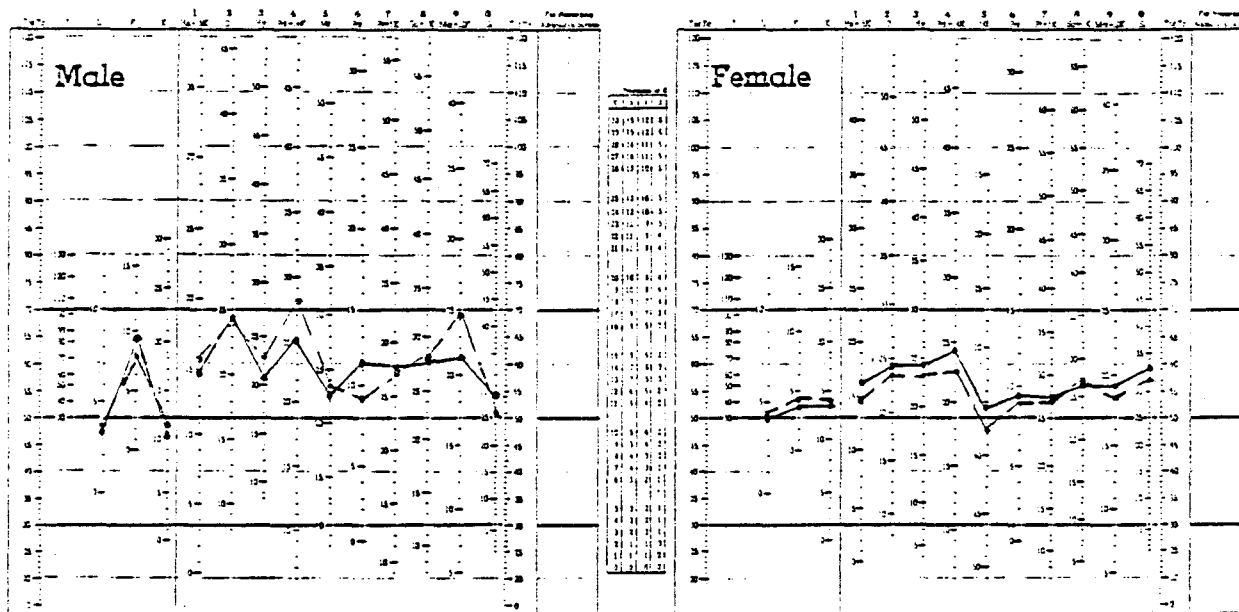
^awhere two digit number is the variable Z-Score,
W represents Wife, H represents Husband, and the decimal
is the square of the Factor loading.

The Minnesota Multiphasic Personality Inventory

Starke R. Hathaway and J. Chamley McKinley

NOTE IF ANSWER SHEET ON THE REVERSE IS TO BE MACHINE SCORED, DO NOT MAKE ANY MARKS ON THIS SIDE UNTIL AFTER IT HAS BEEN SCORED. NOTE

Name Factor I Scores-- Low Age Sex Date Tested
 Address Factor I Scores-- High Occupation
 Education Marital Status Referred by



Raw Score
 K to be added
 Raw Score with K

Raw Score
 K to be added
 Raw Score with K

Signature Scorer's Initials Date

MMPI Profiles

APPENDIX H

The Minnesota Multiphasic Personality Inventory

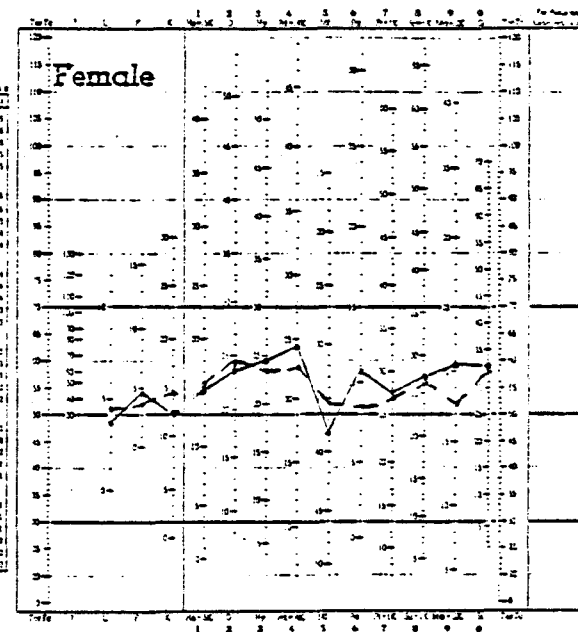
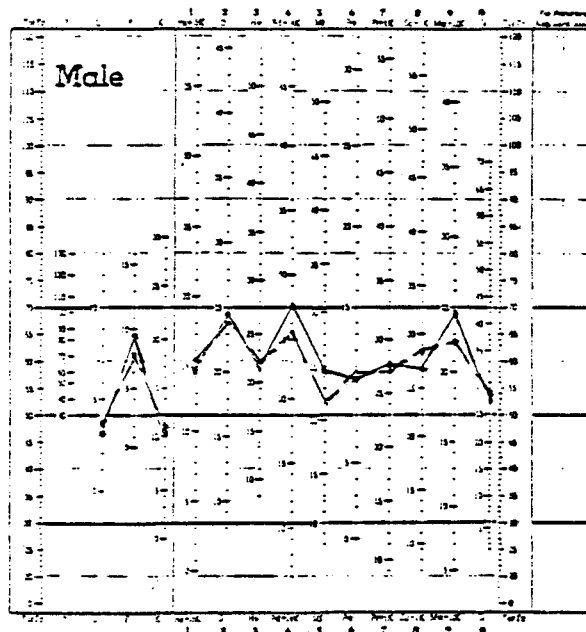
Starke R. Hathaway and J. Chanley McKinley

NOTE IF ANSWER SHEET ON THE REVERSE IS TO BE MACHINE SCORED, DO NOT MAKE ANY MARKS ON THIS SIDE UNTIL AFTER IT HAS BEEN SCORED. **NOTE**

Name Factor III Scores--Low Age Sex Date Tested

Address Factor III Scores--High Occupation

Education Marital Status Referred by



Signature Scorer's Initials Date

APPENDIX I

RESEARCH VOLUNTEER AGREEMENT

I volunteer to take part in the research project conducted by Mr. Patrick Shields at Chicago's Alcoholic Treatment Center. I give the researcher permission to contact my wife (or husband) and request her (his) participation in the research. I understand that my participation will include filling out questionnaires, taking a personality inventory, and a short discussion with my spouse which will be tape recorded.

I give the researcher permission to examine my medical records. I understand that all information obtained in this study will be confidential and will be given to no one other than CATC treatment staff (treatment staff will be given information only when this does not interfere with the research) without my written permission.

I understand that the researcher will contact me three months and six months after discharge from CATC to ask about how I have benefited from treatment. I give the researcher permission to request this information from my family or other agencies if I cannot be reached directly.

I understand that the purpose of this study is to learn more about alcoholism and the family. I understand that a decision not to take part in this research will not affect my involvement in other activities at Chicago's Alcoholic Treatment Center. I understand that I may withdraw from the project at any time without prejudice.

Date _____ Signature _____

APPROVAL SHEET

The dissertation submitted by Patrick E. Shields has been read and approved by the following committee:

Dr. Patricia M. Barger, Director
Professor, Psychology, Loyola
Director Loyola Child Guidance Center

Dr. Jeanne M. Foley
Professor, Psychology, and Dean,
College of Arts and Sciences, Loyola

Dr. Frank J. Kobler
Professor and Director of Clinical
Training, Psychology, Loyola

Dr. Roderick W. Pugh
Professor, Psychology, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

18 May 1976
Date

Patricia M Barger, PhD
Director's Signature