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**SHORT-TERM REHABILITATION FOR
PERSONS CONVICTED OF DRIVING
WHILE INTOXICATED**

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Final Report**

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16. Abstract The objectives of the project were to develop a classification system for assessing persons convicted of driving while intoxicated, identify short-term rehabilitation (STR) objectives for these people, review available treatment programs, and make recommendations of programs which can be used to help DWIs reach STR objectives. A classification system was designed which included assessment of the client's adaptability to inner conflict/stress, assessment of the forces affecting the client regarding drinking from his sociocultural environment, and the severity of the client's problem with alcohol. Using the classification system, a set of STR objectives are identified for a client. These objectives represent desirable changes in the client's behavior and the impact of his sociocultural environment. STR programs are recommended which should help a DWI to reach these objectives. These programs include some elements of treatment modalities which have been shown to be effective and appear relevant for use with DWIs. Research, development, and evaluation needs for continued work in this area are described.					
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9.1

METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

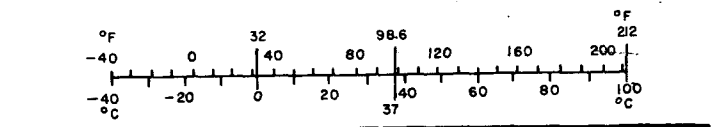
Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
AREA				
in ²	square inches	6.5	square centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	square kilometers	km ²
	acres	0.4	hectares	ha
MASS (weight)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
VOLUME				
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft ³	cubic feet	0.03	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

*1 in = 2.54 (exact). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price \$2.25, SD Catalog No. C13.10:286.



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.5	acres	
MASS (weight)				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (exact)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



TECHNICAL SUMMARY

The project began in response to a need for effective short-term rehabilitation (STR) programs for persons convicted of driving while intoxicated. The objective of such programs is to reduce the possible future occurrence of drinking and driving. The need for STR programs emerged from acknowledgement of the major role which alcohol abuse plays in accidents and crashes, especially those resulting in fatalities and major injury, and recognition of the DWI conviction as a means of identifying various types of potential-problem-drinkers and problem-drinkers. As increasing numbers of people were being convicted of DWI, currently available diagnostic, referral and reeducation/rehabilitation procedures were not considered adequate.

The Classification System

A classification system was developed which incorporates information about the client in terms of three variables. The client's individual characteristics are assessed through the Adaptability Factor. This variable measures the client's ability to adapt to the inner conflicts and stresses of life. The range of adaptive and maladaptive behavior which the client uses in response to inner conflict and stress is examined in the context of the client's actual use of these behaviors.

The second variable is called the Sociocultural Factor. Researchers have established the fact that sociological and anthropological factors affect a person's drinking pattern. This information has not been previously incorporated into diagnostic methods. The Sociocultural Factor measures the nature of forces from the client's reference groups, subculture, culture, and family of origin regarding acceptable and unacceptable drinking behavior.

The third variable measures the client's Severity of the Problem with alcohol. That is, it assesses the specific ways in which alcohol consumption interferes with the life functioning of the client. A variety of possible types of interference is examined, including interference with economic functioning, social and familial functioning, psychological and physical health, religious and citizen functioning.

Through assessment of the client on these three variables, the specific short-term treatment needs for the client can be determined. Such needs reflect the desirable changes which the

client would have to demonstrate to indicate an improved status on any or all of the three variables in the classification system.

Determining STR Objectives

The classification system is a diagnostic procedure for identifying STR objectives. Short-term objectives identify desirable changes in the client's functioning and behavior during the six to twelve months following the diagnosis. The particular objectives may encompass the client's necessary changes to reduce the likelihood of future problems due to drinking or they may articulate the necessary initial steps to helping the client seek long-term treatment for an alcohol problem.

Review of Available STR Programs

A survey of currently available reeducation/rehabilitation programs was conducted to determine their effectiveness in accomplishing each of the possible STR objectives and relevance for use with persons convicted of DWI. Although there is a paucity of information on the effectiveness of available programs, certain programs appeared to have potential effectiveness and relevance for such people. Several multimodality programs were reviewed which demonstrated the possibility of conducting STR programs in working toward a set of STR objectives. Recommendations were made for integrated STR programs which would work toward sets of objectives for which no program currently available appeared appropriate.

Developing a Diagnostic Instrument

At the conclusion of this report, work has begun on the development and field testing of a diagnostic instrument which translates the classification system into a usable diagnostic and referral tool.

PREFACE

This project represents the beginning of a new approach to working with DWIs. It is a start on the way to developing more effective and more appropriate education/rehabilitation programs for persons convicted of driving while intoxicated.

This report reflects work done in the first stage of the project. Currently, a diagnostic instrument for facilitating classification of DWIs and referral to education/rehabilitation is being developed and field tested.

The quality of this report and work on the project was made possible by the encouragement, criticism, and guidance of many people. In particular, Mr. George McDonald (the Contract Technical Manager), Dr. James Nichols, and Dr. John Eberhard of the staff of NHTSA provided this help. Many professionals provided commentary and criticism through their reviews of various aspects of work on the project. The final report is a significantly better product as a result of their inputs.

Mr. James A. Burruss and Mr. Jeremy Cobb performed many functions as staff members in the project. They were a sounding board for ideas, the backbone of the literature search, and a continual source of encouragement. The design for the STR programs offered in Section V was developed in a joint effort by Mr. Burruss, Mr. Cobb, and the author.

The material covered in this project pertains to men and women. Throughout the text of this report, the masculine pronoun is used to refer to DWIs and treatment staff. The use of the masculine pronoun is merely a grammatical technique to facilitate the reading of the report.

SHORT-TERM REHABILITATION FOR PERSONS
CONVICTED OF DRIVING WHILE INTOXICATED

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SECTION ONE:
OBJECTIVES AND INTRODUCTION

Objectives

In response to the needs of the courts, of traffic safety programs around the United States, and of treatment facilities, a project was initiated to investigate the effectiveness and appropriateness of various short-term rehabilitation (STR) approaches for persons convicted of driving while intoxicated. The objectives of this project were to:

- (a) Describe a DWI/Drinker Type Classification System;
- (b) List STR objectives which represent the most appropriate, desirable changes for DWIs in preventing future drinking and driving hazards;
- (c) Document and critique available STR approaches, commenting on their effectiveness and probable relevance to DWIs;
- (d) Make recommendations as to which available STR approaches respond to the various STR objectives listed;
- (e) Suggest new approaches for those objectives for which there appears nothing currently available; and
- (f) List and prioritize the research, development and evaluation needs for the continued improvement and development of STR approaches for DWIs.

An Emerging Need

In 1904, an editorial in the Quarterly Journal of Inebriety (volume 26, pages 308-309) noted the need for steps to be taken to insure the safety of citizens from the dangers of intoxicated drivers of "automobile wagons." During the past ten years, the National Highway Traffic Safety Administration (NHTSA) has made efforts to reduce the hazards posed by intoxicated drivers on our highways. Advances have been made, mostly through local Alcohol Safety Action Projects (ASAPs), in the identification, arrest, and adjudication of persons driving while intoxicated.

After a person has been arrested for driving while intoxicated, the local agencies of government face a

challenging problem: How do we handle this person so that he will not drink and drive in this dangerous manner in the future? Early attempts to respond to this challenge were developed in terms of monetary fines, penal sentences, license revocation and probation. Next came the era of the Alcohol-Driver Safety School, such as the Phoenix School (Stewart and Malfetti, 1971). Attempts to change the behavior of a person convicted of driving while intoxicated were focused on educational inputs. These projects assumed that supplying the individual with information about alcohol consumption and driving behavior would provide an impetus for the person to make more appropriate decisions regarding drinking and driving.

As the ASAP program of NHTSA got under way, a number of new attempts were begun to change the DWIs behavior, referred to as rehabilitation countermeasures. The particular countermeasures chosen, utilized, and evaluated varied from ASAP site to site. Legislative changes in penal sentences, license suspensions and revocations, monetary fines, and periods of probation were tried. Approaches in the rehabilitation area consisted of Alcohol-Driver Safety Schools, alcohol problem diagnosis, referral to intensive diagnostic sessions, referral to different forms of treatment for drinking problems, and the use of group methods for rehabilitation programs conducted during the DWI's period of probation. Different methods for diagnosis of the severity of alcohol problems were also tried, including pre-sentence investigation, the Mortimer-Filkins Interview/Questionnaire, the MAST (Michigan Alcoholism Screening Test), and extensive interviews with counselors, diagnosticians, probation officers, and case managers.

The concept of short-term approaches to rehabilitation emerged from several observations. First, it was noted that arrest and conviction for driving while intoxicated appeared to be a catchment device for identifying persons with alcohol problems. Rather than waiting for referrals from sources such as private physicians, spouses, friends, or relatives, which have been the primary source of referrals (Hoff, 1974), certain people who had a current problem with alcohol or appeared to have a potential problem with alcohol could be identified and forced to examine their drinking behavior by the courts. Although not all DWIs could be considered alcoholics, many people with alcohol problems were being exposed to diagnostic and rehabilitation programs which would otherwise have been undiscovered. The driving record of persons identified as having an alcohol problem contained significantly higher rates of convictions for DWI, reckless driving, other moving violations, and total number of collisions than a comparable group of persons who were not identified as having an alcohol problem (Seixas and Hopson, 1973).

If persons convicted of driving while intoxicated could be exposed to effective rehabilitation programs, the probability of these people being a danger on the highways in the near or distant future would be reduced. For example, a person convicted of driving while intoxicated might be currently having occasional problems due to drinking, and unless helped to change aspects of his behavior and social environment, it is probable that he would be involved in more frequent and more serious problems due to drinking in the next ten years. The increase in frequency and intensity of these problems would suggest an increase in the likelihood of driving while intoxicated.

Second, it was noted that current diagnostic procedures were leaving a large number of DWIs unclassified. That is, they were neither classified as Social Drinkers (first offense and no observable indications of a drinking problem) nor Problem Drinkers (prior record of alcohol-related offenses, blood alcohol level at time of arrest greater than .15, or other evidence of a drinking problem). While the Social Drinker could be sent to Alcohol-Driver Safety School, and the severe Problem Drinker could be sent to treatment facilities for alcoholics, the large number of persons convicted for driving while intoxicated (those unclassified or classified as less severe Problem Drinkers) did not seem appropriately assigned to either of those countermeasures.

An adequate diagnostic system should focus on a DWI's adaptability to the conflicts and stresses in his life (Barten, 1971; Glatt, 1974). This diagnostic process should assess the specific needs of the DWI in improving his repertoire of adaptive behavior. At the same time, it is necessary to assess the impact of the DWI's microsocial environment (i.e., family and reference groups) and macro-social environment (i.e., subculture and culture) on his drinking behavior (Cull and Hardy, 1974). Cahalan and Room (1974) concluded that it was essential to consider individual characteristics and environmental factors when assessing the nature of a person's problems due to drinking.

Third, it was noted that as increasing numbers of persons were being arrested for driving while intoxicated, comprehensive treatment facilities were being overwhelmed with referrals. It can be concluded from this observation that rehabilitation programs for DWIs must be short-term in duration (fitting the rehabilitation program and follow-up into the three to 12 month probation period which is imposed on most DWIs) and be conducted with groups of clients, rather than with individuals.

Short-term rehabilitation may be more appropriate than traditional methods of long-term rehabilitation for the majority of persons convicted of driving while intoxicated. The concept of short-term rehabilitation requires viewing the rehabilitation process as one in which a primary concern is to help the client so that he can mobilize his own strengths and resources from his environment. For those clients who cannot mobilize such resources, STR objectives should provide preparation for long-term rehabilitation (Krimmel and Falkey, 1962).¹ Barten (1971) described short-term rehabilitation programs:

Brief therapy is characteristically a technique which is active, focused, goal-oriented, circumscribed, warmly supportive, action-oriented, and concerned with present adaptation. (page 9)

The effectiveness of short-term rehabilitation would depend on the capability of the diagnostic and assignment procedures to place clients into programs that respond to their specific needs. The design of such programs must be goal-oriented, i.e., based on specific treatment objectives (Sifneos, 1967; Barten, 1971; Hoff, 1974). Diagnosis and assignment to programs based on specific short-term rehabilitation objectives for each client provides the client, staff, and policy makers with a framework within which to evaluate the effectiveness of the countermeasure programs.

The use of groups is indicated for therapeutic and economic reasons. More clients can be exposed to therapeutic activities in group treatment programs than in programs for individuals. Group treatment settings allow a client to explore change, growth and adaptability in the context of a set of interpersonal relationships. Since the dynamics of the lives of people with alcohol abuse problems, or potential alcohol abuse problems, are affected by a system of multiple interpersonal relationships, the group provides a therapeutic setting in which to work on new orientations and new behaviors (Durkin, 1975; Glatt, 1974; Scott, 1973; Steiner, 1971). Goby et al. (1974) found that patients and staff of an alcoholism inpatient facility independently ranked small group counseling sessions as the most helpful of the ten components in their program. A group treatment setting may also arouse less anxiety in clients and arouse less antagonism toward authority than individual treatment activities.

¹Short-term rehabilitation may also be appropriate for use in numerous outpatient programs which are evolving with the implementation of new identification procedures, such as public inebriate programs.

Fourth, assignment to education/rehabilitation programs following a conviction for driving while intoxicated is non-voluntary. In some cases the courts offer a choice of penal and monetary sanctions or participation in such programs. Although these options constitute a legal choice, they do not seem options of equal value for most people. Programs to which DWIs are assigned must be designed and chosen with due consideration to the legal and ethical implications of such assignment. Compulsory attendance in rehabilitation activities has been shown to be an effective vehicle for helping alcohol abusers decrease their quantity of alcohol consumption and decrease behaviors related to alcohol abuse as compared to voluntary participation in such activities (Gallant et al., 1968; Rosenberg and Liftik, 1976). With such evidence, the conclusion that the courts are helping individual citizens and protecting the society around such people by requiring participation in rehabilitation programs is more than conjecture. The nature of activities in the nonvoluntary rehabilitation programs must be carefully designed to protect the privacy and volition of the client with regard to his degree of participation while requiring his attendance and exposure to these activities.

The Structure of STR Programs

The observations underlying the need for STR programs for DWIs suggest a number of implications. Short-term rehabilitation programs for DWIs should be developed around a set of specific change objectives. They should involve group treatment of clients. The duration of STR programs should fit within three to six months, including follow-up sessions. They should be conducted on an outpatient basis, so as not to conflict with the work and life demands of the clients. Staff of treatment agencies who do not have a great deal of formal training should be able to conduct these programs, possibly with minimal amounts of additional training. Due to the nonvoluntary nature of the assignment of clients, the programs should not include any drug treatment or other methods which may affect the client's conscious ability to determine his actions in the future, unless such activities are available to clients in a truly voluntary capacity.

The intent of the STR programs for DWIs who have a serious problem due to drinking (i.e., a dependence on alcohol) is to help them into long term treatment. The intent for DWIs with some problems related to alcohol but without a dependence on alcohol is to help them change their orientation to life and their behaviors so as to mobilize their own internal strengths and resources from their environment. The intent of STR programs for DWIs with no observable problems with

alcohol other than the conviction for driving while intoxicated is to prepare them to resist and reduce the probability of behaviors related to alcohol abuse (such as drinking and driving) in the future.²

Organization of the Report

Selection Two of the report describes the three variables included in the proposed classification system. Section Three is a presentation of 12 basic STR objectives and the process of using the classification system in determining which objectives are appropriate for a DWI. Section Four is a review of available treatment approaches which may fit into the STR programs which may be effective and relevant for DWIs assessed through the classification system. Section Six is a brief statement of research, development and evaluation needs for the continuation of work in the area of STR for DWIs.

²Throughout this report, statements about "behaviors related to alcohol abuse" will be assumed to include drinking and driving.

SECTION TWO:
THE DWI/DRINKER TYPE CLASSIFICATION SYSTEM

The purpose of the classification system is to aid the ASAP or court staff in appropriately assessing the DWI's current status with regard to those factors which affect alcohol use and abuse, especially drinking and driving. Once this status is determined, the most appropriate and desirable changes can be identified. These changes become the short-term rehabilitation objectives for a particular DWI. Such objectives may vary from increasing the DWI's knowledge about the effects of alcohol on the human body to referral to an alcohol treatment center for needed long-term rehabilitation. The classification system is, therefore, a mechanism for identifying appropriate STR objectives for the DWI.

Assessment and classification of DWIs is a complex task. For example, contrary to some beliefs, DWIs are not all alcoholics. In one study, when DWIs referred to an alcohol treatment center and DWIs not referred to the center were compared with the center's clients who were not ASAP referred, a number of significant differences were reported (Towle et al., 1974). That report presented data which revealed that, compared with the alcohol treatment center's other clients, the DWI clients: were younger, included more males, included more members of minority groups, included more veterans, less often lived alone, had spent less time living in the community, were more often in the labor force currently (in professional, managerial, and laboring jobs), worked more days, had higher income, had fewer years of heavy alcohol consumption, had fewer hospitalizations or prior treatment for alcohol problems, drank less (in terms of quantity and frequency measures), showed less impairment, and had higher self-esteem.

The report also presented data on DWIs not referred to treatment center which showed that on the whole, they were less impaired, worked more, and had higher self-esteem than the treatment center's clients who were not DWIs (Towle et al., 1974). As a group, DWIs then do not appear similar to alcoholics who are clients of treatment centers. This does not preclude the possibility that some DWIs are alcoholics.

Past classification efforts for problem drinkers have primarily focused on identification of alcoholics. Such approaches clearly do not address the DWI population.

Classification systems used by ASAPs appear to aid in the differentiation of several classes of drinker problems (Human Factors Laboratory Report, 1974), but even this does not seem adequate for the assessment and classification needs of the ASAP. For example, the Human Factors Laboratory Report (1974) reported that the Idaho ASAP in the previous year had classified 841 (33.9%) DWIs as problem drinkers and 279 (11.2%) DWIs as unidentified. The DWIs in the unidentified category were difficult to assign to an education or rehabilitation program or to refer to another agency because of inadequate information from this classification system. DWIs classified in the same group are usually assigned to relatively similar programs in most ASAPs. It is not clear that all DWIs in the problem drinker category would be helped through the same programs, nor that all the nonproblem drinkers would be helped by the same program.

ASAPs vary in their classification systems. Hennepin County ASAP (1975) has a system in which 12% of their DWIs were classified as social drinkers, 35% of their DWIs were classified as problem nonalcoholic drinkers, 51% of their DWIs were classified as problem alcoholic drinkers, and only 2% were unclassified. The Hennepin County system allows for somewhat more specific assignment; but even this system requires additional information prior to appropriate assignment to education or rehabilitation programs or referral to other agencies.

Some ASAP sites use the Mortimer-Filkins Test to aid in classification of DWIs. The test makes some useful distinctions which aid in the classification process (Filkins et al., 1974). The distinctions it makes do not appear useful in classifying and assigning the large portion of the DWI population who are not social drinkers or alcoholics to education or rehabilitation programs or to other agencies. There is another problem inherent in the methodology of the test. Test results are a score on a single, continuous scale. Without further clarification, such a scale assumes a linear progression of nature or degree of problem with alcohol along a continuum (Kerlan et al., 1971; Filkins et al., 1974). As the following sections will demonstrate, categories of DWI/Drinker Types do not appear to be located along a linear continuum of one dimension, but rather break into clearly different and distinct categories.

The need is clear. A classification system for DWI/Drinker Types must be developed which makes distinctions among DWIs as to the nature and degree of the problem related to alcohol consumption, as well as distinctions which will aid in the selection of appropriate short-term rehabilitation objectives and assignment to appropriate short-term rehabilitation programs.

Overview of the System

The proposed DWI/Drinker Type Classification system is composed of three variables: the Adaptability Factor, the Sociocultural Factor, and the Severity of the Problem Scale. The Adaptability Factor is a measure of the individual's adaptability to the inner conflict and stress which he experiences in life. It can be obtained through a questionnaire/interview concerning the individual's current life activities. The Sociocultural Factor is a measure of the forces affecting the individual from his social environment which encourage, discourage, or permit specific drinking behavior. This factor provides a cultural context within which to interpret the client's specific drinking behavior. It can be obtained through a questionnaire/interview concerning the individual's demographic characteristics, reference groups, subculture, culture and family of origin. The Severity of the Problem Scale is a measure of the degree to which alcohol consumption, and resulting behavior, interfere with the life functioning of the individual or others. It can also be obtained through a method of assessing the individual's current life activities.

The Adaptability Factor provides an assessment of the individual's adaptability in terms of his ability to be aware of conflict and stress, to choose among various behaviors, and to utilize a variety of functionally adaptive behaviors to resolve the inner conflicts and stress of life experiences. In providing this assessment, it also indicates the degree of the individual's potential vulnerability to forces in his environment and his potential for self-corrective behavior.

The Sociocultural Factor provides an assessment of the individual's social context, specifically with regard to drinking behavior. The individual's social context gives meaning to his behavior and indicates the consequences of his behavior. This variable focuses on the social context with respect to drinking behavior. Assessment of this variable will indicate whether the individual is in a social environment which: (a) encourages controlled use of alcohol, and emphasizes a reduction in incidents of alcohol abuse while making explicit the negative consequences of transgressing these norms; or (b) encourages events calling for heavy use of alcohol, and supports behavior related to alcohol abuse, such as drinking and driving; or (c) provides contradictory encouragement and discouragement of drinking and related behavior. The nature of the individual's social environment will affect his drinking behavior. An individual in an environment which provides ambiguous forces or encouragement for episodes of heavy alcohol use and supports other behavior related to alcohol abuse is potentially more vulnerable to positive inducements to drink and drive than an individual

in an environment which encourages controlled drinking and discourages the demonstration of behavior related to alcohol abuse.

The Severity of the Problem Scale provides an assessment of the current degree of the individual's problem with alcohol. This variable is not independent of the Adaptability Factor. It focuses on the individual's drinking behavior and assesses the consequences in the individual's life, where alcohol consumption may be one of the functionally adaptive responses or maladaptive responses used by the individual.

Assessing the DWI on the Adaptability and Sociocultural Factors suggests aspects of the individual's behavior or social environment which need to change if he is to reduce the probability of behavior related to alcohol abuse. Assessing his level on the Severity of the Problem Scale suggests the level of intensity of the STR approaches necessary to work toward the desired changes, as well as the duration and intensity of the recommended STR follow-up.

Adaptability Factor

Definition of the Variable

The Adaptability Factor is one of the independent variables in the classification system. The intent of this variable is to examine aspects of the person which relate to his degree of adjustment and adaptability in life. This is an attempt to determine the individual's level of inner strength and vulnerability, which has also been termed his level of maturity or ego development. A person's maturity, or ego development, determines the nature and pattern of behavior demonstrated. Through assessment of the individual on the Adaptability Factor, those specific aspects of his behavior, values, attitudes, and cognitive-affective processes which have inhibited or blocked his continued growth can be identified as targets for rehabilitation efforts.

This variable measures characteristics of the individual. Individual characteristics can be used to make distinctions between people who do not drink and those who drink (Jones, 1968, 1971), those who drink and those who have alcohol-related problems (Jessor and Jessor, 1972; Pelz and Schuman, 1973); those with alcohol-related problems and alcoholics (Towle et al., 1974), and within groups of alcoholics (Horn and Wanberg, 1970; Hamlin et al., 1974). The importance of individual characteristics in research

related to alcohol use and abuse has been demonstrated over the years.

The Adaptability Factor indicates the individual's adaptability to the inner conflict and stress which he experiences in life. A person may be classified in one of three possible categories on this variable: [A] using a variety of behaviors which are functionally adaptive; [B] frequently using only specific, limited behaviors as an attempted adaptive response; or [C] using behaviors which are maladaptive.

In Category A of the Adaptability Factor, the person is using a variety of behaviors which are functionally adaptive in response to inner conflict and/or stress. The person is able to choose appropriate behaviors among potential alternatives with only occasional exceptions. This implies that the person is aware of various behaviors which would resolve the conflict or ease the stress and is aware of the arousal of the inner conflict or stress.

In Category B of the Adaptability Factor, the person is frequently using only specific, limited behaviors as an attempted adaptive response to the exclusion of alternative behaviors. This may result from three possible sources. First, the person may be frequently unable to choose appropriate behavior among a variety of potential alternatives in responding to inner conflicts and/or stress. Second, the person may only be aware of a limited number of behaviors which would resolve the conflict or ease the stress. In this case, the person may be able to choose appropriate behavior from his repertoire. Due to the limited number of behaviors in the repertoire, the behaviors chosen may not be particularly adaptive. Third, the person may have decided that the specific, limited behavior is an appropriate choice for the general types of conflict and/or stress which he experiences in life. Whatever the source of the use of limited behavior, the person may or may not be aware of the arousal of the inner conflict or stress.

In Category C of the Adaptability Factor, the person is using behaviors which are maladaptive in response to his inner conflict and/or stress. The person is unable to choose appropriate behavior among potential alternatives in responding to inner conflict and/or stress. This could result from either of two possibilities. One is that the person may be aware of various behaviors which would resolve the conflict or ease the stress, but is making inappropriate choices among the alternative behaviors. The other possibility is that the person is unaware of various behaviors which would resolve the conflict or ease the stress. In this case, he makes inappropriate choices as a consequence of his inadequate knowledge.

Inner conflicts are a part of natural life experiences. In many situations, people are able to resolve inner

conflicts directly. Inner conflict occurs (Miller and Swanson, 1966) when the person consciously or unconsciously experiences: (a) several needs which require different behavioral responses; (b) associations of pleasure and desirability to a response to a need while simultaneously experiencing associations of pain and avoidance to the same response; (c) a need, the satisfaction of which would violate an internalized standard or norm; (d) a need to which there seem no available responses for its satisfaction; or (e) a need to which there seem only equally unattractive responses for its satisfaction.

All behavior could be considered a direct response to an attempt to satisfy a need or "unconsciously selected substitutes or indirect expressions of needs whose direct expressions are in conflict with other needs or with moral norms" (Miller and Swanson, 1966, page 8). A person's responses to inner conflicts become organized into a pattern which affects other aspects of his behavior. In striving to maintain internal equilibrium (balancing needs and satisfactions), a person develops a set of defense mechanisms for adaptation to inner conflicts.

Miller and Swanson (1966) indicated that, "Every defense depends for its effectiveness upon the substitution of a socially acceptable alternative for the original form of the need" (page 21). The individual develops a repertoire of behavior which corresponds to his defense mechanisms of repression, projection, reaction formation, displacement, and sublimation. To establish a repertoire of effective and functional behavior, the individual must balance responses to inner conflicts emerging from his defense mechanisms with the social consequences of such behavior.

A behavioral response to an inner conflict (whether in direct satisfaction of the conflict or emanating from a defense mechanism) must help the individual function and/or grow to be considered functionally adaptive. If the behavioral response perpetuates or aggravates the inner conflict, or stimulates further problems, it must be considered maladaptive. A behavioral pattern which is predominantly maladaptive and regenerates inner conflict could be considered neurotic (Shapiro, 1965). The person with a neurotic life style may be able to function without attracting the attention of legal authorities or rehabilitation agencies, but their actions are potentially hazardous to themselves and others and can easily lead to episodes of socially harmful behavior.

The dynamics being described can be viewed from a different perspective with similar implications. Behavioral responses to inner conflict can be seen as the individual's attempt to solve a problem which he is experiencing. The human organism may respond to a variety of specific and non-specific problems through a "general adaptation syndrome" (Selye, 1956). This form of response operates through a

process of alarming the individual to stresses, or strains on the organism, alerting the need for resistance to these stresses, and initiating behavioral responses which adapt the organism to the stresses. A behavioral response which helps the organism regain equilibrium and reduce the harmful effects of the stress is considered functionally adaptive. A behavioral response which does not aid in resisting the stress is considered maladaptive (often such a response stimulates further stress). The individual's behavioral responses in attempting to adapt to the stress experienced are analogous to his attempts to solve, or resolve, the experience of inner conflicts.

Historical Perspective

The present formulation has emerged from perceived inadequacies in earlier research and theorizing. This section reviews these efforts in order to place the Adaptability Factor as presented in the context of past work. Past attempts to study the use and abuse of alcohol have focused on numerous individual characteristics. The two most popular types of variables have been drinking pattern and underlying factors. Underlying factors have referred to the individual's personality characteristics, such as self-image, motives, attitudes and values, as indicative of the causes of their particular pattern of alcohol use or abuse. Drinking pattern has referred to the individual's drinking behavior in such terms as quantity and frequency of beverage consumption and episodes of drunkenness.

Contributions from the Study of Underlying Factors

Of the various theories which have been used to explain alcoholism and/or drinking problems, the motive theory and the stress theory provide the basis for the construction of the Adaptability Factor. The motive theory contends that alcohol abuse is consciously or unconsciously chosen as a behavior to satisfy an inner need created by the sensations, perception, and interpretation of a current condition and an image of a more desirable condition. Such a conflict between a current condition and an ideal condition, when it persists over time, is usually termed a psychological disposition, need, or motive. There are four specific theories which fit into this perspective: the dependence-independence conflict theory; the power conflict theory; the guilt theory; and the ego development theory.

The dependence-independence conflict theory contends that alcohol abuse is a result of a conflict in the person's

desires for dependence and independence (McCord and McCord, 1960; Bacon, 1974; Bacon, Barry and Child, 1965). This theory has cross-cultural evidence which indicates that cultures which engender greater amounts of this conflict in their people have higher levels of alcohol abuse than others. On an individual level, the dependency conflict theory has gained support through the psychoanalytic interpretation of alcohol abuse emanating from an oral fixation which causes the adult to be preoccupied with concerns about dependency and emotional support.

The power conflict theory contends that alcohol abuse in men is a result of a conflict between a person's desires for potency, strength and control and the amount of the same which he experiences in his life (McClelland et al., 1972; Boyatzis, 1973). This theoretical perspective also has documented evidence which indicates that cultures which engender greater amounts of this conflict in their people have higher levels of alcohol abuse than others. On an individual level, the power conflict theory has gained support through the evidence linking heavy alcohol consumption to aggressive interpersonal behavior, crime, and status seeking behavior.

The guilt theory contends that a person demonstrates a dysfunctional, or "bad," behavior as a result of a poor self-image and the self-judgment that he should be punished. The individual feels that he is not competent and worthy, and acts out this perception through behavior which would cause himself and others to agree that he is not a competent and worthy person. Research on the self-concept of alcoholics has consistently shown that they rate low on measures of personality characteristics which would be considered healthy, and high on personality measures of characteristics which would be considered unhealthy (McCord and McCord, 1960; MacAndrew, 1965; Kalin, 1972).

The ego development theory contends that alcohol abuse is a behavioral substitute for resolving conflicts that occur at various stages in a person's life. The assumption is that as a person matures and passes through advancing stages of ego development, his ability to choose alternate satisfactions to felt needs increases, his ability to exercise voluntary and planned behavior increases, as does his ability to utilize past experience (Blum, 1966). When a development failure occurs, the individual becomes fixated at a particular stage of growth, or regresses to a previously outgrown stage. Psychoanalytic approaches would contend that regression to oral, anal, or phallic-oedipal stages represent the variety of events which might occur in the individual, any of which could lead to alcohol abuse (Shapiro, 1965). It is also possible, using other developmental theories such as Erikson's (1964), that regression to a stage of identity

crisis, or some other stage, may also be associated with alcohol abuse. The individual who experiences such regression loses his current adaptive responses and must rely on ego defenses learned early in life as adaptive responses.

The developmental theory may include all of the motive theories previously mentioned. For example, a person experiencing dependence-independence conflict could be regressing to the oral stage, an adolescent stage of concern with memberships in groups, or a young adult stage of concern with nuclear family formation. A person experiencing power conflict could be regressing to an anal or phallic-oedipal stage, an adolescent stage of parental separation and rebellion, or a middle-aged crisis of autonomy. A person experiencing guilt or derogatory self-image could be regressing to a phallic-oedipal stage.

The stress theory contends that alcohol use is a behavioral adaptation to stress. Alcohol abuse is an excessive, or dysfunctional adaptation. The experience of stress requires action by the organism to return itself to equilibrium. Stress can be defined as an internal condition resulting from external or self-stimulation which elicits an adaptive response. This theory assumes that as the level of stress increases, so does the use of various adaptations, as well as the degree to which any particular behavioral adaptation is used (Selye, 1956). In the latter case, alcohol abuse could result from the overuse of alcohol, which may have been an adaptive response at one point in the person's life. The level of stress can increase due to: a particular stressor (i.e., stimulus becoming more potent or more intense); an increase in the number of stressors (i.e., stress-inducing stimuli); or a reaction to a stressor which stimulates other stressors or increases the intensity of a particular stressor (i.e., a positive feedback loop). If a particular adaptive response is used frequently and intensely each time a stress is experienced, the individual may find himself using this response indiscriminately when any stress occurs. If this happens, the response may lose its adaptive potential and become dysfunctional.

Selye (1956) contended that adaptations to nonspecific stress are not only the human organism's key to growth but also become diseases which threaten the organism when taken to extremes. Nonspecific stress can result from the conjoint experience of biological, psychological, and social (including economic) stresses. It tends to occur in situations where the individual cannot attribute stress to a singular stimulus. The use of tranquilizers and sedatives in the treatment of alcohol abusers suggests that coping with stress is an integral part of the alcohol abuse syndrome.

Attempts to cross-culturally validate this theory have yielded ambiguous results (Horton, 1943; McClelland et al., 1972). Research on the incidence of stress-inducing life changes has begun to document a strong relationship to alcohol abuse (Boyatzis, 1973).

Cappell and Herman (1972) and Cappell (1975) have based their criticism of this theory on the lack of evidence that drinking reduces measures of tension, or interrupts the demonstration of other tension-reducing behavior. There are several flaws in their critique. First, these authors defined tension as an aversive state of experience (such as fear) which motivates behavior. This excludes many types of stress-provoking experiences. For example, people can experience stress from buying a house, getting a promotion at work, or trying to enjoy holidays and celebrations.

A second error in the analysis of Cappell and Herman (1972) and Cappell (1975) involves their review of many studies which were based on a simplistic interpretation of human behavior. A human's response to stress involves a complex chain of behavioral events (e.g., a chain of stimuli, responses, reinforcements, and further stimuli, etc.). Laboratory experiments attempting to induce drinking by stimulating tension (or attempting to reduce measures of tension following drinking) may be influencing so many factors and eliminating degrees of freedom in a subject's response that they interrupt his natural process of adaptation. The positive relationship between stress-inducing life changes, alcohol consumption, and other behavioral attempts at adaptation (Boyatzis, 1973) indicates the importance of measuring human responses to stress in a manner which includes the complex chains of events in the person's life as a whole, rather than isolating one element of the chain for examination. Another flaw in their critique is the lack of attention to a person's perception of the adaptive potential of drinking in response to stress. Whether or not alcohol directly changes physiological aspects of stress, expectations and beliefs of the individual as to the adaptive potential of drinking may be the most important factor. Of course, it is difficult to examine these effects in a laboratory setting in which the subject is presented with many experimental stimuli which affect his expectations and performance.

A person's response to stress is similar to his response when inner conflicts are aroused (as described by the motive theory). In both cases, the individual is attempting to restore equilibrium when he is experiencing a dynamic tension. Integration of these two theories eliminates the need to identify a specific conflict which is aroused and which may be causing the disequilibrium within the individual. A

person's adaptability is a function of his ability to functionally respond to these types of internal forces. Selye (1956) defined adaptation as "modification of the organism to fit it more perfectly to exist under conditions of the environment." An adaptive response is an action of the organism intended to resist the impact of stimuli and concentrate the resistance to the smallest area possible so as to maximize its impact on alleviating the stress condition.

The construction of the Adaptability Factor rests on the assumption that the level of stress or aroused inner conflict a person experiences and the specific origin of the stress or inner conflict are not as relevant in assessing a person's short-term rehabilitation needs as is his ability to respond to aroused inner conflicts and stresses when they occur. The specific origins of the conflict or stress, if they can be identified, are important issues to examine during a rehabilitation process, but are not critical in determining the status of the individual's ability to deal with life experiences.

In addition to the motive theory and stress theory, there have been four other theoretical perspectives on underlying causal factors contributing to alcohol abuse. They are: (1) the vice/moral theory; (2) the mental illness theory; (3) the deviance/cultural theory; and (4) the physiological theory. These will be briefly reviewed.

The vice/moral theory was an inheritance of the Temperance Movement and the view of religious dogma concerning alcohol abuse. This perspective contended that such behavior emanated from evil, and was evidence of immorality. While being difficult to document with research evidence, popular appeal brought this theory into prominence. It implied a simplistic recommendation for rehabilitation which involved a degree of exorcism, followed by leading a person to the path of righteousness. In the context of available literature, the vice/moral theory appears not only functionally useless, but inaccurate.

The mental illness theory contends that alcohol abuse was a behavior exhibited by the insane, or "mentally deranged." Literature is available which documents both low and high proportions of alcohol abuse in samples of people diagnosed as schizophrenic, psychotic, or persons with such tendencies who also show extreme neurosis (Freed, 1975). This is not to say that chronic alcoholism does not lead to or aggravate tendencies toward a variety of neurotic disorders or psychotic delusion, but that such mental disorders do not appear to cause alcohol abuse. This theoretical perspective is included in the Adaptability Factor to the

extent that any mental disorder will probably affect a person's ability to respond to conflict or stress in an adaptive manner.

Contributions from the deviance/cultural theory are included in the discussion of the Sociocultural Factor, and therefore are not reviewed in this section.

The physiological theory contends that certain biological characteristics of an individual will lead to alcohol abuse. Current research is examining endocrine dysfunctions, liver dysfunctions and minor disorders in the central nervous system as possible causal factors. Certain physiological characteristics may lead to continued choice of alcohol consumption, loss of control while drinking, or the inability to abstain. The body's adjustment to alcohol consumption may lead to deviations in processes of functioning which create a physiological demand for alcohol. In this way, certain people may become vulnerable or overly receptive to alcohol consumption. These characteristics directly affect the adaptive potential (i.e., tendency toward functionally adaptive response or maladaptive response) of drinking for the individual.

Contributions from the Study of Drinking Pattern

The other popular individual characteristic frequently examined in the alcohol field has been drinking pattern. Drinking pattern is defined as the quantity and frequency with which alcohol is consumed in the context of the cultural, subcultural, and reference group support or disapproval of such consumption. A variety of studies have revealed extreme variance in drinking patterns (Cahalan, Cisin, and Crosseley, 1969).

Jones (1969, 1971) has shown the diverse personality correlates and behavior patterns of persons who have various quantity/frequency (hereafter referred to as Q/F) patterns of alcohol consumption. Mulford and Miller (1960) reported the significant association of heavy drinking with preoccupation with drinking. Tomsovic (1974) and Knupfer (1966) reported highly significant differences between continuous drinkers (those who consume certain amounts steadily) and binge drinkers (those who consume heavy amounts at certain times and not others). Fillmore (1974) found a trend toward moderate drinking in a sample followed over a twenty-year period. This included increased consumption by low Q/F drinkers and decreased consumption by high Q/F drinkers.

While the individual differences in drinking pattern are significant in accounting for a person's drinking behavior, numerous studies have demonstrated the impact of

sociocultural forces in determining an individual's drinking pattern. This material will be reviewed in the discussion of the Sociocultural Factor.

Drinking pattern is included in the Adaptability Factor as an individual characteristic only to the extent that drinking is seen as one of the many possible behaviors which a person may use in response to inner conflict and/or stress. The individual's drinking pattern (in terms of quantity and frequency and other such measures) may represent use of a functionally adaptive behavior. On the other hand, heavy continual consumption or binge drinking is an example of the frequent use of a specific, limited behavior which may have been adaptive at one time, but is no longer. Such behavior may even exclude the use of other potentially adaptive behaviors. Even out of context of the individual's sociocultural environment, his drinking pattern may be maladaptive.

Possible Sources of Measurement

Within the presently proposed DWI/Drinker Type Classification System, a person's category on the Adaptability Factor scale could be determined from his responses to a questionnaire and/or interview concerning his current life activities. The nature and utility of a person's repertoire of functionally adaptive behavior could be obtained from questions asking:

- the number and types of self-control behavior (e.g., weight control, physical fitness, ability to control smoking, eating, drinking, report of having deliberately stopped some activity initiated by a prior decision);
- number of recreational, leisure, and/or self-development activities;
- measure of the diversification of the repertoire (e.g., number of different domains of activity reported being used regularly, such as recreation, self-development, religious, occupational, professional, familial, civic, etc.);
- number of times drinking and driving divided by the number of times drinking;
- typical behavioral response to interpersonal conflict at work, at home, in a recreational setting;
- number of stress-inducing life changes which have occurred during the last six months;

- involvement in familial, friendship, or collegial activities;
- number and type of different behaviors used when feeling exceedingly emotionally or physically tired or exhausted.

A person's frequent use of specific, limited behaviors as an attempted adaptive response to the possible exclusion of other potentially adaptive behaviors could be obtained from questions asking about the:

- pattern of use of the various "functionally adaptive" behaviors identified above;
- habits (the habitual use of cigarettes, alcohol, exercise, work, prayer, sex, etc.);
- ritualized use of any behavior which may have been functionally adaptive at one time;
- preoccupation with any of the behaviors mentioned above (including alcohol);
- BAC at time of arrest for DWI.

A person's ability to choose appropriate behavior among potentially adaptive behaviors may be measured by ascertaining the adaptive potential of the various behaviors in the individual's repertoire. For example, for each behavior the person could be asked to state the number of benefits and the number of costs resulting from its use. The ratio of these two numbers could be used as an adaptive potential measure. A person's awareness and ability to state the consequences of various behaviors would also measure his ability to choose appropriate behavior as adaptive responses to inner conflict and/or stress.

A person's use of maladaptive behavior could be determined from questions concerning:

- types of interference in life functioning resulting from his use of specific behaviors (e.g., drinking, fighting, travel, etc.); a more general form of this question may be to identify the negative consequences of his behavior;
- degree of interference in his life functioning which has resulted from his specific actions;
- the use of alcohol or other drugs for personal effects (e.g., getting high);

- BAC at time of arrest for DWI;
- police and motor vehicle record;
- record with treatment agencies, courts, social service agencies, penal institutions;
- condition of physical health.

It may be important to integrate information from collaterals (e.g., spouses, close friends, employers, etc.) in determining the status of the client's adaptability. For example, a client may report a specific behavior as functionally adaptive, while a collateral would provide information showing that it is not used by the client in a functionally adaptive manner. The need for information from collaterals may be avoided through adequate construction of the testing instrument. It may be possible to include items in the testing instrument which have first been validated by administration to a sample of DWIs and collaterals.

Sociocultural Factor

Definition of the Variable

The Sociocultural Factor is one of the independent variables in the classification system. The intent of this variable is to examine the individual's social environment regarding alcohol use and abuse. An individual is affected by his environment in many different ways. The cultural environment influences the individual through norms and values which both designate appropriate and inappropriate behavior and describe the consequences of specific behavior. A person's immediate social environment (such as his family) provides stimuli and feedback concerning aspects of his behavior. A person derives a sense of self-image (self-definition) from his reference groups. These reference groups affect the person's behavior through their norms and values, as well as acting as mediating influences, interpreting the norms and values of other reference groups, subcultures, and the main culture (e.g., a reference group helps its members interpret the meaning of the law and information from the media). Various reference groups and cultural groups provide an individual with a sense of belonging. To continue his membership in certain groups and exclude his membership from other groups, the individual will attempt to demonstrate behavior conforming to norms and values of those groups to which he wishes to belong and not conforming to those of groups from which he wishes to differentiate himself.

The individual's sociocultural environment not only provides the proscriptions, prescriptions, and consequences of a person's behavior, but also helps him to interpret and attribute meaning to his behavior and experiences. It is this latter function which makes the potency of the social environment so great that the examination of a person's behavior out of context of his sociocultural environment would lead to questionable conclusions and inappropriate inferences.

The importance of cultural context in understanding alcohol use and abuse has been discussed at length (McAndrew and Edgerton, 1969; Heath, 1975). Not only do cultures vary in determining the amount of alcohol consumption acceptable for their peoples, but also in determining their drinking patterns (the pattern of use and abuse of alcohol). Within the United States, the importance of membership in various ethnoreligious groups as a determinant of alcohol use and abuse patterns has been documented in numerous sources (Cahalan and Room, 1974). While the research literature has presented an impressive amount of information on the impact of sociocultural variables on drinking behavior, these variables have seldom been integrated into an assessment system for understanding an individual's drinking behavior.

The Sociocultural Factor indicates the forces from the social environment affecting the individual which encourage, discourage, or permit specific drinking behavior. The forces of a person's sociocultural environment may be classified in one of three possible categories on this variable: [A] positive forces; [B] ambiguous forces; or [C] negative forces.¹

In Category A of the Sociocultural Factor, the individual's environment provides pressure through forces which encourage controlled drinking (in terms of quantity and frequency) and discourage behavior relating to alcohol abuse (e.g., drinking and driving). The social environment may exert this pressure through extreme negative consequences of any drinking behavior which violates explicit norms and values regarding specific drinking behavior. The environment may exert pressure on the individual through provision of rewards for conformity to the norms and values. The environment may provide explicit norms and values regarding specific forms of drinking behavior which are to be avoided, and not provide explicit norms and values as to what is approved. The assumption could be made that any drinking behavior not included in those prohibited is acceptable.

¹Positive and negative forces are labelled to indicate direction of the forces with respect to the desired state: controlled (i.e., responsible) use of alcohol.

In Category B of the Sociocultural Factor, the individual's environment provides ambiguous pressure with regard to drinking behavior and behavior related to alcohol abuse. The ambiguity may result from the lack of specific norms and values regarding alcohol use and abuse, or from the lack of specification of the consequences of conformity and non-conformity to those norms. The ambiguity may also result from forces which encourage controlled drinking and discourage behavior related to alcohol abuse and concurrent forces which encourage heavy or uncontrolled drinking and behavior related to alcohol abuse. The ambiguity is the greatest when these concurrent forces contradict each other with respect to the same specific drinking behavior.

A person exposed to ambiguous forces is more vulnerable to situational inductions. That is, the social context of ambiguous forces permits the individual to act in many ways and rationalize to himself or others the positive incentives for such behavior, or the behavior's conformity to the environment's norms and values.

In Category C of the Sociocultural Factor, the individual's environment provides pressure through forces which encourage heavy and/or uncontrolled drinking and supports behavior related to alcohol abuse. In such an environment, the individual is induced to conform to norms and values which may have negative consequences in the environment outside his immediate social context. For example, a person's reference group may view drinking and driving as a sign of masculinity and encourage each of its members to prove himself through his ability to get drunk and drive. In the greater cultural context of the United States, such behavior would receive negative consequences if discovered through an arrest for driving while intoxicated.

Composition of the Sociocultural Environment

A person's sociocultural environment is composed of his reference group, or groups, his subculture, and his culture. A reference group is a group of people from whom the individual derives his perception of what behavior is appropriate, as well as when and where it is appropriate. The reference group provides the individual with support for certain values (beliefs), norms (customs), and self-definition (i.e., results of recognized membership in a group or various groups).

A person's reference groups may be one or more of the following types of groups:

- family of orientation (current nuclear family);

- friendship network;
- extended family network;
- co-workers;
- occupational group (e.g., professional association, trade union);
- drinking group; or
- voluntary organizations (e.g., civic organizations).

A subculture is a group of people within a larger cultural context who share a set of values and norms, and are differentiated from the larger, or main culture by various characteristics (i.e., skin color, dress, language, religious customs, etc.). A culture, or main culture, refers to the values and norms of the grouping of people who dominate (socially, politically, economically, etc.) and may constitute the majority of the populace in a social system. Distinctions among membership in subcultures and the main culture become difficult in pluralistic societies such as the United States, where the population consists of many ethnoreligious and racial groups.

A person's subculture and culture can be described through the use of information regarding various demographic characteristics, such as: place of upbringing; place of residence; ethnoreligious group; age; sex; race; education; and occupation and occupational status. The person may be exposed to cultural forces through his family of origin. These forces are exerted through parental drinking behavior, parental attitudes toward drinking, and the consistency between parental views expressed toward drinking and parental drinking behavior.

It is assumed that a person's reference groups have a greater impact on him than his subculture or culture. This assumption is based in part on the fact that the reference group can provide rewards and punishments for behavior closer to the moment of the action than the subculture or culture. The individual spends more time in the sphere of influence of his reference groups than in the sphere of influence of his subculture or culture alone. Often the reference group mediates and interprets the norms and values of the subculture and culture for the individual, thereby extending its influence even further.

Historical Perspective

Past attempts to study the impact of sociocultural context on alcohol use and abuse have focused on drinking patterns. Most of this research examined quantity and frequency of consumption, type of beverage consumed, place of consumption, and incidence of alcoholism and other problems related to alcohol consumption. Drinking pattern is examined in the context of the sociocultural environment through determination of normative levels of drinking developed from descriptive, survey statistics.

Many sources have documented differences for various cultures (Pittman and Snyder, 1962; McClelland et al., 1972). Cahalan, Cisin and Crosseley (1969) reported substantial differences according to socioeconomic status, religion, ethnic background, occupation, race, sex, and age.

Sex differences have been reported in many sources (Gomberg, 1974); particularly noteworthy are Jones' (1968, 1971) longitudinal studies. Hyman (1968a) reported substantial sex differences in automotive accident-vulnerability statistics. Fillmore (1975) reported substantial differences in drinking problems and their development over time between males and females.

Age has consistently shown differences in drinking patterns (Cahalan, Cisin, and Crosseley, 1969) and the consequences of these patterns (Warkov et al., 1965; Cospers and Mozersky, 1968; Hyman, 1968; Struckman, 1975; Cahalan and Room, 1974).

Likewise, socioeconomic status measures (education, income, occupational status), marital status, ethnoreligious group, urbanization of place of upbringing, urbanization of place of residence, region of the country, race have shown substantial drinking pattern differences (Knupfer, 1966; Tomsovic, 1974; Struckman, 1975; Cospers and Mozersky, 1968; Hyman, 1968b; Warkov et al., 1965; Straus and Bacon, 1953; and Cahalan and Room, 1974). Many of these variables demonstrate significant interactions.

The social deviance theory provides a framework in which to examine these influences on drinking pattern. The deviance theory contends that drinking patterns are determined by expectations and behavioral responses to the expectations and beliefs (i.e., norms and values) of the various reference groups, subcultures, and culture which constitute a social system. These norms and values determine which drinking patterns are acceptable (permissible), which are favorable (encouraged), and which are discouraged or punished (prohibited). Deviance is defined as any deviation from the

norms and values which sanction particular behavior. Members of such groups are encouraged to conform to the norms and to communicate these sanctions to new members. Alcohol abuse would therefore be a group-specific classification. Certain groups facilitate a drinking pattern which would be considered abusive in terms of the norms and values of another group.

Jessor and Jessor (1975) and Jessor et al. (1968) have provided evidence through their longitudinal studies suggesting that when a person begins to drink alcoholic beverages other behavior which can be labelled as deviant is also demonstrated. Cahalan and Room (1974) explained the particularly high levels of problem drinking of men in urban areas of "dry regions" in this country as resulting from the development of groups of people (reference groups) who reinforce a type of drinking behavior which is disapproved by others in their surrounding geographic and social environment.

Theories as to the causes of deviance, in general, attribute the cause of such behavior to blocked access to opportunities and goals valued within the culture, anomie, alienation, relative deprivation, and the social labelling of certain behaviors as deviant. Pelz and Schumann (1973) reported findings which support this perspective. They reported that of young drinking drivers, a small proportion were antagonistic and rebellious to others in their environment, and felt alienated and powerless. For this small proportion, drinking was related to reckless driving (crashes and violations), while it was not for other groups within the sample.

Possible Sources of Measurement

A person's category on the Sociocultural Factor could be determined from responses to a questionnaire and/or interview. The following information could be obtained from a questionnaire: age, sex, ethnoreligious group, place of residence (urban to rural distinction), place of upbringing (urban to rural distinction), socioeconomic status, race, marital status, family of origin (ethnoreligious group and socioeconomic status), parental drinking behavior, parental views toward drinking and consistency between parental views toward drinking and actual drinking behavior. This information could be translated into measures of cultural and subcultural forces regarding use and abuse of alcohol.

The individual would be asked to list (or check off on a prepared list) the various reference groups to which he belongs, formally or informally. This may include loosely

knit groups of people who engage in some activities together even though they do not consider themselves a group. The individual would then be asked to assess the potency of influence from each of these reference groups through several rank ordering methods. For example, the individual may be asked to rank order the groups in terms of the general importance of each group to him. He might be asked to rank order the groups in terms of difficulty of leaving the group (withdrawing membership) and still maintaining his current image of himself. Another method might involve asking him to rank order the groups in terms of how much time he spends with them.

Once the groups have been assessed in this manner, the individual would answer a variety of questions to determine the norms and values of each group regarding alcohol use and abuse. The following questions are samples of what might be asked:

- Do you drink when you are with this group?
- Where do you drink with this group?
- When you are drinking with this group, how much do you drink?
- How often do you drink with this group?
- Does a member of the group ever get drunk when you are together?
- How does the group respond when a member gets drunk?
- How would the group respond if a member said that he did not want to drink?
- Has anyone in the group ever been a topic of discussion or a concern of the group because he is thought to drink too much?
- How many members of the group drink as much or more than you do?

Each reference group would be classified as providing positive, ambiguous, or negative forces regarding controlled drinking to its members, and in particular to the client. Using the rank order information, the forces from each of the reference groups could be combined to yield a resultant vector impinging on the individual from his reference groups. This resultant vector would be integrated with the cultural and subcultural forces affecting the individual into a single resultant force.

Severity of the Problem

Definition of the Variable

The Adaptability Factor provides information about the individual's adaptability to the inner conflict and stress experienced in life. The Sociocultural Factor provides information about the individual's environment and how his social context exerts pressure on him with regard to drinking behavior. Cahalan and Room (1974) empirically demonstrated the importance of using both individual characteristics and sociocultural context in assessing a person's drinking pattern.

"Overall, personality variables predicted tangible consequences more strongly than problematic intake; their contribution to the regression equation on tangible consequences was separate from and approximately equal to the contribution made by social differentiation and life-history variables. Neither arena of predictive variables should, then, be neglected in future studies of the etiology of drinking problems" (Cahalan and Room, 1974, page 224).

The need for examining an individual's alcohol problem in the context of his environmental norms and values regarding alcohol has also been reflected in the World Health Organization's definition of alcohol problems (Strachan, 1967).

While the information from the Adaptability Factor and the Sociocultural Factor suggest desired changes for the individual if he is to reduce the probability of behavior related to alcohol abuse, there is no indication of the intensity of the current problem or the degree to which the individual has become immersed in problems stimulated or perpetuated specifically by his drinking. To accurately assess the extent and intensity of desirable changes for the person's rehabilitation, a measure of his current problems with alcohol must be obtained.

The Severity of the Problem Scale indicates the degree to which alcohol consumption and resulting behavior interfere with the life functioning of the individual, or others. It is a specific assessment of the adaptive potential of his drinking behavior, and therefore, not independent of the Adaptability Factor. A person may be classified in one of four possible categories on this variable: [A] no/threatened interference; [B] occasional interference; [C] regular inter-

ference; or [D] generalized interference. The focus of this variable is on the consequences of drinking in terms of interferences caused by drinking, not merely on the drinking behavior per se.

In Category A of the Severity of the Problem Scale (no/threatened interference), the person has been convicted of driving while intoxicated but there is no other evidence of interference in life functioning resulting from alcohol consumption. His current drinking pattern may or may not suggest the possibility of interference resulting from drinking in the future.

In Category B of the Severity Scale (occasional interference), the person has been convicted of driving while intoxicated and there is evidence of occasional events of interference in life functioning resulting from alcohol consumption. This may mean that twice a year he gets intoxicated at a party and becomes obnoxious or gets into a heated verbal argument. It may mean that several times a year, he and his spouse have an argument about how much he drinks.

In Category C of the Severity Scale (regular interference), the person has been convicted of driving while intoxicated and demonstrates a pattern of regular interference with life functioning resulting from alcohol consumption, where the interference has minor or moderate implications. The regularity of the pattern indicates that such interference is somewhat predictable. The pattern of alcohol use which leads to the interference is a consistent element in his behavioral repertoire. Interference with major implications would automatically classify the person as being in the next category of the Severity Scale.

In Category D of the Severity Scale (generalized interference), the person has been convicted of driving while intoxicated and demonstrates a pattern of regular interference with life functioning resulting from alcohol consumption where the interference has major implications. In other words, the person has a DWI conviction and interference with life functioning resulting from drinking which leads to the stimulation or perpetuation of more interference with life functioning. Generalized interference is a pattern of interference which is self-sustaining; it results in problems which create more problems.

Life functioning is defined as any activities or processes which are necessary to the individual for maintaining mental and physical health, as well as social and economic behavioral patterns necessary to participation in a social system. Interference with life functioning is the interrup-

tion, inhibition, or cessation of any such activities or processes.

The Severity of the Problem Scale must be included in the classification system as a separate variable because the specific alcohol-related interferences evident in a person's life may be symptoms or manifestations of problems the individual is having in the individual adaptability or sociocultural domains. If this were the case, the rehabilitation objectives (desired changes for improvement of the individual) would be focused on changes in their status on the adaptability or sociocultural variables. On the other hand, in the event that interferences in a person's life are a function of a problem with alcohol, in and of itself, the rehabilitation objectives (desired changes) would be the direct result of the person's status on the Severity Scale.

Historical Perspective

Of all variables examined in the alcohol field, the Severity Scale has the longest history. Severity of the problem was viewed as a dichotomous variable (i.e., either a person was an alcoholic/social problem or not) during the 19th and first half of the twentieth century. As the Temperance Movement lost popularity, a third type of category was reestablished--a person who drank alcoholic beverages but was not a social problem.

In the following years, progress was made by defining alcohol problems through the expansion of categories diagnostic of alcoholism. Jellinek (1952) provided a more refined conceptualization of this variable when he proposed the phases of alcoholism. Several new categories appeared, all of which were varying points along the path to alcoholism. In effect, he added the concept of "pre-alcoholic" drinker to the three other categories mentioned above. Although not presented in this way, his view became popularly accepted as justification for the concept of alcoholism as a progressive disease. In other words, alcoholism was seen as an illness in which a person could be located somewhere along a continuum of the progression of severity, as illustrated on the following page.

In further development of his work, Jellinek (1960) provided an elaboration of the Severity Scale by identifying five types of alcoholics: alpha, beta, gamma, delta, and epsilon alcoholics. His descriptions included conditions suggesting which types of alcoholics might develop into other types. A new twist was inherent in this system: the path to the inability to abstain (viewed as the most severe stage of alcoholism) may not be continuous. This was an important distinction from the exponential curve perspective, shown in Figure 1.

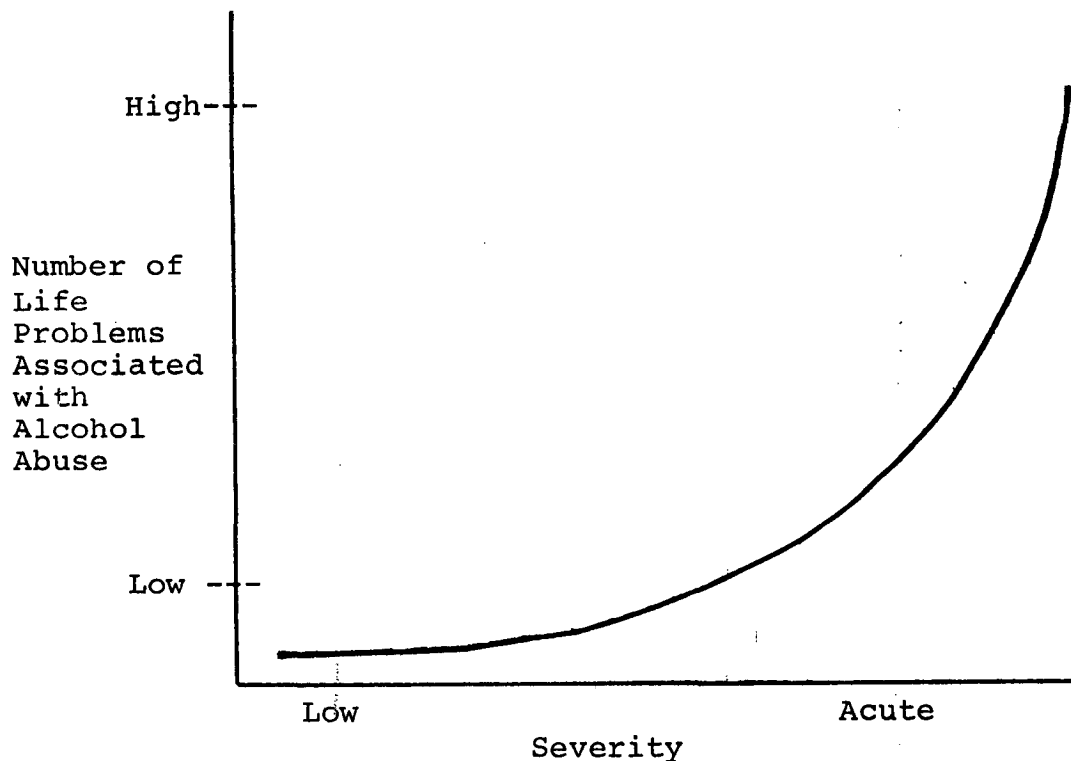


Figure 1. Traditional View of the Progression of Alcoholism

The field of alcohol studies took on new dimensions with time, and the number of categories in the Severity Scale increased. Straus and Bacon (1953) classified college students as potential problem drinkers if alcohol use inflicted injury or inconvenience in their lives. They also defined problem drinking as evident if certain warning signs were present. One of these warning signs was a high score on a Social Complications Scale, a Guttman-scaled variable.

By this point the "skid-row" alcoholic had earned a distinct category. Although other categories were mentioned, the focus was still primarily on the varying degrees to which a person was an alcoholic. Methodologically, categories were still described in terms of the end point (alcohol addiction).

Advancements in the survey research field with quantity/frequency/volume measures led to the differentiation of light, moderate, or heavy drinkers as separate from persons with a problem due to alcohol. These represented new categories of drinking patterns. Public inebriate legislation and increased convictions of persons for driving while intoxicated demanded further distinctions between alcoholics and problem drinkers, as well as precise assessments of categories within each of these groups. Without such distinctions, the intended rehabilitation efforts of the programs could not function effectively.

The ASAP's classification systems ranged from three to five categories. South Dakota classified DWIs as Social, Problem, Serious Problem, or Alcoholic Drinkers (Struckman, 1975). Los Angeles classified DWIs as Problem and Nonproblem Drinkers (Los Angeles, 1974). Hennepin County classified DWIs as Nonproblem (Social), Nonalcoholic Problem, and Alcoholic Drinkers (Hennepin County, 1975). All ASAPs had a category of unidentified, or undetermined drinker type, which contained people who were not classifiable into the other categories on the basis of preliminary or presentence investigations.

Changes in the view of alcoholism were reflected by the World Health Organization's change of definition of alcoholism to include and distinguish among several categories (Seeley, 1959). It defined alcoholics as "excessive drinkers whose dependence upon alcohol has attained such a degree that it shows noticeable mental disturbance or an interference with their bodily and mental health, their interpersonal relations, and their smooth social and economic functioning..." (Seeley, 1959). It changed its definition of excessive drinkers to "any form of drinking which in its extent goes beyond the traditional and customary 'dietary' use, or the ordinary compliance with the social drinking customs of the whole community concerned..." (Seeley, 1959). Seeley (1959) critiqued their definition and extrapolated their definitions to contend that: (a) drinkers could be classified as nonexcessive or excessive; (b) excessive drinkers could be classified as irregular or habitual; (c) habitual drinkers could be classified as without addiction or with addiction; and (d) any habitual, excessive drinkers would be classified as alcoholics.

To date, classification of problem drinker types has been predominantly based on the Severity of the Problem Scale. Most notable deviations from this are studies by Knupfer (1966), Clark (1966), Tomsovic (1974), and Cahalan and Room (1974). Recent literature has established the need to differentiate among continuous heavy drinkers and binge (i.e., episodic) drinkers (Tomsovic, 1974; Knupfer, 1966; Cahalan and Room, 1974). Cahalan and Room (1974) presented evidence to support the differentiation of persons with heavy intake and no tangible consequences, persons with problematic intake, and persons with relatively high numbers of tangible consequences.

Clark (1966) examined a sample of noninstitutionalized and nontransient residents of a community and concluded that combining severity of the problem and recency of the problem was essential in assessing the status of a person's drinking. He described severity as having the following elements:

- (a) excessive intake (above Q/F/V norms or receiving

disapproval from others); (b) concern about own drinking; (c) disturbance of social and economic functioning (problems with employers, spouse, police, etc.); and (d) loss of control over drinking (alcohol addiction or psychological dependence). Knupfer (1966) described drinking practices as a continuum from less to more pathological, where degree of pathology was a function of symptoms of addiction, inability to earn a living, deviance from what is customary, and amount of intake.

Cahalan and Room's (1974) measure of tangible consequences is similar to the proposed Severity of the Problem Scale. It incorporates indications of interference in life functioning in various domains resulting from alcohol consumption. The tangible consequences measure, although related to other measures of problem drinking (problematic intake, symptomatic drinking), appears to be the most comprehensive single indicator of the degree to which alcohol is interfering in a person's life. With the system of scoring and weighting the various components (e.g., problems with spouse, problems at work, belligerence, etc.), the resulting tangible consequences score reflects the extent and intensity of the individual's life problems relating to alcohol consumption.

Sources of Measurement

Severity of the Problem would be measured from items on a questionnaire/interview which asked about the variety of types of interference resulting from alcohol consumption. The Severity measure would be computed by a weighted scoring system which includes all of the types of interference.

It would probably be useful to identify what these types may be. Type of interference can be grouped in the following manner:

1. Interference with Economic Functioning: loss of work, loss of productivity, loss of work days, high-risk investments, conflict at work (with superiors, co-workers, or subordinates);
2. Interference with Familial Functioning: conflicts with spouse, children, or parents; loss of spouse or children; disruption of family activity patterns (changes in eating habits, recreational activities, etc.);
3. Interference with Social Functioning: conflict with friends, distant relatives, acquaintances; disruption of such relationships; rejection by others; exclusion from social groups (clubs) or recreational activities;

4. Interference with Psychological Health: thought disorientation (i.e., confusion, change in time orientation); memory loss; extreme states continuing after alcohol consumption (i.e., elation, guilt, powerlessness, loneliness, depression); fixation with self-control;
5. Interference with Religious Functioning: loss of meaning of life; loss of values; loss of cosmic or spiritual feeling;
6. Interference with Physical Health: somatic problems (i.e., loss of sleep, gastro-intestinal trouble); delirium tremens; blackouts; changes in "resting levels" of hormonal processes; organ dysfunctions (i.e., cirrhosis of the liver, pancreatitis, myocardial infarction); death;
7. Interference with Citizen Functioning: encounters with the police or judicial system; involvement in problems with social agencies (e.g., welfare); high risk driving; accidents; crime.

A critical aspect of the Severity Scale is the periodicity of the events which interfere with life functioning. At a minimum, the time when each event occurred would be necessary to include in the data collected on the types of interference. It would be desirable to include other information as to the circumstances surrounding the event (i.e., where it occurred, who else was involved, etc.).

The types of interference enumerated here bear a strong resemblance to those utilized by Cahalan and Room (1974), but expand on their framework. One basic difference between the Severity Scale and Cahalan and Room's (1974) tangible consequences score is that the Severity variable includes periodicity, the timing and regularity of the events of interference. The recommended weighted scoring of these types of interference would follow the same system utilized by Cahalan and Room (1974) in computing their tangible consequences score. The weighting would have to be empirically justified.

Summary of the Variables

The following three pages present summaries of the variables to be used in the classification system.

Adaptability Factor

Definition: The individual's adaptability to the inner conflict and stress which he experiences in life

- Category A:
- Using a variety of behaviors which are functionally adaptive in response to inner conflict and/or stress
 - Able to choose appropriate behavior among potential alternatives in responding to inner conflict and/or stress

- Category B:
- Frequently using specific, limited behaviors as an attempted adaptive response to the exclusion of alternative behaviors

AND

- Frequently unable to choose appropriate behavior among potential adaptive responses

OR

- Aware of limited number of behaviors

OR

- Decision that a specific, limited behavior is appropriate as an adaptation to many inner conflicts and/or stresses

- Category C:
- Using behaviors which are maladaptive in response to inner conflict and/or stress
 - Unable to choose appropriate behavior among potential alternatives

Sociocultural Factor

Definition: the forces from the social environment affecting the individual which encourage, discourage, or permit specific drinking behavior

Category A: ● Positive forces which encourage controlled drinking and discourage behavior related to alcohol abuse

Category B: ● Ambiguous forces, i.e., lack of forces specifically related to alcohol use and abuse

OR

- Forces which encourage controlled drinking and discourage behavior related to alcohol abuse, and which concurrently encourage heavy and/or uncontrolled drinking and support behavior related to alcohol abuse

Category C: ● Negative forces which encourage heavy and/or uncontrolled drinking and support behavior related to alcohol abuse

Severity of the Problem

Definition: the degree to which alcohol consumption, and resulting behavior, interfere with the life functioning of the individual, or others

- Category A: ● No/Threatened Interference: DWI but no other evidence of interference with life functioning resulting from alcohol consumption; current drinking pattern may or may not suggest possible interference in the future
- Category B: ● Occasional Interference: DWI and occasional events in life which show evidence of interference resulting from alcohol consumption
- Category C: ● Regular Interference: DWI and a pattern of regular interference with life functioning resulting from alcohol consumption, where the interference has minor or moderate implications
- Category D: ● Generalized Interference: DWI and a pattern of regular interference with life functioning resulting from alcohol consumption where the interference has major implications; in other words, DWI and interference with life functioning resulting from alcohol consumption which leads to the stimulation or perpetuation of more interference with life functioning

Classification of DWIs

Once a DWI has been convicted, or in the case of diversionary programs once the DWI has been assigned to the ASAP program, a diagnostic questionnaire/interview process will take place. During this process, the ASAP staff will determine the DWI's category on the Adaptability Factor, the Sociocultural Factor, and the Severity of the Problem Scale. In the event of missing information, other sources may have to be included in the assessment, such as police and motor vehicle bureau records, or collaterals.

The DWI's status on the Adaptability Factor and the Sociocultural Factor will indicate appropriate aspects of the DWI's behavior or social context which should be changed to decrease the probability of future alcohol-related problems, such as drinking and driving. On the Adaptability Factor Category A represents the most desirable status. People assessed into other categories will be assigned STR objectives which represent desired changes to bring them into Category A.

On the Sociocultural Factor, the most desirable status for the DWI is that of being in a social context which encourages controlled drinking and the elimination of behavior related to alcohol abuse. In the event that the person's social context is not such an environment, the DWI will be assigned STR objectives which represent a decrease in his vulnerability to environmental forces encouraging heavy and/or uncontrolled drinking or supporting behavior related to alcohol abuse. A change in the client's vulnerability may include a need to change the environments to which he is exposed.

Assessing the DWI on the Severity of the Problem Scale provides information on the extent and intensity to which his drinking behavior specifically interferes with his life functioning. Regardless of the DWI's status on the Sociocultural Factor, it is likely that a client with a status of Category A on the Adaptability Factor could have a Severity level of No/Threatened Interference or Occasional Interference. If he demonstrated Regular or Generalized Interference resulting from alcohol consumption, he would be frequently using alcohol as an attempted adaptive behavior, or maladaptively using alcohol; he would, therefore, be in Category B or C on the Adaptability Factor.

Regardless of the DWI's status on the Sociocultural Factor, a client with the status of Category B on the Adaptability Factor could have a Severity level of No/Threatened

Interference. This means that a client could be frequently using, and possibly overusing, specific, limited behavior in response to inner conflict and/or stress which does not involve drinking. It would be possible for a client to have a status of Category B on the Adaptability Factor and have no evidence of interference in life functioning resulting from alcohol consumption (other than the DWI). On the other hand, it is also possible that drinking could be one of the specific, limited behaviors (or the only one) used as an attempted adaptive response. If this were the case, a client could be at a Severity level of Regular Interference. It is highly unlikely that a client with a status of Category B on the Adaptability Factor would have a Severity level of Generalized Interference. Such a level of Severity would imply the use of maladaptive behavior, indicative of Category C on the Adaptability Factor.

Regardless of the DWI's status on the Sociocultural Factor, a client with a status of Category C on the Adaptability Factor could have any of the four levels on the Severity of the Problem Scale. The same reasoning applies as mentioned above. A client could be maladaptively using behavior other than drinking and have little or no interference in his life functioning resulting from his alcohol consumption. On the other hand, if drinking is one of the maladaptive behaviors being used, the client would most likely have a Severity level of Regular or Generalized Interference.

Summary of Classification Possibilities

A DWI could be assessed into Category A, B, or C on the Adaptability Factor, but only be classified in one of those categories. The same DWI could be assessed into Category A, B, or C on the Sociocultural Factor, but again, only classified in one of those categories.

A DWI with a status of Category A on the Adaptability Factor and any of the categories on the Sociocultural Factor could be assessed at the Severity level of No/Threatened Interference, or Occasional Interference.

A DWI with a status of Category B on the Adaptability Factor and any of the categories on the Sociocultural Factor could be assessed at the Severity level of No/Threatened Interference, Occasional Interference, or Regular Interference.

A DWI with a status of Category C on the Adaptability Factor and any of the categories on the Sociocultural Factor could be assessed at the Severity level of No/Threatened Interference, Occasional Interference, Regular Interference, or Generalized Interference.

The implications of the assessment of the client on each of these variables will become apparent in the next section in which STR objectives will be discussed. The assessment and classification of the DWI is only the vehicle to identification of desirable changes in terms of STR objectives.

Case Studies

Several case studies may clarify the classification system. The cases presented are actual DWI clients. Minor aspects of the descriptions have been changed so as to maintain confidentiality and protect the anonymity of the client. The cases are not indicative of DWIs in general, but are intended to be examples of persons who appear to have different problems related to alcohol.

Frank J.

Frank J. was a construction worker in New Orleans. He had a stable income and did not suffer from some of the seasonal problems of the construction industry. He was happily married with two children. Born and raised in the New Orleans area, Frank J. was about 40 at the time of his second DWI conviction. He was arrested in his car outside of a local bar and recorded a BAC of .18. His first DWI had occurred about five years before. He is a Black-American who attends church sporadically, but affirms his belief in God.

The following information was communicated during several discussions with Frank J. He was aware of some inner conflicts in that he knew he sometimes felt "down" and "weak," having felt both on the day of the current DWI arrest. He felt that "things were getting to me at work." Apparently, his supervisor had put some men to work on the construction project whom Frank described as "yo-yos." He claimed that he could not tell his supervisor why he felt these new men were hindering work at the project. The union steward was also protecting the jobs of the new men and did not seem overly concerned about their competence. Frank J. also felt that there were numerous incidents occurring at work which aroused his continuous and deep awareness of cultural prejudice and his personal impotence to combat such attitudes and behavior.

As Frank J. described his day-to-day life, he was clear in pointing out the variety of behaviors which he demonstrated

in response to stress. His repertoire of adaptive responses was functional at most times. When stress built to a certain level around work and his feelings about cultural prejudice, he frequently spent Friday nights, as he put it, "drinking with my buddies at a local place." He had agreed with me that the Friday night drinking sessions were somewhat overused in such times of stress. After thinking about the frequency with which the Friday night event occurred, he stated that he actually had been thinking that he was doing it a little too often. Although his wife had not said anything, he was afraid she might be feeling neglected. Frank J. reported that he had been going out to the same bar with his friends every Friday for a number of weeks prior to the current DWI arrest, and even on some of the subsequent Saturday nights as well.

Frank's drinking pattern during the week was moderate. He occasionally would have a beer or two with dinner or when he returned home from work, but it was not a typical daily event. On weekends, Frank might have a couple of beers watching a ball game on television. He claimed that on some of those Friday or Saturday nights out with his friends he exceeded his usual amount of alcohol consumption. He said, "Yeh, we get pretty tight on most of those nights. You know how it is, we sit around talking about anything and drinking beers. Sometimes we play some cards, but we keep up a steady pace of drinking. I don't even feel it until I get up and leave for home."

Frank's drinking partners on these evenings have been friends for a number of years. They always drink at the same bar. Frank responded when asked about the possible encouragement which the group provides for drinking on those evenings. He felt that continued drinking was a central part of the group's activities. A person who left early or did not drink was seen as a snob, and he found it better not to go to the bar at all on a night when he wanted to leave early or not drink, rather than go for part of the evening.

In terms of the classification system, Frank J. appeared to be aware of inner conflicts, and to be frequently using the behavior of going to the bar and drinking with his friends as an attempted adaptive response when those conflicts were aroused. At one point in the discussion he even said, "I knew. I just knew that I shouldn't have gone out that night. Something was bothering me. But I went to the bar anyway, drank, and then was arrested." Frank would be classified in Category B of the Adaptability Factor: frequently using a limited number of specific behaviors as adaptive responses.

Frank was raised and lived in a large urban area in what can be considered a "dry" region of the country (Cahalan and Room, 1974). His father drank heavily. These characteristics suggested cultural and subcultural forces which encouraged heavy drinking.

Frank felt that his family and the group of friends with whom he drank were his only reference groups. His wife did not openly object to his Friday night sessions with his friends. When asked about his wife's reactions to his drinking, he said, "She's never said anything about it, but I get the feeling that she'd rather I stayed home on some of those nights." Frank's wife had a drink occasionally after dinner. She had been raised in a strict, fundamentalist home. Although she did not complain to Frank about the nights he came home intoxicated, he thought she probably disapproved. The forces from his family regarding his drinking would be labelled ambiguous. The forces from his group of friends would be labelled negative. Frank did most of his drinking with his group of friends, and felt that he would not be happy if he had to stop spending time with his friends. The strength of the pressures to conform to the heavy drinking norms within the group of friends was much greater than any pressures from his family to consider decreasing his drinking. The resultant force affecting Frank from his social environment would be labelled a negative force. He would be classified in Category C of the Sociocultural Environment.

Frank would be classified as having Regular Interference on the Severity of the Problem Scale. Although his drinking did not interfere with his work, he did feel that it excluded him from many interactions with his wife without the presence of their children (i.e., Friday and Saturday nights). Regarding his psychological health, Frank felt that he should do better at controlling himself and was worried that he was drinking too much lately. He had two DWI convictions in five years. In discussing behavior at his local bar, Frank admitted that at times things got heated. There had been a number of fist fights in the past few months, in some of which he was involved. He was not aware of any physical problems which drinking had caused him. His concern about possibly drinking too much did lead him to ask a number of questions about the long-term effects of alcohol on various parts of the body. These interferences appeared to occur on a regular basis on the weekend evenings drinking with his friends.

This assessment of Frank helps to identify the areas which should be emphasized in short-term rehabilitation. Since he appears to be aware of the arousal of inner conflicts or stresses, Frank's most critical need is to learn new behaviors which he can use as adaptive responses other than drinking on Friday and Saturday nights with his friends. A second focal area in working with Frank would be to help him change his internal responses to situations at work which appear to stimulate most of his inner conflicts and stress. Another critical need would be to help Frank learn to resist conformity pressure from his group of friends regarding heavy drinking and engaging in behaviors related to alcohol abuse (e.g., fighting in the bar). Although these issues represent the most critical areas of concern for short-term rehabilitation work with Frank, information on alcohol and having Frank make a personal decision to drink in a controlled, responsible manner would be important activities to include in a rehabilitation program.

Anna T.

Anna T. was a manager of a staff function in the office of a government agency. She had a good performance record at work, and had received a number of promotions and salary increases. Anna T. enjoyed her work and found it challenging.

She was in her mid-thirties and lived alone. Although she did not have a close group of friends, she enjoyed going out with a group from work on Friday afternoons for several drinks. Sometimes she and some of her co-workers would go out in the evening on weekends. Born and raised in the Midwest, Anna had lived in the Washington, D.C. area for most of her working career. She was of Anglo-Saxon descent and did not attend church. The DWI arrest was her first such encounter with the judicial system. Her BAC at the time of arrest was .12.

In discussions with Anna, she talked about her pride in her work, and her sense of accomplishment. She also spoke of her desire to get involved in a close relationship with a man at some point in her life. Her friends tended to be only those people with whom she worked. They would often go out on Friday afternoons and celebrate the end of the week. Anna explained, "We go to a local cocktail lounge, not to drink explicitly, but because it is a good place to sit and talk." Several of the group would leave after one drink and some of the group would stay on for another drink.

As the discussion continued she explained that she sometimes teased those who had to leave to get home to their husbands or wives, asking whether they wanted to go home, or felt an obligation to do so. Occasionally, she would go out with some of her co-workers for dinner or the evening. Anna T. claimed that most of her weekends were spent with several relatives who lived in the area. Although she felt basically happy with her life, she admitted that she had not achieved the same level of success in her social life as she had at work. Anna claimed that Friday evenings were often her "low" point in the week.

In terms of the classification system, it was noted that Anna T. appeared to have a repertoire of functionally adaptive behavior which she used appropriately, as evidenced by her success and reputation as a good worker and friendly person. She would be classified into Category A of the Adaptability Factor.

Anna was raised in a rural area and was currently living in a suburban area of a "dry" region of the country (Cahalan and Room, 1974). Neither of her parents drank alcoholic beverages. She told how her father had given her a lecture on the dangers of city living before she moved to the Washington, D.C. area. He had emphasized drinking as one of the potential dangers which cities offered. These characteristics suggest subcultural and cultural forces affecting Anna regarding drinking which would be labelled positive forces (i.e., encouraging controlled drinking, if any).

She felt that her only reference group was the group of people with whom she worked. It was a loosely knit group with few boundaries concerning membership. Many people moved in and out of the group during different periods of the year. Although members of the group drank, most of the group never had more than one drink at a Friday afternoon meeting after work or at a party. Those who stayed later on Friday afternoons would talk about eating dinner after two drinks. There were strong negative statements made about people who drank to the point of slurring their words, or lost control as evidenced by outbursts of hostility. The number of drinks that were considered appropriate did not appear to follow any age or sex differentiations; it was an individual decision. The forces regarding drinking which Anna's reference group exerted on its members would be labelled positive. Anna would be classified as Category A on the Sociocultural Factor.

The DWI arrest was the first time Anna's behavior when drinking had ever become a public issue. She had never missed work or gone to work with a hangover. Although she had not been rejected by others because of her drinking, she had missed a number of social events with persons outside of work in order to participate in the Friday afternoon sessions (which at times had stretched into early evening). Several times a year, especially around holidays, Anna would drink heavily (by her standards) by herself at home. Her feelings of depression at those times and the drinking caused her to miss several holiday-related social events with family and friends. Anna would be classified into the Occasional Interference category of the Severity of the Problem Scale. Her drinking did appear to interfere with her social functioning occasionally during the year.

Short-term rehabilitation work with Anna would focus on helping her learn to monitor the arousal of her inner conflict, which appeared to be focused around issues of isolation and loneliness. She was using many behaviors as functionally adaptive responses to inner conflicts/stresses most of the time. Her problem-solving skills and pragmatic orientation, which were evident at work and in her hobbies, were adequate in enabling her to choose an appropriate adaptive response among alternative behaviors. In addition, providing Anna with information on alcohol and helping her to reach a personal decision regarding responsible use of alcohol would help her to change her drinking behavior enough to eliminate the occasional interferences which she had been experiencing.

Jim H.

Jim H. was a part-time graduate student, and worked part-time as a professional in Vermont. He had been raised in an upper-middle class home in the Boston area and had lived in Vermont for about six years. He was in his mid-twenties. Jim had a record of a number of misdemeanor offenses in two states, usually for drunkenness, or fighting in public (alcohol-related fights). His arrest for DWI was his first, and he recorded a BAC of .22 at the time of arrest.

Jim H. had been going out with a particular woman for several years. They had discussed marriage. He felt confused about marriage, and vacillated between thinking it would be just right for him and believing that it was much too soon for him to marry. The woman, as Jim told it, had been increasing pressure on him to decide one way or the other.

He enjoyed his work. Jim H. especially liked working with people. A bright and sensitive person, he was good at his work. His supervisor had become increasingly concerned with Jim's mental health as he watched Jim come to work numerous times during the past six months with a hangover. The supervisor had mentioned to Jim that this might be something he should get some help with, but Jim assumed his comments were part of the ritualistic "hazing" of joining a profession.

During discussions with Jim H., the issue of competence arose often. He indicated that he would take long walks and question himself. As he put it, "I don't know if I have it in me. I don't want to be just another hack at my job, and yet I'm not sure I have any unique capabilities." Jim drank almost every day. Although he drank moderate amounts during the week, on weekends he would often drink to the point of intoxication on at least one of the weekend evenings. He saw nothing deviant about this behavior and claimed it was a part of his coping mechanisms.

Fellow professionals had expressed their concern that he drank too much at times, to which Jim retorted, "We each have our minor vices." His fellow students were split in their opinions of Jim. Some felt that he was a charismatic leader and cited examples of his prowess in bars and at parties as evidence of his exceptional qualities. Others felt that he was interesting and fun to be with until about ten o'clock in the evening, at which time he would often have achieved a state of intoxication and have become arrogant, obnoxious, or belligerent. Jim was candid about these various opinions of him. He was aware of them and tended to admit that he might drink a little too much at times, but there were plenty of people who did not like him because they were jealous.

When asked how he responded to difficult situations at work, in school, or with his girlfriend, Jim H. answered with similar behaviors. He stated that he would get depressed, then have a few drinks and relax. Sometimes he would go to a bar for a few hours, other times he would stay home and read. By the next morning, he claimed most of the depressed feelings were gone and he could face the day's problems and pressures with a refreshed vitality.

The contradictions within Jim's statements of his self-doubts and his criticism of the way others saw him suggested that he was not aware of, or was aware of and denying, inner conflicts concerning his competence and prestige as a professional. His ambivalent attitudes

toward the relationship with his girlfriend, and varying levels of commitment to her (which appeared to swing from periods of wanting to get married to periods of wanting to end the relationship) suggested an inner conflict around becoming close to someone. This was confirmed by Jim's own observation that he had a problem handling dependent people and was very concerned about never being dependent on another person or allowing someone to control his life.

In terms of the classification system, Jim would be classified in Category C of the Adaptability Factor. His drinking behavior, fighting, and antagonistic responses to colleagues and professors in his work were maladaptive responses to inner conflicts and stresses which he was experiencing. Each of those responses aggravated the feelings of others toward him and blocked his ability to attain conditions in his life which he desired.

Jim H. was raised in a suburban area and was now living in an urban area in a "wet" region of the country (Cahalan and Room, 1974). His parents usually had a drink before or during dinner, but did not like to drink heavily (especially at parties and other social functions). These characteristics suggest subcultural and cultural forces regarding drinking which are ambiguous.

He felt that his reference groups included a group of fellow students, a group of professional colleagues, friends with whom he drank at some of the bars near his home, and a group of social friends with whom he and his girlfriend enjoyed spending time. Jim's level of drinking was criticized by most of his fellow students, his professional colleagues, his social friends, and his girlfriend. A small group of friends he met at bars supported his drinking behavior and enjoyed his outbursts of hostility and demonstrations of "masculine prowess" when drinking. He did not appear to spend any more time with this small group of friends than with any other group of people. Time spent with this particular group at bars usually excluded the participation of his girlfriend, fellow students, professional colleagues, and friends which he and his girlfriend shared. The resultant of the forces affecting Jim would be classified as Category B of the Sociocultural Factor (i.e., ambiguous forces).

The number of arrests for alcohol-related offenses, his behavior in bars, and his glib manner of avoiding criticism concerning his drinking caused other problems in his life. People did avoid being with him. His supervisor at work was becoming increasingly concerned about his mental health and the impact it would have on

his work. His drinking caused problems which led to other problems. He would be classified as Generalized Interference on the Severity of the Problem Scale.

The primary implication of the assessment of Jim H. is that he has a serious alcohol problem and should become involved in long-term rehabilitation efforts to work on it. In a short-term rehabilitation context, efforts should focus on getting him to admit having a serious problem with alcohol.

SECTION THREE:
STR OBJECTIVES AS INDICATED BY
THE CLASSIFICATION SYSTEM

The purpose of a DWI/Drinker Type Classification System is to identify STR objectives for DWIs. The purpose of STR objectives is to guide rehabilitation efforts with a DWI to increase the probability that in future he will engage in behavior related to alcohol abuse less often than he has in the past or present.

An objective is the articulation of a desired state or condition. It is the statement of an outcome, or a result. A rehabilitation objective is the articulation of a change toward a desired state or condition. Short-term rehabilitation (STR) objectives are statements of desired changes in DWIs which may be accomplished during the relatively brief period in which the courts and/or ASAP have jurisdiction over the DWI. This period of time may vary from several weeks to several months; in some locations it may be longer.

An STR objective serves several functions. First, it presents the DWI with a picture of the desired end point of the change process. He can determine where he is heading in his rehabilitation programs. Second, an STR objective provides the rehabilitation staff with a guide in their treatment activities. It helps them to focus their activities toward specific outcomes. The use of objectives in human change efforts increases the probability of successfully attaining the desired changes (Kolb and Boyatzis, 1970). Third, an STR objective provides a standard against which the effectiveness of rehabilitation efforts can be evaluated.

An objective, or goal, emanates from the recognition of a need for change in some aspect of a person's life. The perceived need for change emerges from the recognition of a discrepancy between the way things actually are and the way things ideally should be. For example, a person realizes that he is getting so heavy that he has trouble walking up a flight of stairs. He decides to lose weight. He has identified this desired change after realizing that he was having difficulty performing a task which had not been difficult in the past, climbing a flight of stairs. He attributed the difficulty to his current weight (the REAL). At the same time, he remembered how he felt when

he weighed less (the IDEAL). The discrepancy between the REAL and the IDEAL became his objective: to lose weight.

The classification system discussed in the previous section not only provided an assessment of the DWI's status on the three variables, but also provided an image of the most desirable status on each of the variables. The STR objectives are, therefore, statements of direction for aiding a DWI in changing from his current status to a more desirable status on any or all three of the dimensions in the classification system.

Desired Changes Implied by the Classification System

The assessment of a DWI on each of the three variables in the classification system will provide information about desired changes. These changes will be discussed in the context of each of the variables separately.

The Adaptability Factor

The most desirable status on the Adaptability Factor is the person using a variety of behaviors which are functionally adaptive in response to inner conflict and/or stress. In using these behaviors, the person is able to choose appropriate behavior among potential alternatives in responding to inner conflict or stress. He is able to make these choices, in part, as a function of his awareness of the arousal of inner conflict and stress.

If a client is assessed on the Adaptability Factor as having a status different from the most desirable, there are four basic types of changes implied. One change would be an increase in the client's awareness of inner conflicts and stress which he experiences. Specifically, it is awareness of the arousal of the inner conflicts and/or stress which is important to develop. The client may be neglecting, denying, or misperceiving sensations he is experiencing and misunderstanding the links between certain sensations and specific inner conflicts or stress. Awareness of the arousal of such conflicts or stress would prepare him to understand his condition and increase the probability of his choice of appropriate action to adapt to the inner conflict or stress. Without awareness of the arousal, he may continue to deny or avoid the emergence of these sensations.

Another change would be the development of skills in making decisions regarding what behavior is an appropriate and effective adaptive response to inner conflict and stress, and when to use such behavior for maximum benefit. Building this skill involves increasing the client's knowledge of the available alternative behaviors which may be appropriate. It also involves developing the ability to evaluate the consequences (costs and benefits) of alternatives. In some cases, a client may need help in learning how to make a decision once all the previously cited types of information are known. Some people have difficulty making decisions per se.

A third type of change would be the development of skills in the use of alternative behaviors. A person may be blocked from using a variety of functionally adaptive responses to inner conflict and stress because he is not aware of various behaviors. He may need help in learning about alternative behavior and learning the skill to continue identifying alternative behaviors in the future. Even if a client knows about alternative behaviors, he may not be able to use them. For example, a person may know the recommended procedures for meditating but be unable to attain the desired meditative state. Increasing his ability to use various behaviors may require practice, helping him to become comfortable in the use of the behavior.

The fourth type of implied change would be to help a client block, interrupt, or inhibit a self-sustaining cycle of inner conflict and/or stress. The client would have to recognize the self-sustaining nature of his behavior pattern. This may require confrontation of his denial and rationalizations which are probably supported by others in his social environment. This change would require the client to admit to a problem, as evidenced by his continued use of maladaptive behavior. A change in a self-sustaining cycle of maladaptive behavior may be possible only after building the client's skills in some form of crisis-intervention techniques which he can use for periodic symptom relief. Interrupting a self-sustaining cycle is a temporary change. Long-term rehabilitation work would be required to counteract the events and sensations which stimulate the use of maladaptive behavior.

The Sociocultural Factor

The most desirable status on the Sociocultural Factor is the person being in a social environment which encourages the reduction of drinking to levels considered responsible drinking and of behavior related to alcohol abuse. If a

client is in such an environment and still is convicted of driving while intoxicated, or involves himself in other behavior related to alcohol abuse, an implied change would be to socialize the client into his social environment's norms and values regarding alcohol use and abuse.

If a client's status on the Sociocultural Factor indicates that he is in a social environment of ambiguous and/or contradictory forces regarding norms of alcohol use and abuse, the basic implied change would be to decrease the client's vulnerability to forces from his environment. The emphasis would be on increasing his self-determination, and decreasing the impact of his environment in determining his drinking behavior. In environments with ambiguous forces regarding acceptable drinking behavior, a person is likely to be easily induced to behave in various ways, any of which can be justified as conforming to some of the norms present in the environment. The consequences of conformity and nonconformity become muddled in such an environment, and norms and values lose their impact as a social control mechanism.

If a client is in a social environment which supports his current excessive use of alcohol, or encourages increased levels, it would be desirable to change the client's exposure to these forces. This could be accomplished by changing the norms and values of groups within the client's social environment. It could also be accomplished by changing the client's membership in various reference groups. Changing membership in reference groups may mean withdrawing from participation in some groups, joining or forming new groups, or rebuilding older reference groups which have been dormant.

The Severity of the Problem Scale

The most desirable status on the Severity of the Problem Scale is that level at which a client's current drinking pattern results in no evidence of interference with life functioning and does not suggest any interference in the future. If a client is classified at the No/Threatened Interference level, the implied changes would be adjustments or refinements on his current behavior. An attempt would be made to build on the client's current strengths, capabilities, and behavior patterns which are functionally adaptive.

If a client is classified at the level of Occasional Interference or Regular Interference, the implied change would be to develop the client's skills in behavior which would help to interrupt the pattern of interference. A

client with Regular Interference would require more intensive efforts than one at the Occasional Interference Level.

If a client is classified at the level of Generalized Interference, the implied change is to help him to interrupt or block the self-sustaining cycle, to admit a serious problem with alcohol, and to seek long-term rehabilitation for his alcohol problem.

STR Objectives

The desired changes which emerged from the classification system are expanded and developed in detail in this section. Twelve separate STR objectives will be presented and discussed. These objectives include the entire realm of desired changes for a DWI.

Socialize the Client

STR Objective 1: Socialize the client into his reference groups' norms and values regarding appropriate drinking behavior and particular quantity/frequency levels.

To accomplish this objective, the client should be able to:

(a) State the norms and values of his reference group regarding drinking behavior and particular quantity/frequency levels;

(b) Describe the rewards for conformity with these norms and values;

(c) Describe the punishments for nonconformity with these norms and values; and

(d) Demonstrate behavior consistent with these norms and values.

Appropriate drinking behavior describes the alcohol consumption pattern which the reference group accepts and approves. Behavior consistent with the norms and values of a group is defined in terms of the proscriptions and prescriptions of the group. An assumption inherent in this objective is that the most potent forces in a person's social environment are those exerted by his reference group, or groups. Forces from the subculture or culture will probably be mediated and interpreted through the reference group.

Although stable and effective socialization into a group requires internalization of the group's norms and values, a person can be considered somewhat socialized if he recognizes the rules of the group and can acknowledge the rewards and punishments (the consequences) for conformity or nonconformity to those rules.

Decrease the Client's Vulnerability

STR Objective 2: Decrease the client's vulnerability to group forces with regard to drinking behavior.

To accomplish this objective, the client should be able to:

(a) State the culture's view of his reference group's norms and values, especially when behavior labelled "conforming" by the reference group is labelled "deviant" by the culture (i.e., results in negative consequences);

(b) Describe the norms and values for each group (reference group, subculture, and culture) to which he is exposed and the possible consequences of conformity;

(c) Identify and explain the operation of various group pressures to conform;

(d) Demonstrate interpersonal skills in resisting group pressures to conform; and

(e) Make appropriate distinctions regarding when to conform and when not to conform.

Skills in resisting group pressures to conform are a type of social inoculation. They help the person defend himself against the pressures as they occur. Pressure is used synonymously with force.

An assumption made in one part of this objective is that a client will be prepared to resist reference group pressure to demonstrate behavior which his subculture, or culture views as deviant (e.g., driving friends home after a heavy drinking session at a bar) if he is aware of the views of the subculture, or culture toward this behavior. Of course, this dynamic could work in reverse. For example, if the reference group has developed a part of its identity around the "deviant" behavior, then acknowledgement of the culture's view of the behavior as deviant is positive reinforcement for the demonstration of the behavior.

Group Structural Change

STR Objective 3: Change the client's exposure to certain norms and values regarding drinking behavior and particular quantity/frequency levels.

To accomplish this objective, the client should be able to:

(a) Recognize the need for a change of norms and values within his reference group;

(b) Change the norms and values of the reference group regarding drinking behavior and particular quantity/frequency levels, or at least support such a change which has been initiated; and/or

(c) Change his membership in particular reference groups by withdrawing from current membership, becoming a member of a new group, or resuming membership in prior reference groups.

A structural change is a change in the sociocultural environment of the individual. The target for the structural change may be a particular reference group of the client. For example, the rehabilitation work may focus on changing the norms and values of a client's extended family regarding alcohol use. In this case, both the client and his extended family (as a reference group) are the targets for the rehabilitation effort.

The client does not have to withdraw from a reference group to accomplish a structural change. He may alter his involvement in the group's activities, or change his role in the structure of the group. Either of these changes may be enough to change the impact of the group's norms and values on his behavior.

Another option for a client is to mobilize the positive forces in his natural environment which may help him change his drinking behavior. This could be accomplished through rebuilding a friendship network or family who had once been important to the client. The client may wish to build new reference groups with people who are attempting similar changes in their lives, such as Alcoholics Anonymous groups.

Information on Alcohol

STR Objective 4: Improve the client's knowledge about alcohol use and abuse.

To accomplish this objective, the client should be able to:

(a) Describe the effects of alcohol on the human body, mind, emotions, and its consequent effect on behavior and performance; and

(b) Identify behavior indicative of a potential drinking problem, a current drinking problem, and alcoholism.

Decision on Responsible Drinking

STR Objective 5: Obtain the client's decision whether responsible drinking is a realistic and desirable goal, or abstinence a necessary goal.

If responsible drinking is the client's goal, he should be able to:

(a) Identify the specific number of drinks which he can consume within a given period of time and still be a safe driver;

(b) State the number of drinks (glasses of beer, wine, or distilled spirits) which brings his BAC to .05 and .10;

(c) Describe plans to control drinking behavior on specific occasions (e.g., parties, stopping at a tavern after work).

If abstinence is the client's goal, he should be able to:

(a) List the steps he will take to insure continued abstinence; and

(b) Identify resources in the community to help him with this goal.

Choosing between responsible drinking or abstinence is a major decision. The specific actions identified above are only applicable once the decision has been made. It is possible that a person would want to choose abstinence for a period of time as a step on the way to a goal of responsible drinking.

Monitor Arousal

STR Objective 6: Develop the client's ability to monitor the arousal of specific inner conflicts and/or stresses which elicit the need for an adaptive response.

To accomplish this objective, the client should be able to:

(a) Expand his conscious recognition of the inner conflicts and/or stresses which are associated with, or precipitate drinking by: (1) recognizing emotional, mental, physical, and behavioral characteristics of inner conflict or stress which are associated with times when the client drinks; (2) identify interrelationships among these characteristics; and (3) answer the following questions: When do I feel this way? Why do I feel this way? What will happen and what will I do if I feel this way?;

(b) Identify the antecedent, or preliminary cues of emerging inner conflicts and/or stresses; and

(c) Alert himself to the need for actions to avoid or reduce the emerging inner conflicts and/or stresses.

(d) Identify choice points (moments which are an opportunity for continued use of behavioral pattern or use of alternatives) when such actions would be appropriate.

Conscious recognition is a process of locating, focusing, and consciously acknowledging a condition, or state, such as tenseness in the stomach. Interpretation of the states, once recognized, is a labelling process which places the state in a context with hypothesized causes and effects.

The process of recognition and interpretation leads to greater differentiation of sensations. This provides the individual with increased specificity in identifying the observable behavior which corresponds to the inner sensation. For example, a client might say, "I'm feeling down." Once having said this, he would choose some nonspecific action to alleviate the feeling. This action would probably be an attempt to "get high." On the other hand, if the client had said, "I'm beginning to feel lonely," he would have a specified sensation to attempt to resolve. He could easily follow his recognition of loneliness with a statement such as, "I should do something which will make me feel closer to people to get rid of the lonely feeling." In this case, his choice of action would be more effective in resolving the uncomfortable sensations than his choice made without the greater differentiation in his recognition and interpretation

processes. The ability to differentiate among sensations also provides the client with skill in distinguishing among types and degree of inner conflicts and stresses.

When the client can monitor the arousal of inner conflict and stress, he can become proactive in resolving these experiences. Early identification of the arousal enables him to examine behavioral alternatives to alleviate the sensation before it becomes too intense to allow logical or healthy choices. Painful experiences which reach a high level of intensity (e.g., inner conflicts or stresses) inhibit action by the client by confusing his perception of symptoms and problems.

Skills in Choosing Alternatives

STR Objective 7: Increase the client's knowledge of appropriate behaviors and his ability to choose among them when inner conflict or stress is aroused.

To accomplish this objective, the client should be able to:

(a) Develop a list of alternative behaviors responsive to specific inner conflicts or stresses;

(b) Estimate and evaluate the effectiveness of each alternative behavior as an adaptation;

(c) Anticipate the consequences of the use of particular adaptive responses;

(d) State the costs and benefits of using a particular adaptive response in a specific situation; and

(e) Practice making appropriate decisions through simulated or real experiences.

Helping a client develop skills in choosing among alternative adaptive responses assumes that the client has a repertoire of alternatives available to him. The process of choosing a behavioral response to a situation of inner conflict or stress is the first step toward resolution of the conflict.

If this skill is developed, the client would ideally go through a choice process automatically. He would not have to say, "Oh, I must make a choice of an alternative now." This process may even become unconscious as the client further increases his skills in monitoring arousal and in choosing alternatives.

The focus of this objective is to help the client learn to match potentially adaptive behavior with specific inner conflicts and/or stresses. Some clients may need help in learning to make a decision. A client may become confused by an overload of information and fearful of making a decision when attempting to use these new skills. All of the information developed through the skills mentioned in the specific actions listed above are intended to help the client make a decision, and develop skill in making these decisions on a regular basis.

Change Internal Response

STR Objective 8: Substitute or suppress the arousal of the client's typical internal response to inner conflict and/or stress.

To accomplish this objective, the client should be able to:

- (a) Reassess the real consequences of a situation;
- (b) Reduce the anxiety associated with a situation;
- (c) Develop a preferred internal response to situations which have been conflict or stress provoking;
- (d) Identify the specific cues in situations which provoke conflict or stress; and
- (e) Differentiate these cues from symbols or reminders of the situations.

Once this objective is accomplished, the client's internal response to a situation will be different. In situations where the client would have experienced inner conflict or stress, he may experience a new sensation and thoughts which do not arouse inner conflicts or stresses. The new thoughts and sensations may be merely the absence of anxiety or stress, or may be an experience of positive emotion or thoughts of new adaptive responses to the situation.

This objective reflects a particular theory of human behavior and behavior change which is different from that reflected in earlier objectives (e.g., monitoring arousal or skills in choosing alternatives). The theory on which this objective is based assumes that the client can be passive in utilizing the new skills or orientation learned in working toward this objective. The client is not required to think about anything, nor consciously process information; he responds automatically in a new manner to situations which elicited inner conflict or stress in the past. The theory on which earlier objectives were based assumes that a person must be active in facilitating changes in himself. In these instances, the client must learn new thought processes and actively pursue new orientations to situations.

Skills in Alternatives

STR Objective 9: Build the client's skills in behaviors which are alternatives to alcohol abuse.

To accomplish this objective, the client should be able to:

(a) Experiment with alternate behavior not in the client's repertoire; and

(b) Practice alternate behavior.

Building a client's skills in alternatives means that the client, as a result of the rehabilitation efforts, can do something. For example, showing the client how to ride a bicycle by means of a demonstration may be a part of teaching him a skill in riding a bicycle, but it is not enough. Teaching him how to pedal may also be a part of the skill, but it is not enough. The client must demonstrate the skill by actually riding a bicycle. For a behavior to become a real alternative, the client must be able to perform the activity, have experienced satisfaction from it, and feel comfortable and competent in his performance.

The activity, to be a true alternative, must be as satisfying as alcohol abuse, as quick to create the perception of relief from conflict or stress (producing a "high" similar to that experienced with drinking) and as accessible as alcohol (e.g., costs the same amount of money or less). The activity should be self-reinforcing; that is, use of the alternative should encourage more use of it through a self-rewarding process.

Blocking Self-Sustaining Conflict

STR Objective 10: Aid the client in blocking or inhibiting his self-sustaining pattern of inner conflicts and stresses.

To accomplish this objective, the client should be able to:

(a) Examine the beneficial and detrimental consequences of current behavioral responses to inner conflict and stress;

(b) Describe the manner in which these consequences stimulate, or perpetuate inner conflict or stress;

(c) Identify the points in this self-sustaining cycle of conflict and/or stress at which intervention can be effective;

(d) Explore the use of others to aid in the interruption of this cycle;

(e) Develop a plan for trying out behaviors which would interrupt the self-sustaining cycle; and

(f) Name and implement at least one specific behavior that interrupts the self-sustaining cycle.

Working toward this objective is preparation for the client to work on the following two objectives (STR Objectives 11 and 12). There may be the need to help the client interrupt his self-sustaining pattern long enough to allow him to explore his alcohol problem. Work toward this objective, therefore, may be in the form of crisis intervention which attempts to lower the client's anxiety level, or reduce tension-provoking symptoms. Although the objective is stated in terms of blocking the cycle, the ultimate aim is to insure that the client does not begin functioning in this cycle in the future. The assumption is that such insurance could only come with long-term rehabilitation efforts. The objective of the short-term efforts is merely to block the cycle and get the client into long-term treatment.

Working toward this objective may require a considerable amount of confrontation by counselors, especially for those clients who are continuing to deny the existence of an alcohol problem or a self-sustaining pattern of conflict and stress.

Admit Drinking Problem

STR Objective 11: Elicit the client's admission that his drinking behavior is a severe problem that is stimulating and perpetuating many problems in his life.

Accomplishment of this objective will often require confrontation of the client and disconfirmation of his current beliefs about the condition of his drinking problem and its impact in his life. For many clients, others in their social environment are supporters of the denial of a drinking problem, offering him many rationalizations to explain the normality of his drinking behavior.

Seek Additional Treatment

STR Objective 12: Acquire the client's commitment to seek long-term aid in handling his alcohol problem through various community resources.

To accomplish this objective, the client should be able to:

- (a) Admit he has a severe alcohol problem;
- (b) Recognize that he can neither rehabilitate himself nor control his drinking behavior without the help of others;
- (c) Identify potential community resources which could help him with his alcohol problem;
- (d) Describe the costs and orientation of various community resources so as to facilitate the choice of a resource which is acceptable to him; and
- (e) Make an appointment to see a specific person in one of the available community resources for help, and then keep the appointment.

SUMMARY OF STR OBJECTIVES

The following is a summary of the STR objectives:

1. Socialize the client into his reference group's norms and values regarding appropriate drinking behavior and particular quantity/frequency levels;
2. Decrease the client's vulnerability to group forces with regard to drinking behavior;
3. Change the client's exposure to certain norms and values regarding drinking behavior and particular quantity/frequency levels;
4. Improve the client's knowledge about alcohol use and abuse;
5. Obtain the client's decision whether responsible drinking is a realistic and desirable goal, or abstinence a necessary goal;
6. Develop the client's ability to monitor the arousal of specific inner conflicts and/or stresses which elicit the need for an adaptive response;
7. Increase the client's knowledge of appropriate behaviors and his ability to choose among them when inner conflict or stress is aroused;
8. Substitute or suppress the arousal of the client's typical internal response to inner conflict and/or stress;
9. Build the client's skills in behaviors which are alternatives to alcohol abuse;
10. Aid the client in blocking or inhibiting his self-sustaining pattern of inner conflicts and stresses;
11. Elicit the client's admission that his drinking behavior is a severe problem that is stimulating and perpetuating many problems in his life; and
12. Acquire the client's commitment to seek long-term aid in handling his alcohol problem through various community resources.

Deriving STR Objectives from the Classification System

Assessment of a DWI on the Adaptability Factor, the Sociocultural Factor, and the Severity of the Problem Scale will indicate a set of the most relevant STR objectives. The STR objectives considered most appropriate for a DWI assessed by this system are shown in Charts 1, 2, and 3. Chart 1 indicates STR objectives for DWIs assessed as Category A on the Adaptability Factor. Charts 2 and 3 indicate STR objectives for DWIs assessed on the Adaptability Factor as Categories B and C, respectively. An explanation of these charts follows at the end of this section.

Although the chart reveals a large number of possible sections for assignment of DWIs, the process of using the classification system is relatively easy. A person conducting the assessment would determine which one of three categories most accurately describes the DWI on the Adaptability Factor. He would next determine which one of three categories most accurately describes the DWI on the Sociocultural Factor, and finally would determine which one of the four categories most accurately describes the DWI on the Severity of the Problem Scale. The STR objectives relevant for the particular DWI would be indicated by locating the appropriate section in the chart on the classification system.

The reader may find it helpful to consult the charts while reading the textual description of the assignment of STR objectives in the classification system. In some sections in the charts, certain STR objectives are italicized. These are considered of primary importance for the DWI assessed in that particular section. Successful completion of rehabilitation could be determined by achievement of the italicized objectives. Although the classification categories suggest certain priorities among the objectives, these priorities may vary as a result of special characteristics of a particular client.

STR Objectives from Category A of the Adaptability Factor

If a person is placed in Category A of the Adaptability Factor (using a variety of behaviors which are functionally adaptive), STR Objectives 4, 5, and 6 are relevant. Such a person probably needs relatively minor adjustments as reflected by the information on alcohol and decision on responsible drinking objectives. The individual has a

STR OBJECTIVES BY CLASSIFICATION

Chart 1

Adaptability Factor Category A:

Using a variety of functionally adaptive behaviors

SEVERITY OF THE PROBLEM		Adaptability Factor Category A:	
		No/Threatened Interference	Occasional Interference
SOCIO-CULTURAL FACTOR	Positive Forces: Category A	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Socialize the client 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Socialize the client
	Ambiguous Forces: Category B	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Decrease the client's vulnerability 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Decrease the client's vulnerability
	Negative Forces: Category C	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Decrease the client's vulnerability ● Group structural change 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Decrease the client's vulnerability ● Group structural change

STR OBJECTIVES BY CLASSIFICATION

Chart 2

Adaptability Factor Category B:
Frequently using specific, limited behaviors

SEVERITY OF THE PROBLEM		Socio-Cultural Factor		
		No/Threatened Interference	Occasional Interference	Regular Interference
Positive Forces: Category A	No/Threatened Interference	<ul style="list-style-type: none"> • Information alcohol • Decision on responsible drinking • Monitor arousal • Socialize the client 	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • <i>Monitor arousal</i> • <i>Skills in choosing alternatives</i> • Socialize the client 	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • Monitor arousal • Skills in choosing alternatives • <i>Change internal response</i> • <i>Skills in alternatives</i> • Socialize the client
	Ambiguous Forces: Category B	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • Monitor arousal • Decrease the client's vulnerability 	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • <i>Monitor arousal</i> • <i>Skills in choosing alternatives</i> • Decrease the client's vulnerability 	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • Monitor arousal • Skills in choosing alternatives • <i>Change internal response</i> • <i>Skills in alternatives</i> • Decrease the client's vulnerability
	Negative Forces: Category C	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • Monitor arousal • <i>Decrease the client's vulnerability</i> • Group structural change 	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • <i>Monitor arousal</i> • <i>Skills in choosing alternatives</i> • <i>Decrease the client's vulnerability</i> • Group structural change 	<ul style="list-style-type: none"> • Information on alcohol • Decision on responsible drinking • Monitor arousal • Skills in choosing alternatives • <i>Change internal response</i> • <i>Skills in alternatives</i> • <i>Decrease the client's vulnerability</i> • Group structural change

STR OBJECTIVES BY CLASSIFICATION

Chart 3

Adaptability Factor Category C:
Using Maladaptive Behaviors

SOCIO-CULTURAL FACTOR	SEVERITY OF THE PROBLEM	No/Threatened Interference	Occasional Interference	Regular Interference	Generalized Interference
Positive Forces: Category A		<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Socialize the client 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Change internal response ● Skills in alternatives ● Socialize the client 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Change internal response ● Skills in alternatives ● Socialize the client 	<ul style="list-style-type: none"> ● Block self-sustaining cycle ● Admit alcohol problem ● Seek additional treatment ● Socialize the client
Ambiguous Forces: Category B		<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Decrease the client's vulnerability 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Change internal response ● Skills in alternatives ● Decrease the client's vulnerability ● Group structural change 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Change internal response ● Skills in alternatives ● Decrease the client's vulnerability ● Group structural change 	<ul style="list-style-type: none"> ● Block-self-sustaining cycle ● Admit alcohol problem ● Seek additional treatment ● Decrease the client's vulnerability ● Group structural change
Negative Forces: Category C		<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Decrease the client's vulnerability ● Group structural change 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Change internal response ● Skills in alternatives ● Decrease the client's vulnerability ● Group structural change 	<ul style="list-style-type: none"> ● Information on alcohol ● Decision on responsible drinking ● Monitor arousal ● Skills in choosing alternatives ● Change internal response ● Skills in alternatives ● Decrease the client's vulnerability ● Group structural change 	<ul style="list-style-type: none"> ● Block self-sustaining cycle ● Admit alcohol problem ● Seek additional treatment ● Decrease the client's vulnerability ● Group structural change

functional repertoire of adaptive behavior and a DWI conviction is probably an extraordinary event in his life. For such a person with No/Threatened Interference, the DWI conviction is more likely a result of unique situational factors (e.g., the wedding of his only child) than an extreme form of behavior which is typically demonstrated by the client.

Education about alcohol may be enough to help the individual in these sections adjust his behavior. Thinking about responsible drinking and making a conscious decision to control his drinking will be an additional action to reduce the probability of a future drinking and driving episode.

For a person in Category A with evidence of Occasional Interference other than the DWI conviction, work on monitoring the arousal of conflict and/or stress would be needed to improve the adaptive potential of his behavior in the future. For such a person; we cannot conclude that education alone will be enough. The development of skills in monitoring arousal may be necessary to improve the efficiency of the person's ability to choose appropriate behavior from the various potentially adaptive responses in his repertoire.

If the person is in Category A of the Sociocultural Factor, STR Objective 1 would be added to the other objectives indicated. Socializing the client into conformity with his reference group's norms and values about alcohol use and abuse should be enough to prevent a future DWI conviction. Since this individual has a repertoire of functionally adaptive behavior, merely stimulating the client's recognition of his reference group's norms and values and natural social control mechanisms should suffice in working toward this objective.

If the person is in Category B of the Sociocultural Factor, STR Objective 2 would be added to the other objectives indicated. Decreasing the client's vulnerability to forces from his environment would be necessary to insure the client's ability to use his repertoire of functionally adaptive behavior rather than other behavior (e.g., behavior related to alcohol abuse) sometimes encouraged by his reference group.

If a person is in Category C of the Sociocultural Factor, STR Objectives 2 and 3 would be added to the other objectives indicated. Although the client uses a variety of functionally adaptive behavior in response to inner conflict and/or stress, he is in an environment which encourages behavior which is not functionally adaptive for

him. That is, the behavior related to alcohol abuse which is encouraged may be adaptive in conforming to reference group pressures, but is not adaptive in response to the person's inner conflicts or stresses. Decreasing the client's vulnerability to the group forces may be enough to insure his continued use of his own functionally adaptive repertoire. A group structural change may be necessary if the client experiences additional inner conflict from not conforming to the reference group's norms regarding alcohol use. The additional conflict may lead the client into occasionally choosing behavioral responses to situations which are not functionally adaptive (which may be maladaptive) and lead to other conflicts or stresses.

For the client in Category A of the Adaptability Factor, work toward STR Objectives 2 or 3 will probably not require intensive efforts or lengthy follow-up. The client has a repertoire of functionally adaptive behavior, uses it effectively when experiencing inner conflict and/or stress, and in the most extreme case has only Occasional Interference in his life functioning resulting from alcohol consumption. The emphasis of work toward these objectives for such a person would be to build on his current strengths by developing his ability to resist conformity pressure from his reference group.

STR Objectives from Category B of the Adaptability Factor

If a person is placed in Category B of the Adaptability Factor (frequently using specific, limited behavior), STR Objectives 4 through 9 are relevant. Such a person may only require minor adjustments in his pattern of alcohol use, or may require major changes in his skills and orientation to inner conflict and stress. The information on alcohol and decision on responsible drinking objectives are relevant as initial objectives for any person classified in Category B.

For a person in Category B who has a Severity level of No/Threatened Interference, the addition of STR Objective 6, monitoring arousal of conflict or stress, to STR Objectives 4 and 5 would be necessary. A person in these sections either does not use alcohol often or uses it responsibly most of the time. It is not likely that alcohol is one of the specific behaviors which he frequently uses in response to conflict or stress. At this first level of Severity, he needs some help in learning skills to use his repertoire appropriately. Work toward the monitoring objective should provide the basic skills necessary.

For a person in Category B with a Severity level of Occasional Interference, STR Objective 7 should be added to Objec-

tives 4 through 6. Such an individual would need developmental work on his skills in choosing appropriate behavior once he is aware of the arousal of inner conflicts and/or stresses. His Occasional Interference in life functioning, resulting from alcohol consumption in the context of frequently using specific, limited behaviors as adaptive responses, suggests a greater potential danger of alcohol abuse than that of persons assessed with less interference on the Severity of the Problem Scale. The focus of his rehabilitation work would probably be on STR Objectives 6 and 7, using work toward Objectives 4 and 5 as background. Since he is only experiencing Occasional Interference due to drinking, he appears to be using adaptive behaviors most of the time. The focus of these objectives is to increase his ability to utilize these behaviors.

A person in Category B with a Severity level of Regular Interference would need to work toward STR Objectives 4 through 9. For him, the focus of rehabilitation work would be on Objectives 8 (changing internal response to conflict) and 9 (skills in alternatives). Work toward Objectives 4 through 7 would provide background for work toward increasing the number and variety of behaviors in his repertoire. A person with Regular Interference resulting from alcohol consumption has developed a pattern of habitual behavior which becomes self-reinforcing over time. The rehabilitation work would be oriented toward changing that pattern. To help the person break such patterns, he must learn new behaviors and ways to integrate them with his current activities. For such a person, learning to monitor arousal and choose alternatives alone would not have as much impact as changing his pattern of Regular Interference. In contrast to someone with Occasional Interference, this person does not appear to be using adaptive behaviors often. The regularity of interference with life functioning due to drinking suggests that STR efforts must emphasize expanding his repertoire of usable behaviors.

The emphasis of STR work for this person is on building skills in alternatives rather than skills in choosing alternatives, and on changing the client's internal response to conflict or stress rather than on monitoring arousal of conflict or stress. The client must have alternatives which he can use before he can apply skills in choosing which alternative is appropriate in a given situation. A pattern of Regular Interference implies that the client does not have a variety of adaptive behaviors as alternatives in his repertoire. Following this line of reasoning, a client with a pattern of Regular Interference would not be more effective than previously in responding to conflict or stress in his life if he could monitor the arousal of conflict or stress. Once he was aware of the arousal, he would be relatively

unable to identify adaptive behavioral responses. For this person, it would be more helpful for him to change the nature of his internal reactions to various situations.

If a person is in Category A of the Sociocultural Factor, STR Objective 1 would be added to the other objectives indicated. Socializing the client into conformity with his reference group's norms and values about alcohol use may require a rehabilitation effort focusing on the individual, rather than on the reference group. The person would have to learn to break his pattern of frequent use of specific, limited behaviors and to develop behavioral responses which are considered appropriate by his reference group.

If the person is in Category B of the Sociocultural Factor, STR Objective 2 would be added to the other objectives indicated. Decreasing the client's vulnerability to group forces may be critical to the client's rehabilitation if the frequent use of specific, limited behaviors represents his reference group's habitual behavioral pattern, rather than merely the client's personal pattern. Interrupting the influence of his reference group's pattern on his behavior requires building his ability to resist group pressure to conform, and replacing the rewards of conformity with other rewards of equal, or greater value to the client. Work toward this objective may necessitate periodic follow-up contact to reinforce his skills and build his resistance to group pressure. It must be assumed that the client's resistance to group pressure to conform would weaken with emotional distance from the rehabilitation sessions. Follow-up contact would be a way to remind him of his desired behavioral changes and to maintain his consciousness of STR objectives.

If the person is in Category C of the Sociocultural Factor, STR Objectives 2 and 3 would be added to the other objectives indicated. Decreasing the client's vulnerability to group pressures would involve the type of efforts mentioned above. A structural change in the client's exposure to various group pressures regarding alcohol abuse would require work with the client and the reference groups involved (if the desire was to change the group's norms). Working with the client alone to build skills which decrease his vulnerability to group pressure may suffice for persons in Category B of the Adaptability Factor. Any work toward changing the client's exposure to norms encouraging drinking would probably focus on his vulnerability rather than attempting to change his group membership. Follow-up contact would have to be periodic and at a level of intensity which could provide continued reinforcement to the client in his change efforts.

STR Objectives from Category C
of the Adaptability Factor

If a person is placed in Category C of the Adaptability Factor (using behaviors which are maladaptive), STR Objectives 4 through 12 are relevant. Although such a person would require extensive work to improve his life functioning in general, he may only require a relatively minimal development of new skills to change his drinking behavior if his Severity level is No/Threatened Interference. Information on alcohol, a decision on responsible drinking, skills in monitoring arousal of inner conflict and/or stress, and skills in choosing alternatives objectives would be relevant to helping this person insure no interference with life functioning resulting from his drinking behavior. The skills in monitoring arousal and choosing appropriate alternatives are needed as preventive steps by this person because of his inability to choose appropriate adaptive responses and his use of maladaptive behavior (other than drinking) when responding to inner conflicts and stresses in his life.

If a person in Category C has a Severity level of Occasional Interference, STR Objectives 4 through 9 would be relevant. Information on alcohol and a decision on responsible drinking would be necessary objectives to accomplish as background to his other rehabilitation work. Although he would be working toward increasing skills in monitoring the arousal of inner conflicts and stresses and skills in choosing appropriate alternatives, the focus of his rehabilitation work would be on building skills in alternatives and changing his internal response to conflict and stress. A person with Occasional Interference in life functioning who is using maladaptive behavior in response to conflict and stress in life is occasionally using alcohol abusively and has the potential of developing a greater degree of interference. He needs help in developing new ways of responding to conflicts and stresses.

If a person in Category C has a Severity level of Regular Interference, STR Objectives 4 through 9 would be relevant. Information on alcohol and a decision on responsible drinking would be necessary objectives to accomplish as background to his other rehabilitation work. STR work would focus on monitoring the arousal of conflict or stress, skills in choosing appropriate alternatives, building skills in alternatives, and changing his internal response to conflict or stress. A person who is using maladaptive behavior in response to inner conflict or stress, and has a pattern of Regular Interference in life functioning due to drinking needs the monitoring skills and choosing skills as back-up to the new alternatives he is learning and his new internal responses to conflict or stress.

Work toward these objectives for a person with Occasional or Regular Interference must be intensive. This requires intensive and lengthy follow-up. The individual is not only attempting to learn new behaviors, but to use them in his life while attempting to break patterns of inappropriate behaviors. Working on these many different aspects of life functioning can be confusing. For a person with an alcohol problem, working toward these objectives can easily overload his capabilities to respond to conflict and stress and create even more inner conflict and stress. The rehabilitation work must be intensive to enable the individual to learn new behaviors and new internal responses in relatively safe environments prior to returning to his usual life environment.

If a person in Category C has a Severity level of Generalized Interference, STR Objectives 10 through 12 are relevant. A person with this level of interference in life functioning resulting from alcohol consumption has a substantial problem with alcohol. This problem needs special rehabilitation work before he can address any of the other problems in his life. The emphasis of working with this person is to get him to admit a problem with alcohol and to seek additional rehabilitation help for his alcohol problem. To accomplish these objectives, it may be necessary to help him block his self-sustaining cycle of conflict and stress. The client may need momentary relief from his anxieties, conflicts or stresses to enable him to confront his drinking behavior and recognize the self-perpetuating cycle which his behavior produces. STR Objectives are merely vehicles to get this person into long-term rehabilitation. His alcohol problem is too severe for significant progress to be made over a short period of time. With most DWIs, work toward these STR objectives would require intensive programs with intensive and lengthy follow-up.

If the person is in Category A of the Sociocultural Factor, STR Objective 1 is added to the other objectives indicated. Socializing the client may imply using his reference groups to confront him about his pattern of difficulties in life, and the role which alcohol plays in these difficulties. Working toward this objective would require the involvement of one of the person's reference groups in an intensive manner.

If the person is in Category B or C of the Sociocultural Factor, STR Objectives 2 and 3 would be added to the other objectives indicated. Decreasing the client's vulnerability becomes a difficult task with someone whose behavioral repertoire is maladaptive. Rehabilitation work would focus on STR Objective 3, even if the client's reference groups provide ambiguous forces regarding alcohol use and abuse.

It is not likely that a person in Category C of the Adaptability Factor could develop skills in decreasing his vulnerability to group forces while simultaneously attempting to learn to use new behaviors which are functionally adaptive. Working toward STR Objective 3 for such a person would require highly intensive work with the client and his reference groups (if the choice is to change the norms of one of the groups). If a choice is made for the client to withdraw from a reference group, he will need a source of emotional support and some social context to replace the lost reference group. Building new groups, or rebuilding older reference groups requires working with the reference group as well as the client.

SECTION FOUR:
SURVEY OF AVAILABLE POTENTIAL STR APPROACHES

Once a system has been defined and a set of desirable changes have been identified in terms of STR objectives, treatment programs must be examined to find an approach, or set of approaches, which will help the DWI to accomplish the rehabilitation objectives. A survey was begun to determine what has been done and what is currently being done to help people accomplish these rehabilitation objectives. Such a survey can never be exhaustive due to the distribution of relevant information among many sources and the continual emergence of new approaches. The objective of this section of the report, therefore, is to document and review as many rehabilitation approaches as possible which may be applicable to DWIs in a short-term context.

It is difficult to reduce the documentation and review of potential STR approaches into manageable proportions. In attempting to accomplish this task, a sense of the dedication, energy, and inventiveness of persons who design, develop, and implement various rehabilitation approaches can be overlooked. Innovation in a treatment field is a slow process in which many obstacles are encountered along the way. Some of these obstacles are based on sensible, ethical concerns of practitioners, and others are based on rigid conformity to tradition by practitioners and program administrators. The following review does not seek to demean any of these attempts, nor to lessen the appreciation felt for people attempting to improve rehabilitation services. The review does attempt to place such programs in a perspective of probable effectiveness and relevance for various DWI/Drinker Types.

Criteria for Assessment of Programs

Two criteria have been used in examining each rehabilitation program in an attempt to determine whether it is an STR approach with potential for use with DWIs or not.

Criterion 1: Is the rehabilitation approach effective in helping people attain specific rehabilitation objectives? Each approach is reviewed with regard to information concerning its effectiveness (case study and evaluation research are considered relevant information). The effectiveness is discussed in terms of accomplishment of specific rehabilitation

objectives. To accomplish this task, the intended objectives of each approach must be determined. It is also important to document the types of clients used in the study.

Criterion 2: Is the rehabilitation approach relevant for use with DWIs in a short-term context? The applicability of the approach must be determined for various DWI/Drinker Types, as well as for potential differences in acceptability for various groups with certain demographic characteristics.

Relevance for use with DWIs is determined through exploration of a number of issues. Any program to be used with DWIs must utilize a group, rather than individual setting, at least for most of the dominant aspects of the rehabilitation program. Programs must be conducted in an outpatient setting. Programs for DWIs must be such that they can be conducted by rehabilitation staff (counselors, social workers, etc.) who do not necessarily have a great deal of formal training in psychotherapeutic methods, medicine, and so forth. The programs must also be considered relevant only if they can be conducted in the context of the involuntary assignment which results from the DWI conviction.

Problems in Conducting the Survey

A number of general problems in documenting and reviewing rehabilitation programs on the above mentioned criteria should be noted. First, relatively few rehabilitation programs are systematically evaluated, as compared to the number that are attempted or are in use. There is great variance among those evaluated as to the quality of the research involved (Emrick, 1974, 1975). Second, rehabilitation approaches which reach exposure in the literature are more likely a function of the personal desire to write and communicate a program to others than a function of the program's quality or uniqueness.

Third, many advances in rehabilitation programs have been developed and described as rehabilitation procedures; few have articulated specific desired outcomes (i.e., objectives). This may result from the process orientation of most people in the treatment field. They tend to think about "how to do" something rather than to think about "what will happen as a result or outcome" of this process. In the process of applying a particular rehabilitation approach to a new type of client, problem, or group, practitioners may lose the sense of the specific objectives originally intended for the program. For example, the intended rehabilitation objectives of marathon groups used with alcoholics are vague (Dichter et al., 1971). This vagueness of objectives may have resulted from the transfer of this

technique to use with alcoholics from the human relations training field in which it was originally developed (Dinges and Weigel, 1971; Bradford et al., 1964).

A fourth problem in discussing rehabilitation programs in terms of the criteria mentioned above is that many advances have been reported or discussed as a result of enthusiasm about the techniques rather than as a result of research evidence documenting a program's effectiveness or relevance to certain people. Descriptions of programs emanating from enthusiasm tend to provide information on methods in conducting the program while descriptions of programs emanating from research evidence on effectiveness tend to provide information on the outcomes of the programs.

Organization of this Section

The following section of the report includes a discussion of rehabilitation approaches which may be relevant for use with DWIs. These approaches are related to each of the STR objectives discussed in the last section. The last part of this section will review several approaches to rehabilitation which have attempted to integrate various STR methodologies.

Approaches to rehabilitation which are reviewed in this section of the report may work toward a number of different desired changes, as reflected in the STR objectives. In some cases the authors of the programs have identified a number of objectives for their approaches; and in other cases, approaches are discussed in terms of STR objectives which have not been mentioned by the authors but are perceived to be relevant. The result is that a particular approach to rehabilitation may be discussed, or mentioned, in the context of several STR objectives.

A Review of Rehabilitation Programs by STR Objectives

Socialize the Client

Socializing the client into his reference group's norms regarding drinking has not been an articulated nor dominant treatment objective in the past. Part of this problem emanates from the view that the client's drinking problem requires abstinence and conformity to special norms for people labeled as problem drinkers. Part of the problem is also the result of attempts to socialize the client into society's norms without regard to his reference group's norms.

Rehabilitation programs whose objective is socialization of clients have traditionally been oriented toward stimulating a client's awareness of the consequences and punishments for nonconformity to the social group's norms. This occurs with methods such as incarceration, monetary fines, and restriction of personal freedom. Often the socialization is not focused on making the person a responsible (i.e., conforming) and functioning member of his reference group, but a responsible and functioning member of a larger culture (e.g., society). In cases where the client's reference group has been identified as having deviant norms in contrast with the culture's norms, socialization efforts work toward the STR objective which involves structural changes in the client's social environment.

The majority of attempts to teach alcoholics to become responsible and functioning members of society have focused on behavior other than drinking. For example, rehabilitation programs with such an objective have worked on socialization through occupational therapy (Recsey, 1969), and recreational therapy (Freeman and Kogler, 1973). Socialization with regard to drinking behavior has not been socialization into conformity with the client's reference group's norms, or even his culture's norms regarding drinking behavior. Usually such programs require abstinence, which in most cases reflects nonconformity to reference group or cultural norms regarding drinking behavior.

Three specific rehabilitation approaches have been reported in which socialization could be considered a basic objective: reality therapy, confrontation approaches, and controlled drinking. An attempt to work toward this STR objective was made with reality therapy (Bratter, 1973). The goal was "to assist the individual to be aware of the impact of his behavior, to understand the consequences of his acts, and to become more responsible to himself, others, and to society" (Bratter, 1973). While the methods employed in this approach appear to work toward the specific outcomes identified as part of STR Objective 1, there was no information regarding effectiveness in the report.

Another basic approach to rehabilitation with this objective was attempted through confrontation of the client concerning his behavior when intoxicated. The assumption was made that if a person saw how he acted when intoxicated, and was visually confronted with the reactions of others at the time, he would begin to conform to social norms and change his drinking behavior.

Several attempts at confrontation were made through the use of videotape playback. Schaeffer et al. (1971) assigned 36 male inpatient alcoholics to one of four conditions:

drinking sessions followed by 30 minute playbacks in sober state; drinking sessions followed by five minute playbacks in sober state; drinking sessions with no playbacks; volunteers with no drinking and no playback. Four-hour drinking sessions occurred on alternate days to the playback sessions. Only 44% of the patients in the first two conditions completed participation in the study. The amount of alcohol consumed during drinking sessions did not decrease after playback sessions. Six weeks following discharge from the hospital, 100% of the patients in the first two conditions resumed drinking, while only 83% of the drinking-no playback condition patients resumed drinking, and 75% of the volunteers (no drinking, no playback) had resumed drinking. The conclusion of the authors was that videotape confrontation alone appeared to induce, or at least not suppress, drinking behavior of alcoholics. In this sense it was an ineffective procedure for changing behavior.

Feinstein and Tamerin (1972) concluded from a similar attempt at videotape recording and playback with a single alcoholic patient that viewing his behavior in an intoxicated state had the effect of opening up discussion of many aspects of his life and problems not previously discussed with a therapist. Unfortunately, after five weeks of treatment, he left the hospital and did not return for additional treatment.

Some of the deleterious effects of such confrontation may be ameliorated through group playback sessions. Davis (1972) randomly assigned 12 outpatient alcoholics to individual videotape and playback sessions and 12 outpatient alcoholics to group videotape and playback sessions. The sessions were conducted for one-and-a-half hours weekly, for eight months. Eight of the 12 persons in the group sessions completed the program, and five of the 12 had decreased their amount of drinking. Only three of the 12 persons in the individual sessions completed the program, and two of the 12 had decreased their amount of drinking.

Effectiveness of videotape playback confrontation of intoxicated behavior appears to be questionable in accomplishing behavioral changes which could be construed as indications of increased socialization of the client. The evidence suggests that without other concurrent treatment activities, this method is probably harmful, and even in concert with other therapeutic activities may or may not be helpful in accomplishing the objective.

Another approach to confrontation as a vehicle to increased socialization has been described by Johnson (1973). He attempted to confront the client with the negative social consequences of his drinking. Using several people from the client's reference groups, Johnson guided a confrontation

around specific events in which the client's drinking interfered with life functioning of himself or others. Johnson (1973) contended that the personal rehabilitation process began with the client acknowledging the maladaptive and socially disapproved (nonconforming to group norms) nature of his behavior resulting from drinking. It is difficult to separate the effectiveness of this aspect of Johnson's (1973) rehabilitation efforts from the impact of his total treatment program at the Johnson Institute. Evidence suggests that the Johnson Institute program is effective in helping alcoholics return to lives as responsible and contributing members of society (Johnson, 1973).

The relevance of various approaches to confrontation as means of helping DWIs work toward STR Objective 1 is questionable. Although it would be possible to conduct videotape playback of drinking sessions with groups of DWIs on an outpatient basis, it does not seem appropriate due to legal questions concerning the viability of a court-referred program which involves the client with alcohol and with transportation home after such sessions. The questionable effectiveness of the methods also suggests that such approaches would not be useful in helping DWIs work toward STR Objective 1. The confrontation method used by Johnson (1973), on the other hand, may provide a vehicle for helping the DWI acknowledge the rewards and punishments of nonconformity to the drinking behavior norms of his reference group, or groups. Since this would require the involvement of members of the DWI's reference group in addition to himself, there is a question as to the applicability of this approach in a nonvoluntary program.

Another basic approach to socialization of the client into his reference group's norms concerning drinking behavior may be found in attempts to facilitate controlled drinking. Although these approaches have aroused much controversy in work with alcoholics, it is possible that these methods could be successfully applied to persons who have problems with alcohol and are not alcoholics (i.e., those DWIs with a Severity level less than Generalized Interference). Helping a DWI to conform to his reference group's norms regarding drinking behavior in many cases does not lead to abstinence, since many reference groups throughout this country have norms which accept consumption of alcohol in certain amounts and in certain settings. Although these approaches will be discussed in more detail as they relate to STR Objective 5 (decision on responsible drinking), it is important to mention them at this point as well. While some studies report the failure of attempts at controlled drinking by alcoholics (Ewing and Rouse, 1973; Ewing, 1974a; Ewing, 1974b; Ewing, 1975), a recent review of the literature pertaining to controlled drinking (Lloyd

and Salzberg, 1975) concluded that controlled drinking may be an appropriate treatment goal for certain alcoholics, as well as for certain persons who have problems with alcohol but are not alcoholic. The authors of the review cited a number of different types of programs which work toward the objective of controlled drinking. Such approaches offer a mechanism for helping a client become socialized into his reference group's norms regarding drinking when those norms do not demand abstinence.

The various rehabilitation programs reviewed as potentially relevant in helping DWIs achieve STR Objective 1 suggest several possibilities. Reality therapy, confrontation with members of a reference group, and controlled drinking offer modalities with potential effectiveness and relevance for DWIs. The evidence available does not suggest any of these methods as highly effective programs in working toward this objective for several reasons. First, many of the approaches reviewed dealt only with alcoholics. The effectiveness of the programs may be different with persons having different drinking problems, or appearing as various DWI/Drinker Types in the classification system. Second, the use of these methods with nonvoluntary, outpatient clients (as the DWIs are) further confuses issues of potential effectiveness and applicability.

As responsible drinking has become a legitimate goal for people in recent years, more methods should be developed which facilitate work toward STR Objective 1. As yet, there are not many approaches which hold promise for helping DWIs make progress on this objective. New programs should focus on recognition of the norms of reference groups regarding drinking. They should provide rewards for conformity, as well as punishments for nonconformity.

Decrease the Client's Vulnerability

Despite the paucity of rehabilitation programs directed at helping the client deal with sociocultural forces regarding alcohol use and abuse, some efforts have attempted to build the individual's skills in resisting group pressures to drink or to demonstrate behavior related to alcohol abuse, such as drinking and driving. These programs have assumed that working with the individual is enough to help him combat the various forces in his social environment. For example, group therapy programs have often included activities which might help a client decrease his vulnerability to group conformity pressures, but have not explicitly stated this as an objective. At a minimum, this represents a missed opportunity to utilize the here-and-now of group sessions as a stage for clients experimenting with and practicing social skills in resisting group conformity pressure.

At best, the client may learn some useful skills and be able to resist conformity pressures from people in his natural environment. It is more likely that the lack of this as an explicit objective establishes a false sense of accomplishment in the development of social skills for a client completing a group therapy program, and leads him to return to his natural social environment and experience failure in attempting to demonstrate his newly learned behaviors. As many therapists have observed, this failure is often due to the continued presence of the same pressures which facilitated the development of his problem in the first place.

Programs which work on stimulating structural changes in a client's social environment will often attempt to decrease the client's vulnerability as a part of their methods, but do not focus on decreasing his vulnerability explicitly. The lack of available programs which work on STR Objective 2 specifically may be in part the result of an assumption that a client will only be able to withstand group conformity pressure regarding drinking through strict adherence to a personal norm of abstinence, and/or withdrawal from groups which might encourage anything but abstinence. Another possible reason for the lack of attention to this objective may be an underestimation of the potency of sociocultural forces in determining drinking behavior coupled with a perception that alcohol abuse is the problem of the individual ignoring his social context.

Results from participation in assertiveness training as a rehabilitation program may help a client decrease his vulnerability to group pressure, and increase his ability to decide when and when not to conform. Such programs specifically applied to persons with alcohol problems have not been documented substantially in the literature, although preliminary effectiveness data is encouraging (Adinolfi et al., 1976).

To date, no programs have demonstrated effectiveness in working toward this objective. New programs are needed. Such programs must help a client see his place in his reference groups, understand the pressures toward conformity, and develop social skills in resisting pressures toward patterns of alcohol use which he feels are inappropriate for him, regardless of the reference group's inducements.

Structural Change in the Client's Environment

Rehabilitation efforts which have attempted to deal with a client's social environment have, in the past, focused predominantly on this objective. Some efforts have been directed at improving or changing the composition and interaction patterns within the reference group and have assumed that other changes will follow. Seldom has there been a direct attack on the group's norms regarding drinking behavior. Alcohol abuse has been seen as symptomatic of other problems in the group. Other efforts have been directed at helping the client build new reference groups. Building new groups with people who share similar difficulties and rehabilitation objectives has been assumed to be an effective way to build on the empathic ability and emotional resources of "people who have been there."

Family and couples' therapies involve an effort to change the norms of one type of reference group, or to rebuild reference groups which may have been helpful to a client at one point in time but have lost their rehabilitative potential. The requirement for structural change in families with a problem drinker assumes that: (1) alcohol abuse is part of a complex set of family dynamics and family pathology; and (2) the family adjusts its functioning to tolerate the alcohol abuser. The latter assumption appears to contradict the perceived pain reported by family members and the difficulty of living with an alcohol abuser, even though the family (as do many reference groups) reorganizes itself around the problem behavior.

Usually these approaches have utilized group sessions in the home or in an outpatient setting. Sessions have usually been conducted weekly. These efforts attempt to deal with the family or couple, as a whole, in restructuring the ways in which members interact. Meeks and Kelly (1970) claimed, "For so long as the alcoholic was identified as the sick member, our families, at home and in treatment, continued to be preoccupied with the alcoholism as the sole source of their problems; healthy communication was stifled. When family members were able to accept their shared responsibility for family problems, the identified patient effects became less influential." It is important to indicate that most of the persons identified as the problem drinker in the family, couple, or therapy programs were males.

The effectiveness data on family or couple therapy with alcoholics is impressive. Esser (1968, 1970, 1971) reported improvements in drinking behavior and family functioning in nine out of 14 families treated with his program. Meeks and Kelly (1970) reported that all five of the families they

treated in weekly, outpatient sessions demonstrated healthier communications after participation in their program. Burton and Kaplan (1968) conducted nine to 77 month followup on 39 couples who went through their program. Twenty of 36 couples on which drinking data were available reported abstinence or reduced drinking by the alcoholic member. Eighteen of 24 couples on which information was available on family problems reported fewer problems in the marriage. Burton and Kaplan (1968) reported that decreases in family pathology were proportional to decreases in drinking or abstinence by the alcoholic member.

Cadogan (1973) assigned 20 couples to his rehabilitation program and placed 20 couples on a waiting list as a comparison group. Six month follow-up data showed significant differences: nine of the patients in the experimental program were abstinent, as compared to two of the patients in the comparison group; four of the patients in the experimental group were occasionally drinking, as compared to five of the patients in the comparison group; seven of the patients in the experimental group had relapsed in their drinking to earlier levels, as compared to 13 of the patients in the comparison group. No significant differences were found between the groups in pre-post measures of family functioning (Primary Communication Inventory and the Conjugal Life Questionnaire).

Gallant et al. (1970) worked with 118 couples and reported success (as measured by abstinence and relating well in the family or productive and satisfying family relations with no more than two drinking episodes) with 53 of 118 couples; reported failure (as measured by unhappy family relations, or frequent drinking) with 41 of the 118 couples; and reported the degree of progress as unknown for the remaining couples.

A special four-day intensive workshop was conducted with couples following inpatient hospitalization of an alcoholic member (Corder et al., 1972). A variety of treatment techniques were used to help the couples integrate the insights which the alcoholic gained during treatment into their relationship and interaction patterns. Twenty couples were involved in the program, while 20 couples who were admitted one month prior to the experiment were used as a comparison group. The six month follow-up data were significant in terms of less drinking, or abstinence demonstrated by patients in the experimental program, and longer contact in follow-up than demonstrated by patients in the comparison group. Follow-up data on the employment record and marital status reported by the authors may be interpreted as evidence of further improvement in life functioning, or may suggest that the groups were not comparable on some important characteristics related to prognosis of improvement.

Other attempts at family therapy have included efforts which involved the participation of spouses in separate discussion groups (Smith, 1969; Strayer, 1959; Gliedman et al., 1956). Results from these programs have been far less encouraging. Gliedman et al. (1956) reported a great deal of difficulty in obtaining participation in their program.

A method for attempting to change the structure of family groups is reported by Speck and Attneave (1973). Their approach, called network intervention, requires bringing together all persons in the client's life with whom he has lasting and significant relationships. The therapists help the entire group (which may vary from 15 to 100 people) to establish a new set of norms and a new set of interaction patterns. The client's network becomes an on-going source of reinforcement to him while he becomes a part of rehabilitative efforts for others.

Not all family or couples' therapy works toward restructuring the family's norms of interaction. Berman (1968) described the treatment goal of his program as personality reorganization which should lead to behavioral change in the family. Other attempts at family therapy have a variety of intervention models. For example, Borstein (undated) trained probation officers as family counselors to intervene in the families of juvenile offenders.

Although the evaluation studies have not conformed to statistical standards and research design concerns which allow for substantive conclusions and inferences, the consistency of the positive results with family therapy approaches tends to confirm the theoretical notion and clinical observation that working with the client's family is critical to combating problems related to alcohol abuse and the problem drinking behavior itself. Persons assessed as DWI/Drinker Types whose alcohol problem does not indicate alcoholism could possibly benefit even more than alcoholics from such family or couple rehabilitation programs. Although it is claimed that intervention in families of alcoholics may be facilitated by the experience of crisis due to the alcoholic member's behavior, the trauma and patterns of behavior developed over the alcoholic's problem years make the family a more difficult, rather than less difficult, target for change.

The family or spouse of a person with a less severe alcohol problem would probably be more amenable to change; and the results of rehabilitation efforts may be greater because of the existence of patterns of behavior which are still functionally adaptive. These patterns can be used as the starting point for rehabilitation efforts aimed at changing the family's norms regarding drinking and their responses to the member who has shown a problem with alcohol.

For example, behavioral contracting can be used with the family to reduce alcohol abuse (Miller, 1972; Ross, 1974; L'Abate, 1975). It may be easier to implement behavioral contracting with families who still have aspects of their relationships which are satisfying and functionally adaptive to life's problems.

The methods reviewed have been used in group settings on an outpatient basis, and therefore appear relevant as potential STR approaches for use with DWIs. Problems may emanate from the nature of the involuntary assignment of DWIs to such programs. Special techniques are possible which encourage the voluntary participation of spouses. For example, techniques can be used in which the client asks cooperation and participation of his family in an activity assigned as homework in the rehabilitation program. It will also be necessary to explore the application of these programs to other reference groups, such as friendship networks, to increase their relevance for helping various DWIs work toward STR Objective 3.

While family and couple therapy programs have attempted to change the norms of existing reference groups of the client, some attempts have been made to help the client develop new reference groups. Schwitzgebel (1964) attempted to build new reference groups for juvenile delinquents. He established a storefront center for self-research and paid juveniles to spend time at the center and talk about themselves. Through the use of rewards and contingent reinforcement of various desired behaviors, reference groups were developed consisting of those persons attending the center. New members were referred to older members to "learn the rules." He reported positive results in a variety of case studies.

In working with alcoholics, Kjolstad (1969) discussed the rehabilitative effect of club therapy. Three types of clubs were recommended as useful: clubs centered around recreational activities, clubs devoted to self-help concerning drinking problems (such as Alcoholics Anonymous groups), and clubs organized to offer help to others who have drinking problems. These clubs become new reference groups in which members can develop norms regarding drinking which directly respond to their current status of rehabilitation. Evidence on the effectiveness of AA in rehabilitation of alcoholics can in part be attributed to the development of new reference groups (Leach, 1973; Bailey and Leach, 1965).

One approach to rehabilitation toward this objective has been the use of halfway houses. The objective of halfway house programs has been to help the client become a responsible part of society (Blacker and Kantor, 1968). Membership

in the house reflects a social status halfway between incarceration and socialization. Halfway houses typically provide the client with a new reference group and make use of this reference group to facilitate socialization into society.

Although Catanzaro and Green (1970) described telephone therapy as a vehicle for follow-up and long-distance after-care, their methods could be used by persons who develop new reference groups and wish to continue their relationships even though they may be miles apart.

Muller et al. (1969) discussed distinctions between the utility of group therapy approaches in rural and urban areas. They contended that group therapy programs provide necessary social ties and aid in the development of new reference groups helpful in controlling drinking for people in urban areas. An urban environment, they claimed, stimulates sensations of isolation and limits the opportunities for development of reference groups outside of specific settings (e.g., it limits reference group activity to public places such as bars). People in rural areas have nuclear and extended families or friendship networks with self-corrective capabilities. Because of their geographic isolation, such groups must help each other in numerous aspects of life. Family therapy approaches could be used to build on this potential for self-correction and self-help, and extend the group's rehabilitative effects on drinking behavior.

Information on Alcohol

A standard response of ASAPs to the need for rehabilitation programs has been to develop an alcohol/driver safety school. The primary objective of these schools is to increase the DWI's knowledge of the effects of alcohol on physical and mental processes and to learn about alcohol abuse (Stewart and Malfetti, 1971). Malfetti (1975) reported the effectiveness of participation in such schools in reducing recidivism (i.e., rearrest for DWI) and increasing knowledge of alcohol in evaluations of DWIs exposed to the program and matched comparison groups not exposed to the program. Nichols and Reis (1974) reported on the nature and impact of a variety of such schools. They found no significant differential impact on recidivism (measured as a rearrest for driving while intoxicated) to warrant a conclusion that the schools alone affect rearrests. Nichols and Reis (1974) indicated that substantial differences exist among schools in operation around the United States as to objectives and methods utilized. For example, some schools work toward education about alcohol, while others attempt to integrate some counseling of clients into the education sessions. They examined the impact of different types of schools on various drinker types and found some differences in recidivism.

Without comparison groups who had not attended such schools, they concluded, it was difficult to draw inferences as to which types of schools helped or harmed various drinker types.

The schools do appear to effectively help DWIs learn information about alcohol (accomplishing STR Objective 4). Continued research as to the differential impact of various types of schools should clarify which schools are most appropriate for helping specific types of DWIs learn information on alcohol.

Decision on Responsible Drinking

There are two separate steps inherent in achieving this STR objective. First, the client must make a decision as to whether responsible drinking or abstinence is relevant for him. Second, once a decision has been made, the client must be helped to develop skills which will allow him to implement his decision. For persons with Generalized Interference resulting from alcohol consumption, this STR objective will have to be translated into a long-term rehabilitation objective in conjunction with treatment efforts outside of the DWI STR programs.

Recent developments in the effectiveness of teaching controlled drinking to alcoholics have been a source of controversy. Most of the criticism of controlled drinking for alcoholics has come from a treatment tradition requiring abstinence for all alcoholics (which has been supported and promoted by Alcoholics Anonymous as the alcoholic's only choice). In addition, there has been a greater concern expressed about people in general learning to drink responsibly.

Whether or not controlled drinking is a realistic goal for alcoholics, many DWIs have problems resulting from alcohol which do not include psychological or physiological dependence and may seek responsible drinking as a realistic goal. The controversy concerning controlled drinking is relevant to only several of the DWI/Drinker Types discussed in the classification system (i.e., those with Generalized Interference on the Severity of the Problem Scale). Regardless of the values of the treatment staff concerning abstinence and responsible drinking, a client will make a decision to continue his current drinking behavior or to change it.

The lack of available programs to help a client make a decision regarding responsible drinking or abstinence may be a function of the tradition mentioned above, and/or the lack of attention given to rehabilitation programs for problem drinkers who are not alcoholics. Toomey (1972) developed a program to help a client make such a decision

based on decision making conflict theory. She contended that not only must a client be helped to appraise the utility of various alternatives in making a decision, but he must, once the decision is made, equip himself to adhere to the decision despite post-decisional feedback from his environment or his own internal questions and doubts. Inpatient alcoholics (47 males, 11 females) were randomly assigned to three possible conditions. In one condition, patients met on two consecutive days to discuss the pros and cons of making a decision to drink and the pros and cons of making a decision not to drink. Using role plays and discussions, patients were asked to make a decision and a public commitment not to drink. In the second condition, the group met for two days and focused activities and discussions on the negative consequences of drinking, using the same methods as in the first condition. A public decision not to drink was not sought in this condition. It was assumed that this group would make a private decision. In a third condition, patients had no special treatment. Patients in all three conditions continued their regular hospital treatment program during the study.

Toomey (1972) obtained data on patient outlook following the special program and follow-up data one month after discharge. No significant differences were found between the two conditions in which patients examined drinking through the decisionmaking model. Patients in the two conditions using the decisionmaking model were drinking significantly less and feeling significantly better than patients in the comparison group (i.e., the third condition) one month after discharge. There was no significant difference found among the conditions for patients who were abstinent.

Although this study had a brief follow-up and worked with inpatient alcoholics, the results were noteworthy. The methods hold promise as to their relevance for DWIs. The program could be conducted with groups, on an outpatient basis, in a short period of time.

Making a public decision, committing oneself to the decision, and preparing for possible negative feedback later are thought to be important from the perspective of cognitive consistency theory (Festinger, 1957). The lack of significant differences in Toomey's (1972) results for patients making a public decision and those not making one may be attributed to the perspective that once a person has examined behavioral alternatives at a decision point, he makes a decision (sometimes not consciously aware that he is making a decision) (Greenwald, 1973). The person then acts in a manner which is consistent with this decision. Greenwald (1973) explained that often a person's only clue to the nature of his personal decisions comes from observation and organization of the antecedents and consequences of particular actions into a

temporal sequence. In this manner, a client may acknowledge decisions which were made unconsciously.

Gottheil et al. (1973) reported results from a program which allowed alcoholics access to alcohol for a certain period of time. The access to alcohol was structured in such a manner as to provide 13 decision points in each of five days during four consecutive weeks in an inpatient treatment program. Patients were able to discuss the decisions with other patients and ward staff. Of the 45 patients in the program, 19 chose not to drink at all, 12 began drinking and stopped during the sessions, and of the other 14, only seven continued to drink heavily and consistently.

It is also possible that some of the techniques discussed by L'Abate (1975) in behavioral contracting could be applied to this decision. The steps taken in behavioral contracting go further to help the person build a system which will help him maintain adherence to the decision. For example, Miller et al. (1974) reported that behavioral contracting with reinforcement contingencies with alcoholics resulted in a significantly larger number of patients attaining preestablished goals for controlled drinking than patients not involved in the contracting with reinforcement contingencies. Cohen et al. (1973) reported a study of three alcoholics who were able to maintain controlled drinking for approximately 14 days with access to alcohol. If the patient drank less than five ounces in a day he remained in an environment with a telephone, work, recreation, regular diet and reading material. If he drank more than five ounces (up to a maximum allowed of 24 ounces) during a day, he was denied the above environment. All three patients drank five ounces or less during each day of this period.

Several programs have addressed the steps taken to insure adherence to such a decision once the decision has been made. If abstinence is the choice of the client, a variety of methods developed by Alcoholics Anonymous appear to be effective (Bailey and Leach, 1965; Leach, 1973). Techniques such as one-day-at-a-time, rewards for maintaining abstinence for a specific number of days, continuous interpersonal support for abstinence, and anniversary parties have been used to help people maintain abstinence (Alcoholics Anonymous, 1955).

If the client chooses responsible drinking, a variety of methods may help him to develop mechanisms to adhere to his decision. Lovibond and Caddy (1970) and Silverstein et al. (1974) described studies in which they trained alcoholics to discriminate various blood alcohol concentration levels. Silverstein et al. (1974) reported that all four alcoholics

in their study had been able to discriminate blood alcohol levels accurately following their training. Lovibond and Caddy (1970) reported alcoholic patients were able to discriminate blood alcohol levels accurately and to maintain controlled drinking following their program in contrast to patients in a comparison group. A substantially greater number of patients dropped out of the program from a comparison group than from the experimental group. It is also important to note that Lovibond and Caddy (1970) used electroconditioning procedures in the discrimination training program.

Nonalcoholic drinkers may also be trained to discriminate blood alcohol levels. Huber et al. (1976) trained 36 males who were moderate drinkers to discriminate various blood alcohol levels while drinking. They found that the subjects increased in the accuracy of the estimates significantly after training in the internal sensations of various blood alcohol levels, in behavioral indicators of various levels, or in both types of cues. No differences were found in increased accuracy resulting from one type of training versus another. Unfortunately no data were collected in this study to see if the subjects' drinking behavior changed following participation in the study.

Training to differentiate various blood alcohol levels is only one of the techniques used in programs to help alcoholics develop controlled drinking patterns. Lloyd and Salzberg (1975) reviewed various studies attempting to train alcoholics to maintain controlled drinking and concluded, "While there is no reason to conclude that controlled drinking behavior can be established and maintained by all alcohol abusers, there seems to be sufficient evidence to conclude that training in controlled drinking does at least reduce the probability that an alcohol abuser will resume unacceptable drinking patterns."

With the exclusion of the study by Huber et al. (1976), programs which have made progress in helping people develop controlled drinking have dealt with alcoholics, often inpatients. The methods involved the consumption of alcoholic beverages. This presents potential problems in court-referred, nonvoluntary programs. Will the courts or the public understand and accept the use of alcohol in such programs? How will clients get home following sessions in which they drink?

Some of the techniques used to develop the controlled drinking behavior involved electroconditioning. Although such techniques may be effective, the use of any electrical or chemical aversion method raises legal and ethical issues when being considered for DWIs, not to mention the difficulty of training staff (who may not have a great deal of formal

training) in these methods. Of course, it may be possible to train clients to discriminate blood alcohol levels without the use of aversion techniques, as suggested by the study by Huber et al. (1976).

In working toward this objective, the decision making methods described by Toomey (1972) and Greenwald (1973) can be adapted for use with DWIs. Some of the decision making techniques could be included in education/discussion programs attempting to communicate information on alcohol to DWIs. Once the decision has been made, there are various methods which appear effective in helping people maintain adherence to their decision. Unfortunately, aspects of these methods pose problems which must be solved before relevance of the methods for DWIs can be confirmed. Changing these programs into formats which can be used with various DWI/Drinker Types may be considerably easier than attempting to implement them directly.

Monitoring Arousal

Although the conceptualization of this rehabilitation objective in this report does not appear often in the treatment literature, numerous efforts have been made in working toward one aspect of this objective--building awareness (recognition) of a person's inner conflicts and stresses. Traditional approaches to psychotherapy contend that a person must become aware of his problem before moving on to action planning, reconstructing his image of life, or releasing repressed anxiety. Awareness of the problem is seen as necessary for the person to help himself. Rehabilitation efforts have sought to build a client's awareness primarily through three approaches: increasing awareness of inner conflicts and stresses by creating a microcosm of life in the therapeutic setting; increasing awareness of inner conflicts and stresses by bringing existing conflicts to the surface in the context in which they occur; and increasing awareness by providing conceptual frameworks for self-diagnosis.

The therapeutic value of creating a microcosm of life in the group therapy setting lies in the ability of the therapists to help the clients experience conflicts which occur in their lives in the here-and-now experiences of the group interactions. Although this aspect of group therapy has been recognized by the majority of practitioners, the articulation of specific rehabilitation objectives of increasing awareness of inner conflicts and stresses has not been explicit (Hartocollis and Sheafor, 1968). One attempt was through the use of marathon groups with alcoholics. Dichter et al. (1971) reported a study of ten groups

(approximately eight to 12 male alcoholic patients per group). Each group met for 40 to 60 continuous hours, allowing a four-hour sleep break after 20 hours of the session. Meals were eaten together. In a four to 18 month follow-up, 57% of the 82 patients were considered improved in their drinking and life-functioning behavior. This compared to 35% of 137 patients admitted to the same facility previous to the availability of the marathon groups who were followed and evaluated on the same criteria.

The authors indicated that a number of key problems were present in the potential use of marathon groups despite the relative success. The length and intensity of the sessions required that patients with potential medical or psychological problems which might be aggravated by such sessions be carefully screened and selected out of participation. They contended that patients who would participate must have adequate ego strength, a sincere desire to participate, perceptual ability for self-inspection, therapeutic readiness, average intelligence, and an absence of medical contraindications. The marathon sessions presented a danger to patients due to the emotional highs and lows and physical fatigue. A third major problem was the nature of the therapeutic staff involved. Beside standard levels of training, skills, and sensitivity, the therapists must have the ability to handle countertransference phenomena, be high in physical and emotional stamina, and be free from hidden competition with each other. A fourth problem was the need for a special environmental setting. The rooms used must be particularly comfortable and somewhat isolated from the outside world.

The marathon group poses several special problems to alcoholics and other persons with alcohol abuse problems. Accelerated interactions in the microcosm of compressing living experiences into a long, continuous period of being with the same people may create levels of anxiety which precipitate inner conflicts and stresses. The hallucinatory nature of the sessions during late hours when participants are fatigued may be hazardous to people who have fears associated with hallucination experiences which they had while drinking (Dinges and Weigel, 1971; Dichter et al., 1971).

Ends and Page (1957) attempted to compare the effectiveness of various approaches to group therapy with male alcoholics. They randomly assigned patients to a group based on learning theory, or one based on client-centered theory, or one based on psychoanalytic theory, or a social discussion group. They used an elaborate Latin Square design for assigning therapists to lead one group in each of the four approaches. Data collected one-and-a-half years after discharge revealed that the client-centered and psychoanalytic approaches were significantly more effective than the learning theory or social

discussion groups. They attributed the lack of effectiveness of the learning theory group to increased self-criticism and decreased participation which occurred in those groups.

Increasing awareness through surfacing of current inner conflicts and stresses has been an objective of psychodrama and many family/couple therapy programs. Psychodrama has been used with male and female alcoholics in numerous countries (Weiner, 1966). The methods include the use of role plays and reexperiencing interactions from real life events. Through the observations of other group members and the therapists, the protagonists are exposed to their own feelings and behavior during the episodes, as well as the reactions of others. The objectives of psychodrama include building awareness of problems, and learning new ways to handle life experiences (Blume, 1974). The literature describes various ways to use psychodrama, but lacks information as to the effectiveness in reaching its objectives. This approach requires highly skilled therapists due to the intensity of the emotional experiences and delicacy of the debriefing process (Van Meullenbrouck, 1972). Even with this caveat, it may be possible to borrow some of the specific techniques used and redesign them for use with various DWI/Drinker Types.

Family and couple therapy programs do include increasing awareness as one of their objectives (Meeks and Kelly, 1970; Burton and Kaplan, 1968; Berman, 1968; Corder et al., 1972; Cadogan, 1973). The effectiveness and relevance of these approaches has been discussed previously in this report.

Increasing awareness through providing clients with conceptual frameworks and self-diagnosis skills has been attempted in some rehabilitation programs. One rehabilitation approach presents a specific framework, called transactional analysis, in which clients are helped to learn to use the framework to understand the nature of their experiences and interactions (Fairchild and Wanberg, 1973; Steiner, 1971). In this approach, the client constructs a contract with the therapist as to his desired outcomes and processes. He then analyzes his life script, examining the games he plays with himself and others, and the nature of his adult-parent-child interactions with others. Fairchild and Wanberg (1973) evaluated the outcome of a transactional analysis program with inpatient alcoholics who continued attending discussion sessions on an outpatient basis. The clients consisted of 28 males and five females. In six month follow-up analyses with a comparison group of 35 patients admitted and treated in the same facility without the transactional analysis, they found no significant differences. They did report significantly greater improvement by both of these groups as compared to clients treated in a short-term

residential program. They concluded that longer-term residential treatment was more effective than shorter-term treatment and that the use of transactional analysis did not appear to affect the effectiveness of the treatment program.

Although many practitioners would claim that they work toward the objective of building skills and monitoring arousal it seldom appears in the literature. Most therapists do not conceptualize the development of skills in monitoring arousal as separate from increasing awareness of inner conflict and stresses. Hartman (1973) identified the development of skills in monitoring arousal as a critical part of his approach to relaxation training. Although he contended that a number of arousal states could be used, Hartman chose anger. There was an attempt to teach clients to recognize components of the pattern by which anger becomes aroused (e.g., identify physical sensations, ideational patterns, and so forth). The goal was to teach the skills of knowing when anger was aroused. It was at those moments of recognition that a client could then use the relaxation methods to calm himself "as a deliberate tool in lessening the impact of severe emotional arousal or tension states and reduce the likelihood of impulsive drinking behaviors" (Hartman, 1973). The only effectiveness data presented concerned completion of the ten-day treatment program. Eighty-one percent of the patients participating in the relaxation training completed the treatment program, while only 57% of the patients in discussion groups (used as a comparison group), and 56% of control group patients (in regular treatment program only) completed the treatment program.

One of the objectives of the transactional analysis approach previously mentioned was to develop a client's ability to know when he is acting out his former script (acting similarly to his past patterns), when a particular game is being played, or when his "child" or "parent" is determining his behavior. Skills in labelling such behavior are skills in monitoring the arousal of various inner conflicts and/or stresses.

In some family/couple therapy programs, an attempt is made to help clients learn monitoring skills. Bowen (1974) discussed the need for recognition of arousal to break the pattern of escalation of conflict characteristic of families in which one member has a drinking problem. L'Abate (1975) described the development of skills in recognizing arousal of conflict which often leads to drinking, as well as recognition of arousal of pleasurable family states. In his behavioral contracting process, the client analyzes the stages in the development of his drinking episodes. He then focuses on identifying stages at which he can interrupt the pattern. These are skills in monitoring the arousal of states which lead to drinking.

The effectiveness data on the approaches reviewed in the context of this STR objective are minimal. In terms of relevance, a number of approaches hold promise. Through adaptation of methods described in the transactional analysis and psychodrama studies for various DWI/Drinker Types, techniques for working toward this objective within the constraints of the DWI rehabilitation system may be developed. Techniques in training monitoring skills mentioned by Hartman (1973) and L'Abate (1975) appear directly relevant and would need little design change.

Skills in Choosing Alternatives

Rehabilitation programs which work toward this objective appear to be divided into three groups. One group of approaches assumes that the client's cognitive processes will help him make appropriate decisions regarding drinking and alternatives to drinking. These programs attempt to build the client's skills in these cognitive processes. The second group of approaches assumes that the individual cannot make such decisions using his conscious, cognitive processes. These programs view the drinking behavior as integrated into a complex chain of response networks, which are not susceptible to change through conscious volition. The client must learn a response network which precludes certain choices (e.g., the possible choice of alcohol). A third group of approaches seems to combine both assumptions inherent in the above. The client is taught a response network which precludes certain choices, but is encouraged to use this new condition in making appropriate behavioral choices.

Of those approaches which work on building the client's cognitive skills, some programs work toward building his decisionmaking skills (Toomey, 1972; Greenwald, 1973). As discussed earlier, these programs attempt to help the client learn to evaluate alternatives and make an appropriate choice among them. Another approach is found in programs which attempt to increase the client's problem-solving skills (Bratter, 1973; Cadogan, 1973). While they discuss the development of problem-solving skills, the authors appear to work toward increasing the client's skill in assessing a problem. This involves steps in accurately identifying a problem, identifying various potential actions to solve it, and evaluating the relative merits of the various solutions.

The programs in the second type of approach utilize a variety of aversion techniques in helping the client internalize a response which eliminates the choice of alcohol from his behavioral repertoire. These approaches are examples of what may be considered classical conditioning.

The assumption is that once a client is not free to choose drinking, he is free to choose alternatives to alcohol. The basic methods used in aversion approaches are: chemical aversion (including apneic aversion); electro-aversion; and hypnotic aversion.

The chemical aversion methods attempt to match an unconditioned stimulus, such as sweating, nausea, salivation, or vomiting, with the conditioned stimulus of alcohol. The methods involve ingestion of a drug which stimulates a noxious state followed by thinking about drinking, smelling alcohol, or actually drinking (Stojiljkovic, 1969). The most impressive results with this method were reported by Lemere and Voegtlin (1950). In following 4,096 alcoholics, they reported 60% were abstinent after one year, 51% abstinent after two years and 23% abstinent after ten years. Similar results were obtained by Thimann (1949a, b) and Weins et al. (1974; cited in Franks and Wilson, 1975). Beaubrun (1967) found that effectiveness could be substantially improved by adding Alcoholics Anonymous to chemical aversion techniques. The effectiveness data are weakened by poor experimental design, including infrequent use of comparison groups.

The use of emetic drugs can cause embarrassing social consequences, medical complications, and uncomfortable side effects (Clancy, 1968). The margin of safety in administering doses is narrow, and lethal effects can occur (Stojiljkovic, 1969; Clancy, 1968). Elkins (1975) concluded, in reviewing chemical aversion methods, that the best evidence suggests it is only effective with certain alcoholics and limitations make it difficult to use. For example, Elkins (1975) did not feel it was appropriate on an outpatient basis. Clancy (1968) did not feel it was appropriate for use with females, extroverts, or persons with aggressive tendencies. The use of these drugs is different from a chemical reaction based on fusion of a drug with ingested alcohol as occurs with disulfiram.

A client who takes Antabuse (disulfiram) regularly cannot drink without risking a noxious reaction. The reaction can vary from flushing to nausea to vomiting (Morgan and Cagan, 1974). Despite the usual problems of inadequate research designs, some studies indicate that disulfiram is effective in the treatment of certain alcoholics who are older and have had a long history of alcoholism (Fox, 1973; Billet, 1968; Baekeland and Kissin, 1972; Morgan and Cagan, 1974). Billet (1968) emphasized the importance of properly preparing the patient, instructing him in the drug's use, and minimizing fear of it. The side effects and potential toxic reactions to the drug cannot be overlooked in examining its relevance for a treatment program (Morgan and Cagan, 1974).

Apneic aversion therapy uses injection of a drug which causes paralysis as the unconditioned stimulus. Elkins (1975)

concluded that the evidence does not support its effectiveness above expectation effects, and claimed no sound basis for recommending its use. His conclusions are supported by a variety of studies (Clancy et al., 1967; Holzinger et al., 1967; Farrar et al., 1966; Madill et al., 1966).

The use of electric shock aversion methods to work toward abstinence appears relatively ineffective (Elkins, 1975; Miller and Barlow, 1973). Miller et al. (1973) reported nonsignificant differences among groups of patients receiving electro-aversion and other forms of pseudo-conditioning or group therapy. Register (1971) also found no support for effectiveness of electroconditioning alone or with other treatment methods. McCance and McCance (1969) randomly assigned inpatient alcoholics to group therapy or electro-aversion therapy. They found nonsignificant differences in drinking behavior at six and 12 month follow-ups between the two groups and a third group (not randomly assigned) who received only the general ward treatment program. Other studies provide only weak support for the use of electroconditioning (Vogler et al., 1970; Davidson, 1972).

The popularity of electroconditioning methods appears to emanate in part from a study by Kantorovich (1929; cited in Razran, 1934) in which he reported a 70% abstinence. Unfortunately the data are misleading. The follow-up period in this study varied from three weeks to 20 months (mean abstinence period was only two months). Although there were 30 alcoholics in the experimental group and ten alcoholics in the comparison group, they were not randomly assigned nor was there a control for possible influences of other treatments received concurrently by either group.

Hsu (1965) contended that electroconditioning is safer than chemical aversion techniques with regard to side effects and potential danger to the patient. Elkins (1975) and Miller and Barlow (1973) indicated that electroconditioning techniques provided more flexibility than chemical techniques.

The use of hypnotherapy to induce aversion can ameliorate the socially embarrassing effects of some chemical conditioning methods (Borg, 1966). Evidence on the effectiveness of hypnotherapy is contradictory. Edwards (1966) found no significant differences in abstinence when following patients randomly assigned to regular treatment with and without hypnotherapy. Smith-Moorhouse (1969), on the other hand, found that adding hypnotherapy to the regular treatment program substantially increased the percentage of patients maintaining abstinence. Wallerstein (1957) concluded that neither hypnotherapy nor chemical aversion therapy made a positive contribution to the outcome of a standard hospital program. The use of hypnotherapy appears limited mostly by the need for highly trained staff to administer the techniques.

In general, aversion techniques, other than disulfiram treatment, appear to have weak research support for their effectiveness. For those techniques with sound research support, limitations on the use of the methods for the type of client, sophistication of trained staff, and possible negative consequences outside of the treatment setting suggest a lack of relevance. The majority of studies reviewed used volunteer patients, which poses a serious question about the use of such methods with nonvoluntary clients. Although the use of disulfiram as an aversion technique appears more effective and less hazardous than other chemical approaches, it is a drug with side effects and can produce toxic reactions with the metabolic processes of certain people.

One very different type of aversion technique which may help a client work toward the STR objective being discussed is verbal aversion. The most popular method is called covert sensitization (Cautela, 1967). The client is instructed to associate the thought of alcohol with an unpleasant state. The use of the client's imagination of the noxious stimulus provides the client with the opportunity of practicing and utilizing this method outside of the clinical setting, at home, or at work. Cautela (1967) claimed, "One of the crucial procedural differences is that in covert sensitization the patients are taught to apply the procedures themselves outside of the office situation in a prescribed manner. Patients are usually told to practice the procedure ten to 20 times per day. Also, they are told to apply the procedure any time they have a temptation to drink." He emphasized the importance of patients having the use of a technique under their control and not an automatic learned response which results from other aversion methods. Cautela (1967) reported five of seven patients treated were abstinent six months following discharge, while only one of four controls were still abstinent.

Other studies present contradictory evidence concerning the effectiveness of verbal aversion. Anant (1968) reported that all 25 of the patients who completed the program were abstinent from eight to 15 months (one dropped out). Rohan (1970) reported that six of ten patients who had gone through a modified version of covert sensitization had resumed drinking (two patients could not be located). Ashem and Donner (1968) reported that six months following discharge six of the 15 experimental group patients were abstinent while none of the eight comparison group patients (who received group psychotherapy instead of covert sensitization) were abstinent.

Although the data do not clearly support the effectiveness of this technique (having many of the same methodological

problems as studies of the other aversion techniques), the relevance of this method appears easier to establish. It appears easier to use than other aversion methods because it is under the control of the client and has no medical contraindications or side effects. Miller and Barlow (1973) suggest it may be more generalizable for the client than other techniques, allowing the client to use it in various settings.

The discussion thus far has focused only on the use of aversion techniques in working toward the STR objective of building skills in choosing alternatives to alcohol abuse in terms of abstinence. One alternative to alcohol abuse is responsible use of alcohol. Therefore, the potential for aversion methods in positively helping clients work toward controlled drinking should be mentioned. Sobell and Sobell (1973), McBearty et al. (1968), and Voegler et al. (1975) reported the use of electroconditioning and verbal conditioning in the context of a multi-modality treatment program. These programs are reviewed in detail in a later section of the report which discusses multi-modality programs. It is relevant to note at this point, however, that such aversion methods in the context of other treatment techniques may help a client make progress toward the STR objective being discussed here in terms of controlled drinking.

As with programs which have been reviewed regarding the other STR objectives, there is a dearth of effectiveness data. Several programs do appear more relevant than others in helping a client develop skills in choosing alternatives. Skills which focus on building the client's cognitive skills in making such decisions appear the most relevant to DWIs. These programs may include elements of verbal aversion (covert sensitization) or electro-aversion in the context of other methods to further enhance the client's ability to be free from his prior behavior pattern of habitually choosing alcohol when experiencing inner conflicts and/or stress. Legal and ethical questions must be carefully addressed before such techniques could be considered. Aversion methods may not be needed for clients who do not have a past history of habitually choosing alcohol, as indicated by their assignment in the classification system (e.g., a client in Category A of the Adaptability Factor would not need aversion techniques).

Changing the Client's Internal Response

Work toward this objective is based on two assumptions. One is that by changing the client's internal response to various situations (e.g., those arousing inner conflict and stress) the client's natural repertoire of functionally adaptive behavior, or newly learned behavior becomes available for

his use. The second assumption is that to break the habitual pattern of using maladaptive, or potentially maladaptive behavior, a competing response to the inner conflict and/or stress must be aroused in the client. Several programs have attempted to achieve this objective.

Systematic desensitization is based on principles of reciprocal inhibition developed by Wolpe (1958). The client is relaxed through the use of deep muscle relaxation training, or the use of a drug. He is asked to identify a list of anxiety-provoking situations and arrange them in a hierarchy. The therapist then asks the client to imagine being in the least anxiety-provoking situation. Once the client can imagine this situation without an anxiety response, he is asked to imagine himself in the next most anxiety-provoking situation he identified. Kraft and Al-Issa (1968) described the use of this technique with alcoholics. They focused the sessions around social situations, assuming that such situations are a typical source of inner conflict for alcoholics. In several case studies reported, the methods were effective (Kraft and Al-Issa, 1968).

Hedberg and Campbell (1974) and Hedberg et al. (1975) described a program involving the random assignment of male alcoholics to one of four outpatient programs: behavioral family counseling; systematic desensitization; covert sensitization; and aversion therapy. Clients had the choice of abstinence or controlled drinking as a treatment goal. Hedberg and Campbell (1974) reported that six months following completion of the program: 74% of the clients in the behavioral counseling group had achieved their goal; 67% of the clients in the systematic desensitization group had achieved their goal; 40% of the clients in the covert sensitization group had achieved their goal; and most of the clients in the aversion therapy group had been lost to the follow-up (only one who was found showed improvement). The authors reported an interaction effect which indicated that systematic desensitization was most effective for clients choosing a controlled drinking goal.

Newton and Stein (1971, 1974) reported the use of implosion therapy with inpatient male alcoholics. Implosion therapy follows a similar treatment schedule to systematic desensitization with variations (i.e., they did not include relaxation training). Patients were randomly assigned to one of three conditions: detoxification plus milieu therapy; or detoxification plus milieu therapy plus implosion therapy; or detoxification plus milieu therapy plus brief psychotherapy. They were also randomly assigned to highly coordinated aftercare for 12 months or standard aftercare for 12 months. Follow-up data were collected at one, three, six, nine and 12 months following discharge. The results showed

no significant differences in changes in Real Self/Ideal Self discrepancy or treatment outcome measures as a result of adding implosion therapy or brief psychotherapy to the milieu program.

One aspect of systematic desensitization has been isolated as a possible treatment method: muscle relaxation. Hartman (1973) reported a program in which clients listened to six tapes, each about 25 minutes long to learn deep muscle relaxation as a motor skill. Clients going through this program were more likely to complete the treatment program than clients admitted to the same program but who did not participate in the relaxation training.

Green (undated) reported an attempt to use muscle tension biofeedback as a treatment method. Clients viewed their muscle tension (measured from their forearm) on an EMG (electromyogram) meter. No data were reported.

It has been suggested that Transcendental Meditation (TM) would be a useful treatment technique for alcohol abusers or in the prevention of alcohol abuse (Bloomfield et al., 1975). Regular practice of TM has been reported to reduce the level of alcohol consumption of samples of males and females (Benson, 1974; Benson, 1975; Shafil et al., 1975). One application of TM to alcoholics in a ten-week voluntary outpatient program indicated that nine of 11 of the alcoholics involved maintained sobriety during the ten-week period (Benetti, 1975). Transcendental Meditation has been shown to be an effective method for helping psychiatric inpatients develop a generalized relaxation response (Glueck and Stroebel, 1975). A program called self-regulation training attempted to combine biofeedback techniques, relaxation training and meditation training (Troiani, 1976).

Benson (1975) has suggested a different approach be taken than TM. He contended that by including four basic elements in a personal program, a person could develop a relaxation response which is the counter-response to the arousal of inner conflict and stress. The four elements are: find a quiet environment and turn off internal and external stimuli; identify an object on which to focus or concentrate (whether a physical object, word, or phrase); adopt a passive attitude (empty one's mind of thoughts and distractions); and do all of this in a comfortable position (sitting is recommended to avoid falling asleep). It was Benson's (1975) contention that these elements are common to various meditation and relaxation approaches and can be used effectively without expensive training or a long period of preparation. The relaxation exercise, using these four elements, must be conducted regularly on a daily basis, to have its desired effect.

Beary et al. (1974) reported that ten females and seven males (all were healthy subjects) demonstrated a number of physiological changes similar to those occurring with the regular practice of TM when using the method described by Benson (1975).

All of the approaches reviewed have the intended effect of changing the individual's internal response to situations or events in life. Although evaluation results do not support any particular approach over the others, they all appear to be relevant for use with DWIs. They can be used in an outpatient setting. They can be conducted in groups. The techniques appear relatively easy to train staff to use. It is also possible that once people are asked to participate, these techniques may appear nonthreatening enough to allow a nonvoluntary client to try them. Once one of these approaches is tried, it should provide its own positive reinforcement. The more difficult task would be to insure that nonvoluntary clients continue using the techniques on a regular basis in their lives. This aspect of using these methods may require the use of some special incentives.

Skills in Alternatives

Developing a client's skills in alternatives to alcohol abuse has been a primary objective of many treatment programs, particularly in the drug abuse field (Messolonghites and Jackson, 1974). This objective assumed that a client has the ability to choose an alternative once he has one in his behavioral repertoire. A client with alternatives which are not being used should be working toward STR Objective 7 (skills in choosing alternatives).

Before it can be considered an alternative to alcohol use or abuse, a behavior must satisfy a number of characteristics. It must be as accessible to the client as alcohol (as inexpensive and as easy to acquire) and as satisfying as alcohol. The client must know how to use the alternative behavior before it can become a functionally adaptive response. Of course, if developed during a treatment program, the alternative should be an adaptive, not maladaptive, response.

Numerous programs attempt to develop the client's social or interpersonal skills. With such skills, he may not experience inner conflict and stress from various situations and/or may be able to utilize the skills as adaptive responses to the conflict or stress. Family and couple therapy programs reviewed earlier work toward development of various skills, such as improving communication skills, problem-solving skills, ability to understand another's problems (Gallant

et al., 1970; L'Abate, 1975; Meeks and Kelly, 1970; Burton and Kaplan, 1968; Corder et al., 1972; Cadogan, 1973; Esser, 1971). Psychodrama has also been used with alcoholics to develop their interpersonal skills (Van Meullenbrouck, 1972; Weiner, 1966; Speroff, 1966; Blume, 1974). Assertiveness training, which emerged from behavior modification techniques, also works toward developing such skills (McFall and Lillesand, 1971; McFall and Marston, 1970; Lazarus, 1966) and has been shown, in a pilot study, to be effective in helping alcoholics maintain abstinence (Adinolfi et al., 1976). Marathon groups conducted with alcoholics attempted to build interpersonal skills (Dichter et al., 1971; Dinges and Weigel, 1971). These approaches for developing a client's social skills represent programs with the most evaluation supporting their effectiveness in working toward this objective. They also appear relevant and applicable for DWIs.

Other approaches have been designed to develop behavioral skills. Dog therapy (Harris, 1975) attempted to develop social responsibility through asking patients to take care of a pet. Thematic group therapy (Schual et al., 1971) attempted to have alcoholic patients develop interaction and assertion skills through structuring participation in small and large discussion groups. Every patient had to lead a discussion on a specified topic, and then present the summary of his discussion to a larger patient group. No evaluation data were available on either of these approaches.

Recreation therapy has been suggested as a method for developing alternative social skills, as well as skills in specific recreational activities. Freeman and Koegler (1973) randomly assigned 77 alcoholics to an experimental program of psychotherapeutic recreation, and 75 alcoholics to a comparison condition upon admission to a hospital. Unfortunately, 32 patients from each group left the center before the completion of the 60-day program. The dropouts from the experimental group appeared more pathological on MMPI scales than the dropouts from the comparison group. Personal interviews showed that they found the structured program and enforced grouping of the recreation program to be threatening. Of the patients remaining, there appeared to be more improvement resulting from the recreation program than the regular program as measured by pre-post changes in MMPI scales.

Another study by Levison and Sereny (1969) showed that one year following discharge from a hospital program, patients who participated in a special program of recreation and occupational activities were slightly more improved than patients who participated in the regular treatment program which emphasized insight therapy.

Other inpatient programs for alcoholics have emphasized the development of occupational or vocational skills as alternatives to drinking behavior (Recsey, 1969). Such programs are often integrated into milieu hospital programs. Career counseling and placement services are also offered in many hospitals.

Physical fitness training can be considered development of skills in alternatives. Frankel and Murphy (1974) reported significant decreases in pulse, diastolic blood pressure, and increases in weight, submaximal step test, and the Illinois Standard Test of Fitness for alcoholics participating one hour a day, five days a week for 12 weeks. Gary and Guthrie (1972) did not find significant differences in drinking episodes between randomly assigned samples of alcoholics in a milieu program versus those in a milieu program with physical training. They did report that jogging a mile on each of five days per week for four weeks did result in significant reduction in sleep disturbances. They also found slight improvement on a measure of self-concept in patients participating in the physical training versus the milieu program alone.

Use of meditation (Benson, 1974; Benson, 1975; Shafil et al., 1975; Benetti, 1975; Glueck and Stroebel, 1975), prayer, and relaxation methods (Hartman, 1973; Benson, 1975) help a client develop skills in behaviors which are alternatives to alcohol abuse as adaptive responses. The use of prayer as an adaptive response to inner conflict and/or stress for alcoholics has been recommended by Alcoholics Anonymous and has been integrated into their Twelve Steps and Twelve Traditions (Alcoholics Anonymous, 1955).

While some alternatives may consist of special activities, one alternative is to teach clients self-directed change methods (Schwitzgebel and Kolb, 1974). Self-directed change methods include establishing change goals and keeping records on progress toward those goals while a variety of new behaviors are attempted. Establishing a goal for change is a critical element in such methods (Kolb and Boyatzis, 1970). With a system of record keeping, a person can work on changing a variety of behaviors, such as smoking, changing one's weight, wasting time, hurting other people, and so forth (Schwitzgebel and Kolb, 1974).

Responsible drinking, also called controlled drinking, may be an alternative for some people. As mentioned earlier, there is controversy over the appropriateness of this as an alternative for alcoholics. Lloyd and Salzberg (1975) reviewed numerous studies of programs intending to help clients develop patterns of controlled drinking. Controlled drinking usually refers to drinking such that the person does

not surpass a certain blood alcohol level, or consume more than a specified number of drinks. It could also refer to ways of drinking (sipping rather than gulping), and types of beverages (mixed drinks rather than straight drinks). Various approaches used to develop controlled drinking include: biofeedback and aversion methods (Lovibond and Caddy, 1970; Silverstein et al., 1974); avoidance conditioning combined with discrimination training (Sobell and Sobell, 1973; Vogler et al., 1975; McBearty et al., 1968); and contingency management (Lloyd and Salzberg, 1975). The use of these approaches in helping various DWI/Drinker Types learn responsible, or controlled, drinking as an adaptive response appears to be relevant to many DWIs for whom abstinence would not be a goal. For some, it may even help them resist group conformity pressures to drink abusively.

There are many programs which attempt to develop a client's skills in alternatives. Choosing an effective and relevant program for a particular DWI will probably be a function of the set of STR objectives representing desired changes for him.

Block Self-Sustaining Conflict

Working toward this objective may require the use of approaches discussed in the context of other STR objectives in brief, intensive programs (particularly, changing the client's internal response, skills in choosing alternatives, and skills in alternatives). Any program used to work toward this objective must have the impact needed to break a pattern of behavior and escalation of conflicts and stresses which has developed in the client's life over a period of time. For example, it may be necessary to use an aversion technique to interrupt the client from his current drinking behavior. It may be necessary to teach the client and his family some basic methods of interrupting a cycle of self-sustaining interpersonal conflict (Esser, 1971; Bowen, 1974; L'Abate, 1975).

The client may need relaxation training or systematic desensitization to interrupt his internal response of conflict or stress to many situations. Techniques which the client can easily use in many settings would be most relevant. As mentioned earlier, working toward this objective is preparation for working toward STR Objectives 11 and 12.

Admit a Drinking Problem

Some approaches attempt to achieve this objective while working on other objectives such as having the client take responsibility for his drinking problem (Gallant et al., 1970). Within the context of short-term rehabilitation work with DWIs, it would probably be most relevant to use a program which directly confronts the client. Various uses of videotape playback of intoxicated behavior were reviewed earlier (Schaeffer et al., 1971; Davis, 1972; Feinstein and Tamerin, 1972; MacDonald, 1974) and found to have ambiguous effects in rehabilitating alcoholics.

Scott (1956) described an approach to group therapy which could be used to "break the denial" of alcoholics. One member (out of a group of about six) takes a turn being "It." The other members question him, agree with him, defend him or attack him on any topics they wish. This approach appears to amplify an interpersonal dynamic characteristic of many group therapy sessions.

Tate (1975) described an education approach in which she attempts to break through the denial and alibi system of clients and encourage acceptance of abstinence and further treatment.

Johnson's (1973) approach to helping a client work toward this objective was also mentioned earlier. His approach differs from the others mentioned in that he uses any person who is meaningful to the client as a participant in the confrontation meeting which he carefully focuses on specific events and the consequences of drinking by the client. His goal is to get the client to accept the reality of his drinking problem enough to seek help.

Members of Alcoholics Anonymous contend that a client must admit his powerlessness over alcohol as a first step in his personal rehabilitation process (Alcoholics Anonymous, 1955). A variety of methods are used in AA meetings to help a client understand that he has a serious problem with alcohol, as distinguished from other problems in his life.

Seeking Additional Treatment

Work toward this objective does not require separate programs or approaches, but should be integrated with activities used in working toward STR Objectives 10 and 11. The client must be helped to make an appointment, arrive, and continue in treatment. These activities should be conducted as a part of persistent and lengthy follow-up. The staff must be ready

to recommend various community resources to a client who asks for help. It may be helpful to attempt to match the client to appropriate community resources on the basis of his demographic characteristics, values, or interpersonal style.

Multi-Modality Approaches

Multi-modality approaches to rehabilitation are those programs which utilize a variety of treatment approaches to work toward a set of treatment objectives. A modality can be defined as a treatment activity in which efforts are focused on the accomplishment of a specific objective, or set of objectives, utilizing a specific set of methods. A multi-modality program utilizes several modalities to accomplish a set of treatment objectives. The various modalities may differ in their approach to specific objectives and assumptions about how to help a client change.

Several issues make the use of multi-modality approaches relevant in the rehabilitation of DWIs. First, each DWI will have a set of STR objectives identified as appropriate, desired changes as a result of assessment in the classification system. Since these objectives will represent desired changes in his adaptability to inner conflicts and stress, as well as desired changes in his exposure to his sociocultural environment, it may be necessary to use a set of multiple methods in working toward the various objectives.

Second, the evaluation data on the effectiveness of the programs reviewed in the previous section were often minimal, and sometimes ambiguous. The use of multiple modalities will increase the probability of achieving an STR objective. The increased effectiveness would result from attempts to work toward an objective from a variety of perspectives and methods.

Third, several studies reported data showing interactions between effectiveness and client characteristics. It is probable that any program is particularly effective with certain clients, and not effective with other clients. The use of multiple modalities would cover the various client characteristics through the use of various methods (with their different assumptions on ways to help people change). It is also likely that more clients will become motivated to participate actively and sincerely in a program to which they were assigned nonvoluntarily if various methods are offered. This increases the probability that one of the methods will capture the interest and commitment of the client.

Because of the importance of multi-modality approaches and the relatively few such programs which have appeared in the literature, each approach will be examined separately. Each approach will be examined for data indicating its effectiveness and its relevance in terms of the criteria established for helping DWIs change, i.e., its applicability for use with groups and with nonvoluntary clients, its outpatient setting and the restrictions placed on both staff training time and the length of group sessions.

Due to the complex nature of these approaches, three other criteria will be used in the review. One criterion calls for examination of the congruence of various modalities within the approach. Do these modalities represent a common set of values and assumptions about how people change? Is the value or theoretical basis of any of the separate modalities in conflict with the value or theoretical basis of any of the other modalities?

Another criterion calls for the examination of the developmental nature of the approach. Are the modalities in a specific sequence? Does this sequence reflect a developmental advancement toward an STR objective from one modality to another? Do the modalities build on the learning of prior modalities and reinforce the client for progress toward STR objectives which may have been the focus of previous modalities?

Another criterion calls for examination of the logistic requirements of the approach. Can the various modalities be conducted by the same staff? Are different facilities, equipment, or materials needed for each of the modalities?

Of the five approaches to be reviewed, three share a common theoretical base in behavior therapy (McBearty et al., 1968; Sobell and Sobell, 1973; Vogler et al., 1975). The fourth approach is similarly based on the principles of behavior therapy but focuses on the application of operant reinforcement principles (Hunt and Azrin, 1973). The fifth approach utilizes a broad-based experiential learning model in the context of a power conflict theory of alcohol abuse (Boyatzis, 1976).

A Behaviorally-Oriented Program

McBearty, Dichter, Garfield, and Heath (1968) reported a behaviorally-oriented, broad spectrum approach to treating alcoholics. The program included an emphasis on excessive drinking behavior and on "those behaviors or conditions which represent fractional components of a complex

series" of maladaptive behavior. They assumed that alcoholic drinking is maintained by the consequences of the behavior. Alcoholism is a learned behavioral excess, the functions of which can be isolated and described. The modification of these functions should follow behavior modification principles. They also viewed the drinking response as one facet of a chain of antecedent responses prior to the drinking episode. Another assumption was that the efficiency of any treatment program would be a function of the degree to which drinking behavior is interrupted and the degree to which the antecedent responses are also interrupted.

Their approach included the following modalities:

- didactic sessions on behavior modification, with readings and homework assignments;
- aversive conditioning procedures (visual-verbal sequence with electric shock, homework assignment of thought stopping techniques, sip and sniff sequence with electric shock, and covert sensitization);
- relaxation training;
- systematic desensitization;
- behaviorodrama (in areas of client's behavioral deficits); and
- in vivo training (graduated exposure to situations which originally elicited drinking behavior).

It appears that this approach worked toward the following STR objectives: (a) decision on responsible drinking; (b) monitoring arousal; (c) skills in choosing alternatives; (d) changing the client's internal response; and (e) skills in alternatives. It is also possible that the methods worked toward decreasing the client's vulnerability to group forces regarding drinking.

No evaluation data were presented. The program does appear relevant to DWIs according to the criteria mentioned. The various modalities appear to be congruently based on behavior theory and behavior modification principles. The modalities also appear to build on the learning from prior modalities. The program requires electric shock apparatus and involves drinking.

Individualized Behavior Therapy

Sobell and Sobell (1973) reported an approach based on behavior theory. The goals of the approach included developing awareness of the various situational stimuli which elicit heavy drinking, developing a set of adaptive responses to such situations, assessing the consequences of each response, and practicing the potentially beneficial responses (Hamburg, 1975). The assumption underlying this approach is that excessive drinking is a learned behavioral response, supported by various reinforcers in the person's environment. The stimulus situations which elicit drinking behavior and its consequences vary on an individual basis (Hamburg, 1975). It is possible for the individual to develop a pattern of controlled drinking if he can gain control of the stimulus eliciting excessive drinking behavior and has alternative responses for situations arousing conflicts and stress.

In addition to a regular treatment program (which included Alcoholics Anonymous, group therapy, chemotherapy and so forth), Sobell and Sobell (1973) assigned patients to an experimental program which included:

- videotape playback and confrontation of intoxicated behavior;
- shaping of controlled drinking or abstinence behavior through aversive conditioning (with electric shock);
- availability of alcohol during the treatment program; and
- behavioral change training sessions (including examination of settings and events related to drinking, listing alternative responses, evaluation of consequences of such responses, discussions, role plays, assertiveness training, etc.).

It appears that this approach worked toward the following STR objectives: (a) decision on responsible drinking; (b) skills in choosing alternatives; and (c) skills in alternatives. It is also possible that the methods worked toward decreasing the client's vulnerability to group forces regarding drinking.

Alcoholics were assigned an abstinence or controlled drinking goal as a result of an interview. Each were assigned a goal which appeared most appropriate for that particular client. Fifteen of the 30 alcoholics assigned to abstinence were randomly assigned to the experimental program in addition to the regular hospital program, and 15 to the regular

hospital program only. Twenty of the 40 alcoholics assigned to controlled drinking were randomly assigned to the experimental program in addition to the regular hospital program and 20 to the regular hospital program only.

In a one year follow-up, in which 69 of the 70 alcoholics were tracked, the results were impressive. Significantly more patients in the experimental program were functioning better with regard to drinking than patients in the comparison condition (85% of the controlled drinking goal experimental group vs. 31.58% of the controlled drinking goal comparison group; 86.67% of the abstinence goal experimental group vs. 26.67% of the abstinence goal comparison group). Patients in the controlled drinking goal experimental condition appeared improved on measures of driving violations (per driver) and other multiple measures of life adjustment.

The Sobell and Sobell (1973) program appeared effective. Patients in the experimental program with a goal of controlled drinking appeared to demonstrate more evidence of life adjustment behavior than patients in any of the other conditions. This multi-modality approach appears even more relevant than the McBearty et al. (1968) approach because of the inclusion of the controlled drinking goal. The development of responsible drinking patterns (i.e., controlled drinking) may be an appropriate and realistic goal regarding drinking for many DWIs.

The approach appears to fit the relevance criteria. All of the modalities are based on the same behavioral principles and appear to build on the learning of previous modalities. It appears to be a developmental program. The program requires the use of videotape equipment, electroconditioning apparatus and the use of alcohol during the program. The use of this equipment and the use of alcohol presents obstacles regarding the applicability of this program with DWIs due to ethical, legal, and economic problems (e.g., most ASAPs or treatment centers do not have budgets allowing for major equipment purchases and maintenance). It appears that other aspects of the modalities can be conducted by one set of staff members.

Integrated Behavior Change

Vogler, Compton and Weissbach (1975) reported a multi-modality program the goals of which were to train alcoholics to: (a) reduce their intake of alcohol; (b) change certain high risk patterns of consumption; and (c) make positive changes in their interpersonal contacts and environment. They attempted to accomplish this by beginning to help the individual commit himself to change. They would then teach the indivi-

dual the means to monitor his own level of intoxication, while helping him identify and practice alternatives to drinking in a variety of situations. They also attempted to reach their objectives by teaching the individual about alcohol and developing his interpersonal skills.

The experimental program included the following components:

- drinking history interview (identify pattern and circumstances of drinking, as well as consequences);
- baseline drinking session;
- videotape playback of intoxicated behavior;
- alcohol education;
- blood alcohol level discrimination training;
- aversion training for overconsumption (using electric shock);
- discriminated avoidance practice (in a social setting);
- behavioral counseling (reinforcement, contingency contracting, problem-solving methods, communications skills, etc.);
- wrap-up session (including behavioral reminders);
- booster sessions (once a week for four weeks, then once a month for four months); and
- follow-up (data collection in client's natural environment).

It appears that this approach worked toward the following STR objectives: (a) information about alcohol; (b) decision on responsible drinking; (c) skills in choosing alternatives; and (d) skills in alternatives. It is also possible that these methods worked toward decreasing the client's vulnerability to group forces regarding drinking.

Vogler et al. (1975) randomly assigned 23 alcoholics to the experimental program (outlined above) and 19 alcoholics to a comparison condition. The comparison condition included: drinking history interview; alcohol education; behavioral counseling; wrap-up session; booster sessions; and follow-up. The median length of the program for the

experimental group was 45 days and 22.5 days for the comparison group. Sessions were conducted on an outpatient basis. Even with random assignment, the two groups had significant differences on several important initial variables: the experimental patients had higher alcohol intake and held fewer jobs during the last year than patients in the comparison group. On outcome measures of abstinence and controlled drinking, the groups did not differ significantly one year following the program. Drinking measures were statistically adjusted for initial differences and subjected to multivariate analyses. There were significant pre-post differences for all patients on an overall measure of drinking, intake, preferred beverage, drinking companions, and drinking environment. In terms of group differences, the experimentals had significantly more positive changes on drinking companions and days lost from work than comparison group patients. The authors claimed that, "The data indicate that some alcoholics may be trained to reduce their intake, to change certain high risk patterns of consumption, and to make favorable changes in their interpersonal contacts and environments" (Vogler et al., 1975). Further regression analysis of initial measures on outcome provided support for the hypothesis that patients in the experimental program made more progress toward the objectives than patients in the comparison condition.

In terms of relevance to DWIs, the authors had chosen modalities which could be conducted on an outpatient basis by paraprofessionals. They chose methods that could be used individually or in groups, were economical and compatible. The methods shared a common set of values and assumptions about human behavior and behavior change and combined to enhance the learning from each modality to the next.

The equipment needed to conduct this approach includes: videotape equipment, electroconditioning apparatus, a breathalyzer, and a room with a comfortable social environment. Alcohol consumption was involved in the sessions. The same problems mentioned with regard to the use of equipment and alcohol in the Sobell and Sobell (1973) program are applicable here.

A Community Reinforcement Approach

Hunt and Azrin (1973) reported a multi-modality approach to rehabilitation of alcoholics based on principles of operant reinforcement. The goal of the program was to rearrange the community influences and positive reinforcements in the patient's life such that the individual is deterred from drinking because of the interference it would cause with sources of satisfaction in his life. This is based on an assumption that alcohol intake postpones or omits certain positive reinforcements from the individual's life.

If the postponed reinforcements are maximized (in terms of quality, frequency, variety and regular occurrence), they will act as a deterrent to drinking. The approach attempts to create a set of life forces around the individual such that drinking would precipitate an interruption from positive reinforcement.

The methods used in the program included:

- description of nature and reasons for participation in the program;
- identification of priority needs of the alcoholic;
- vocational counseling (which included help in preparation of a resume, calling people to inquire about available jobs, placing advertisements in newspapers for employment, submitting applications for employment and attending interviews, arranging transportation to work);
- marital and family counseling (which included help in behavioral contracting with the spouse concerning maintenance of sobriety and providing reciprocal benefits to each spouse through various activities);
- counseling with parents (for those who were not married), or with significant persons from the client's natural environment (for those who did not live with parents) in which the methods were similar to those mentioned in the marital and family counseling;
- social counseling (encouragement toward participation in reference groups which supported abstinence and provided positive reinforcement and discouragement from participation in groups which supported drinking, such as membership in a social club in a specific physical setting established for that purpose);
- reinforcement counseling which included helping the client obtain facilities and resources which may be commonly available to most people but are not available to the client (e.g., getting a telephone to make job inquiries);

- didactic instruction in alcohol use and abuse and the workings of Alcoholics Anonymous; and
- community maintenance (post-discharge visits to the patient once or twice a week during the first month, and then on an average of twice a month).

It appears that this approach worked toward the following STR objectives: (a) information on alcohol; (b) decision on responsible drinking (in this case abstinence was required); (c) skills in alternatives; (d) decreasing the client's vulnerability to group pressure regarding drinking; and (e) changing the client's exposure to group forces regarding drinking behavior.

Eight male inpatient alcoholics were arbitrarily assigned to participate in the community reinforcement program. They were then matched to eight male inpatient alcoholics on the basis of employment history, family stability, previous drinking history, age, and education. Follow-up data were collected six months after discharge. The eight patients in the experimental program demonstrated less time drinking, more time employed, less time away from their home or natural reference group, and less time institutionalized than patients in the matched group (who went through the regular hospital program). All of the above results were highly statistically significant. In separate analyses of these four measures on a monthly basis for the six months, the experimental group demonstrated the same highly significant differences as reported above from the matched comparison group in each of the six months.

The authors claimed that these techniques could be easily used in an outpatient setting. In terms of other criteria of relevance for DWIs, this approach requires individual work with the client (e.g., vocational counseling) and with his spouse or immediate social group. This suggests that using the approach as is would be too costly for working with DWIs.

The methods could be conducted by staff without a great deal of training. All of the elements in the program share a common basis in learning theory and operant reinforcement as the basis for human behavior change. The elements of the program appeared to build on the results of preceding elements.

What is unique about this approach is that it worked toward STR objectives intended to alter the client's socio-cultural environment. It helped the client develop skills in alternatives to alcohol abuse in the context of working toward changes in the pressure experienced from his environment and changing his exposure to various pressures regarding drinking.

Power Motivation Training

Boyatzis (1976, 1975) reported a multi-modality, intensive group program based on the power conflict theory of alcohol abuse. The goals of the program were to teach clients to: (a) identify the links between the experiences of power and powerlessness and drinking behavior; (b) identify moments when they are beginning to feel powerless; (c) list alternatives to alcohol abuse which would make them feel powerful; and (d) practice those alternatives. The program was based on the assumption that experience of powerlessness is a common theme in the life of an alcohol abuser. By learning to recognize the onset of this experience the client can choose a behavior other than abusive drinking to feel powerful.

The program included the following components:

- education about relationships between internal experiences and drinking behavior (through discussion and behavioral simulations);
- development of a self-diagnostic system for monitoring arousal of powerlessness;
- development of a personalized list of alternatives;
- changing risk-taking, decision making, and planning behavior (using role plays and simulations);
- interpersonal skills training (which included the use of role plays and simulations, in addition to conceptual frameworks for understanding how to handle interpersonal conflict and structure relationships so that they are more satisfying);
- relaxation training;
- planning for the accomplishment of short- and long-term goals in life (which included statement of goals, listing of action steps, anticipation of obstacles, and seeking sources of help to overcome the obstacles); and
- follow-up sessions.

It appears that this approach worked toward the following STR objectives: (a) information on alcohol; (b) decision on responsible drinking; (c) monitoring arousal of conflict or

stress; (d) skills in choosing alternatives; and (e) skills in alternatives. It is possible that this program also worked toward decreasing the client's vulnerability to group forces regarding drinking.

Cutter et al. (in preparation) reported a study in which fifty-two inpatient alcoholics were randomly assigned to participate in the experimental program in addition to the regular hospital program, and forty-eight inpatient alcoholics were assigned to participate in only the regular hospital program. All were chosen from a pool of 100 volunteers. One year follow-up data showed that patients in the experimental condition maintained the same record of sobriety and similar amounts of drinking while they worked significantly more days per month than patients in the comparison condition. An interaction was reported between treatment condition and a personality scale called Bureaucratic Conservatism. Six months after discharge, patients scoring high on Bureaucratic Conservatism who had gone through the regular hospital program drank less than those who had gone through PMT and the hospital program. Also, patients scoring low on this personality scale who had gone through the experimental program drank less during the six months after discharge than those who had gone through the regular hospital program only.

Boyatzis (1976) reported that the program was being used with alcohol abusers and DWIs on an outpatient basis. It can be conducted by counselors with relatively little formal training. Its use with DWIs suggests it is applicable for nonvoluntary clients. It is conducted in four one-day sessions with a one-day follow-up session per month for several months. The components have been designed around a common set of principles regarding human behavior and behavior change. The various elements in the program build on learning from prior elements.

Discussion and Conclusions

The results of the survey of available treatment approaches offer promise for the applicability of treatment modalities, or their derivatives, in STR programs with DWIs.

Multi-Modality Programs

The review of multi-modality approaches presented evidence as to the effectiveness of such programs in helping alcohol abusers reach rehabilitation objectives. Positive evaluation evidence of effectiveness was presented for four out of the five multi-modality programs reviewed. The evidence came from evaluation studies which were designed according to acceptable research methods and standards. One conclusion is that treatment modalities can be integrated to offer clients a program which works toward numerous rehabilitation objectives. Another conclusion is that the modalities can be integrated congruently (i.e., the modalities used are based on similar values, theories and assumptions about human change) and in a developmental fashion (i.e., each modality appears to build on learning from the preceding modalities).

The issue of relevance of the application of these specific multi-modality programs with DWIs raises certain questions. Some of the programs require the consumption of alcohol. Will the courts and public tolerate and/or accept the use of alcohol in programs designed for persons convicted of driving while intoxicated? If alcohol were consumed during rehabilitation sessions, could transportation for the clients to return home be provided? The delicacy of posing the former question for public review and the economics of potential implementation methods for the latter question suggest the elimination of these approaches from those recommended for use with DWIs. Even if modalities were considered which involved the consumption of alcohol on a voluntary basis, the risks of damaging the overall STR effort with DWIs seems high.

Several of the multi-modality programs reviewed required the use of videotape equipment. Although this may be an expense out of range for many treatment facilities working with DWIs, audiotaping may be a reasonable substitute for videotaping, and certainly much less expensive.

The use of electroconditioning in several of the multi-modality programs raises a number of ethical questions. Can electroconditioning be required in nonvoluntary programs? Does the proposed use of electroconditioning inflict pain

on the client? Does it leave the client with behavioral responses over which he has no control? Any modality which involved electroconditioning should be available, if desired as a modality by the treatment staff, only as a voluntary aspect of an STR program. It should be truly voluntary and have no stigma of disapproval, denial or rewards, or application of punishments for not choosing this option. Electroconditioning, as used in the multi-modality programs, does not inflict any pain but merely a tingling sensation on the client. It is used as an indicator, helping the client to realize when a certain behavior, or reaction is occurring. The use of this form of electroconditioning does not appear to remove future control of one's behavior. Steps would have to be taken to insure proper use of such equipment and protection of clients from possible misuse (even unintentional misuse) by a staff member.

The program presented by Hunt and Azrin (1973) called for extensive time spent with individual clients and their families. Such time could not be spent within the context of STR programs for DWIs. If the methods used by Hunt and Azrin (1973) were to be included in programs for DWIs, they would have to be translated into techniques which could be used in a group setting.

The other multi-modality programs were conducted with groups of clients. Although only two reported actual work with outpatients (Vogler et al., 1970; Boyatzis, 1976), all of the programs appear usable in an outpatient setting.

Applicability of Separate Modalities

The review of modalities presented a hopeful, but not necessarily promising picture as to potential effectiveness and relevance of modalities for use with DWIs. Several modalities were notable exceptions to this conclusion. Decision making approaches, family/couple therapy approaches, alcohol education approaches, and assertiveness training were shown to be effective in reaching rehabilitation objectives for alcohol abusers. Even these approaches often had only one evaluation study, a pilot study, or studies with some design inadequacies.

A number of approaches were reviewed for which some evaluation data were presented. Controlled drinking, blood alcohol level discrimination training, disulfiram treatment, systematic desensitization, interpersonal skill training, TM, relaxation response and/or relaxation training, and behavioral contracting appeared relevant approaches for use with DWIs. Relevance in some cases, as with controlled

drinking, raises certain legal and ethical issues mentioned above. Effectiveness of these approaches was indicated by case study reports, or some combination of positive and ambiguous outcome studies.

Several approaches were mentioned and appeared relevant for DWIs, but had no evaluation data available. These were psychodrama, confrontation meetings (Johnson, 1973), and training in goal setting and planning. Other approaches were reviewed for which evaluation data suggested that no contribution would be made in using these approaches in attempting to reach rehabilitation objectives. For example, the use of implosion therapy and transactional analysis is not recommended for DWIs as a result of evaluation studies reviewed. Videotape confrontation of intoxicated behavior is not recommended for use with DWIs as a result of the ambiguous and potentially harmful effects reported in the evaluation studies reviewed.

Follow-up

Follow-up activities provide the client with a continual source of reinforcement for progress made toward accomplishing STR objectives. They help the client integrate his new skills and orientations to life and drinking into his real life. This is made possible through discussions about his difficulties and successes in applying these new skills and orientations. Dubourg (1969) contended that "energetic" after-care is important in preventing relapses into abusive patterns of alcohol consumption. Such follow-up would also be important in preventing relapses in the use of other maladaptive behaviors. Dubourg (1969) also stated that clients need a resource in a time of trouble, possibly in the form of active support to prevent a relapse or in the form of easily available help. Participation in a regular program of follow-up activities would probably increase the likelihood of a client asking for help as he senses trouble.

Follow-up activities may be an effective replacement for longer term rehabilitation, as well as a source of reinforcement to the client. Polorny et al. (1973) reported that an inpatient program of 60 days' duration with extensive follow-up activities yielded similar effectiveness (in terms of outcome measures of abstinence and social adjustment) as did an inpatient program of 90 days' duration. Of those patients who attended eight or more follow-up sessions, 53% had maintained abstinence one year following discharge from the inpatient program.

The most significant problem in conducting follow-up activities appears to be client attendance. Several

methods have been tested which may help with this problem. Panepinto and Higgins (1969), Koumans and Muller (1965), and Tarleton and Tarnower (1960) reported the successful use of letters in facilitating client attendance at treatment activities. Catanzaro and Green (1970) discussed the use of telephone calls as a potential vehicle for conducting follow-up activity. Their method of using telephone calls could also be applied to increase attendance at follow-up sessions.

The length and intensity of follow-up should vary according to the severity of a client's problem. Activities in follow-up sessions should be designed and conducted with the same care as regular treatment activities.

Client Acceptance of STR Programs

Client acceptance of particular rehabilitation programs is a function of various factors.

First, through assessment of the appropriate rehabilitation objectives for a DWI, he can be assigned to treatment programs which will respond to his specific needs. A great deal of the resistance to treatment programs often emanates from the client's perception that the material being presented is irrelevant to his concerns and his life. Emrick (1975) recommended that attention be given to matching clients and treatment programs. He suggested that this matching be based on the client's views on the causes, nature and treatment of alcoholism. Others have suggested that matching take place on the basis of personality characteristics. Matching would be most effective if based on treatment objectives. If the desired changes for a client are consistent with the objectives toward which a particular program works, the client is more likely to benefit from the treatment program than if he were matched merely on the basis of personality characteristics.

Second, some client characteristics which affect acceptability of treatment programs are included in the assessment of the DWI on the Sociocultural Factor. Mayer and Black (1974) contended that socioeconomic status of a client affects his acceptance of programs. They suggested, for example, that clients from middle and upper socioeconomic status (SES) groups find behavioral conditioning more acceptable than clients from low SES groups. They also contended that clients from low and middle SES groups find Alcoholics Anonymous more acceptable than clients from upper SES groups. Characteristics such as SES, race, age, sex, and so forth, are included in the assessment of the

client on the Sociocultural Factor. In this way, some of the factors affecting acceptability will be used to select appropriate STR approaches.

Third, the client characteristics which most affect their acceptance of DWI programs have more to do with their initial hostility and readiness to engage in rehabilitation programs than specific personality characteristics. Many programs risk losing the involvement of DWIs in the early stages because of lack of attention to hostility and readiness issues. Any program designed for STR work with DWIs should address these issues directly through the content and structure of initial activities with DWIs. There may be other client characteristics which influence the effectiveness of STR programs. Empirical research on such characteristics is needed prior to making any recommendations.

SECTION FIVE: RECOMMENDATIONS FOR STR PROGRAMS¹

Once a set of STR objectives has been identified as relevant for a particular DWI through the use of the classification system, he will be assigned to an STR program. This program is selected on the basis of its effectiveness and relevance in helping that client reach those specific STR objectives. An STR program is an integrated, multi-modality program. The combination of modalities is designed to work toward a set of STR objectives. The programs recommended in this section of the report reflect a synthesis of components from various treatment approaches reviewed in the previous section. The recommendations are intended as a guide to treatment agencies and program administrators in the development and implementation of STR programs. To date none of the programs have been tested in their entirety with clients. In addition to the recommended programs, this section of the report provides a framework for designing rehabilitation programs to work toward specific objectives.

The Development of STR Programs

Basic Assumptions

The STR programs discussed in this report have been developed on the basis of certain assumptions. These assumptions developed from observations of the emerging need for STR programs for DWIs and the concerns of NHTSA as expressed in the contract for this project. One of the assumptions is that the STR programs should be conducted with groups of DWIs. Although it is understood that some individual work with a client is inevitable and desirable, the majority of the rehabilitation effort with a client should take place in the context of a group. The number of DWIs in a group affects to some extent the potential effectiveness of the experience for each client. For modalities which are entitled "courses," it is probable that groups of ten to 20 clients can participate with maximum potential impact. For modalities entitled "workshops," it is likely that groups of ten to 15 can participate with maximum potential impact.

¹Material in this section of the report was prepared and written by Richard E. Boyatzis, James A. Burruss, and Jeremy Cobb.

Another assumption is that the STR programs will be conducted on an outpatient basis. None of the programs should require a client to remain in a facility overnight. The program sessions should be conducted on weekday evenings, or during the day on Saturday or Sunday. These times have been chosen in an attempt to minimize interference with the work commitments and familial responsibilities of the clients.

Keeping in mind the nature of the staff at most treatment facilities who work with DWIs, it was assumed that the treatment staff (i.e., therapists or counselors) conducting the STR program would not have need of advanced, formal training or education (i.e., advanced credentials or academic degrees). They may need some specialized training in the STR program methods. It is recommended that two staff members lead any group (whether the modality is a course or a workshop). One staff member may be able to conduct a modality with a group of clients, but it is not recommended. The group experience may be excessively emotionally and mentally draining for one person to conduct. It is also possible that a leader can become involved in interpersonal conflict with particular clients in the group and need another leader to intervene.

Short-term rehabilitation was assumed to refer to programs of three to six months' duration. This includes follow-up sessions. In some locations where the DWI's period of probation is one year, follow-up sessions should be extended to take place over the entire year.

Since participation in the STR programs is nonvoluntary, legal and ethical considerations as to the nature of activities involved and the potential danger to the client must be examined carefully. Given these considerations, any judgements made determining structure and content of the STR programs should at the minimum maintain the freedom of choice of the individual to actively participate or to merely be present. The programs must also be developed with the recognition of the hostility and resistance to treatment which is so much a part of most DWI's initial posture in rehabilitation programs.

Building the Client's Commitment

There are a number of steps which can be taken to build the client's commitment to participation in the STR program and toward attainment of the desirable changes reflected in his STR objectives. During the early stages of the STR program, the client's hostility and resistance

to participate can be turned into interest if the staff conducting the program can help each client acknowledge an aspect of his behavior or life which he would like to change. Almost everyone can identify some aspect of his life or behavior which, if changed, would lead to a more comfortable or more satisfying life (this may be expressed as a life with less fear and uncertainty). The client should be helped to see how the STR program will help him address these aspects of his life. In other words, the client's reluctance to participate can be turned into interest if he perceives a functional utility to participation beyond merely satisfying the court's condition of probation.

Another vehicle for building the client's commitment is to help him examine his current life status in terms of the classification system. This activity could be particularly effective if conducted during the middle section of his STR program (i.e., after he has been exposed to some new concepts and skills). Helping the client to discover how he was assessed on the classification system, the rationale behind the STR objectives determined as relevant for him, and why he was assigned to this particular STR program will increase the probability that he will begin to accept responsibility for making progress toward the STR objectives.

A Model of Individual Functioning

The design of the STR programs to be presented in this section of the report is based on numerous observations regarding the effectiveness of stimulating a change in a DWI toward the STR objectives. The descriptive model of individual functioning, shown in Figure 1, is useful as a framework for discussion of several of these observations.

The Descriptive Model

The model shown in Figure 1 reveals a sequence of events in the life of an individual. The individual may have an internal state aroused by his own actions, by responses from his social environment to his actions, by the presentation of new experiences or stimuli from the environment, or by some combination of these events. The internal state which is aroused is generated by a variety of inner sensations (e.g., a sensation in the stomach).

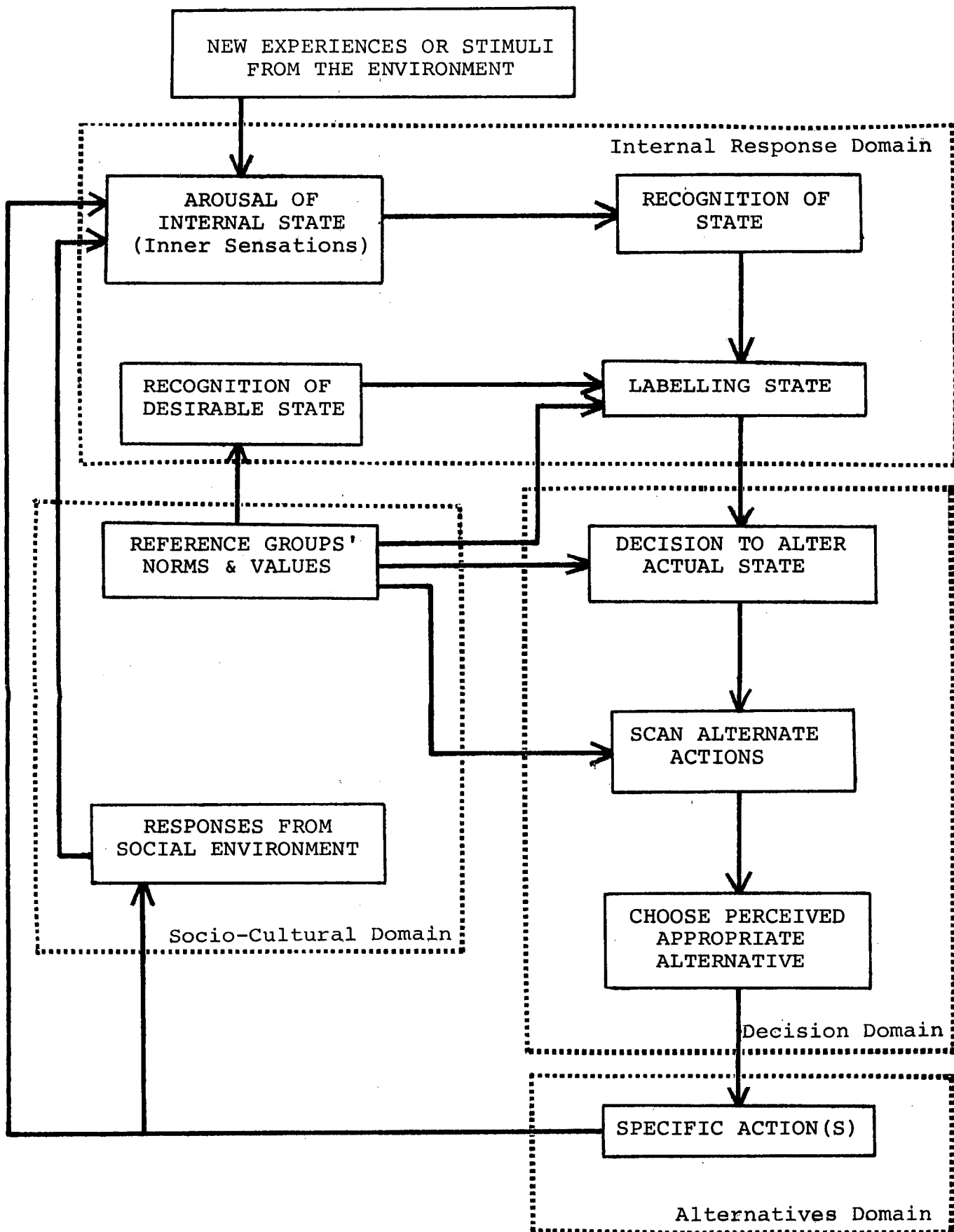


Figure 2. A Descriptive Model of Individual Functioning

The individual establishes some level of recognition of this state; the recognition may be conscious or unconscious. The individual then labels, or interprets, the state. This labelling process is actually a comparison of the recognized state with the recognition of a desirable, or ideal, state which is associated with the same inner sensations. The arousal of the internal state, the recognition of the state, recognition of a desirable state, and labelling of the state are elements of a person's functioning in what is termed the internal response domain.

There are four STR objectives which attempt to stimulate changes specifically in the internal response domain. Work toward STR Objective 4 (information on alcohol) provides the individual with information which should help him to attain more accurate recognition of states related to alcohol consumption, to identify desirable states with knowledge of the potential effects of alcohol, and to more accurately label these states than he could previously.

Work toward STR Objective 6 (monitoring arousal) increases the individual's level of conscious recognition and labelling of the state, as well as increasing his sensitization to internal indicators of specified aroused states. Work toward STR Objective 8 (changing the client's internal response) changes the nature of the internal state aroused by various actions, by responses from his social environment, or by new experiences or stimuli from the environment. Work toward STR Objective 10 (blocking the self-sustaining cycle) should help the client to change the nature of the internal response aroused by his own actions, by the responses of others, and by stimuli from his environment.

Once the individual has labelled his state, he makes a decision about altering it. The decision to alter his state would come from a desire to restore an equilibrium. The perception (conscious or unconscious) of disequilibrium is likely to emanate from a perceived discrepancy between the identified desirable state and the recognition of his actual state.

If he decides to alter his state, he scans the various actions, behavioral or mental, which may be taken. If he decides not to alter his state, he may scan alternative actions which can help him maintain the equilibrium of his current state. Following the scanning, he chooses one or more of the alternative actions which he perceives as the most appropriate. The decision to alter his state,

the scanning of alternative actions, and the choice of an alternative are elements of the person's functioning in what is termed the decision domain.

Work toward STR Objective 5 (decision on responsible drinking) attempts to make the client aware of his decision making processes regarding drinking, and therefore to bring them into his conscious control. It also attempts to build the client's skills in making the decision to alter his drinking behavior. Work toward STR Objective 7 (skills in choosing alternatives) builds the client's skills in making the decision to alter his state, in his scanning abilities, and in making choices based on accurate assessment of the alternatives. Work toward STR Objective 11 (admit an alcohol problem) also helps the client make a decision regarding a change in his current drinking behavior and in his ability to change his drinking behavior on his own.

Once an individual has made a choice of an action, he engages in that action. These dynamics refer to unconscious as well as conscious processes. An individual may not be aware of his decisions made through the sequence of events as described in this model. One reason is that this sequence often occurs rapidly. The individual may go through the full cycle of these events many times in several seconds. Another reason is that the ego defense mechanisms of the individual may function to provide a conscious labelling of an internal state and a rationale for a particular choice of actions which masks the organism's real intent. These activities are included in what is termed the alternatives domain.

Work toward STR Objective 9 (skills in alternatives) increases the range of the client's alternatives. It also helps the client to become comfortable with certain alternatives and to master others. Work toward STR Objective 10 (blocking the self-sustaining cycle) also provides the client with some new alternatives. Work toward STR Objective 12 (seeking additional treatment) gives the client the alternative of combating his alcohol problem in the context of long-term rehabilitation.

When the individual engages in an action (whether mental or behavioral), certain inner states are aroused by the action and by the response to the action from his social environment. The cycle is then completed, and begins again.

The individual's social environment affects this cycle in many ways. Through the norms and values of the client's

reference groups, people in these groups contribute to his image of what is a desirable, or ideal, internal state. These people also affect the individual's labelling, or interpretation processes. They affect his decision regarding when he is in disequilibrium and must alter his state, and when he is in equilibrium and should maintain his current state. The norms and values of these groups influence the individual's scanning abilities through identification of which actions are appropriate and which are positively valued.

The responses from the individual's social environment to his actions and the norms and values of his reference groups are elements in what is termed the sociocultural domain of individual functioning. Work toward STR Objectives 1, 2, and 3 (socialize the client, decrease the client's vulnerability, and a group structural change) attempt to change the impact of the sociocultural domain on the client's functioning. Work toward STR Objective 1 attempts to increase the impact of the responses from the individual's social environment on his actions, and increase the impact of his reference group's norms and values in identifying desirable states and in making a decision to alter his current state. Work toward STR Objective 2 attempts to decrease the potency of the sociocultural domain on the individual's functioning. Work toward STR Objective 3 attempts to change the sociocultural domain to which the client is exposed. This usually requires a change in the sociocultural domain, not merely a change in the individual.

Ease of Change

In terms of the descriptive model of individual functioning, it can be noted that changes in the domains of internal response, decision or alternatives would lead to a change in the client's behavior as assessed in the classification system within the Adaptability Factor. Changes in the sociocultural domain would lead to a change in the client's environmental forces regarding drinking as assessed in the classification system within the Sociocultural Factor.

Given the current status of the alcohol abuse rehabilitation field, it is probably more difficult to create the perceived need for change in the domains of internal response, decision, or alternatives than in the sociocultural domain. At the same time, it is probably more difficult to make a change in the sociocultural domain than in the internal response, decision, or alternatives domains.

The individual may attribute the cause of his maladaptive behavior to his sociocultural domain and avoid taking personal responsibility for the consequences of his behavior. A spouse may want to attribute "blame" for the partner's abusive drinking behavior to the crowd with which the partner spends time. Whether the client has a need for change in his sociocultural domain or not, the attribution of causality of dysfunctional behavior to sociocultural forces shifts attention away from possible needs for change in the individual's repertoire of functionally adaptive behavior, or in his ability to choose appropriately among alternatives.

Although it appears more difficult to create a perceived need for change in the domains assessed by the Adaptability Factor, it seems more probable for a person to make changes in his functioning in those domains than in the sociocultural domain. For complex reasons, sometimes people remain in relationships which stimulate more pain and discomfort than pleasure. People also at times remain associated with a particular group for a variety of reasons, even though association with the group appears to lead to uncomfortable situations and unpleasant consequences for them.

Difficulty in Changing the Sociocultural Domain

Of the various domains involved with individual functioning, the sociocultural domain seems the most difficult in which to stimulate a change and to insure stability once a change has been made. One of the reasons for this difficulty is the involvement of people other than the client in the sociocultural domain. Rehabilitation efforts for DWIs in this domain require more specialized design than efforts in the other domains. To sensitize the reader to the complexity of these design requirements, several considerations for programs intended to work toward STR objectives concerned with the sociocultural domain will be reviewed. Suggestions for methods to respond to these considerations are offered as illustrations of possible STR methods, which will be discussed in detail in the following section.

Working toward any of the STR objectives indicated for changes in the sociocultural domain would be most effective if the client's reference groups were present in the therapeutic setting. This is difficult to engineer, especially in nonvoluntary STR programs with DWIs. As a result of considerations of issues of privacy, ethics and legality in nonvoluntary rehabilitation programs for DWIs, it will be difficult to utilize methods developed in various treatment fields for work with family and natural groups (i.e., reference groups). Other than suggestions for interventions to

be made in bars, private parties, and in the home, there are several possibilities for helping a client change his sociocultural domain. Homework assignments could be given to clients during the STR program. These homework assignments could involve members of the client's nuclear family, extended family, friendship groups, or other reference groups. For example, the client may involve his reference group in a self-research project which may lead to the group making a change in its norms or values (Schwitzgebel, 1964). Through this involvement, members of the group may become interested in attending sessions of the STR program on a voluntary basis.

Another possible approach is to teach the client skills which he can teach others in his reference groups, such as relaxation exercises or skills in monitoring the arousal of conflict. This type of activity may constitute a role change for the client within his reference group. Such a role change may help decrease his vulnerability to group conformity pressure regarding drinking.

Another aspect of the sociocultural domain which may inhibit therapeutic change in the client could emanate from pressures to drink from multiple reference groups. One possible approach toward overcoming this difficulty is to help the client draw a map of his various reference groups (documenting the potency and relevance of each group to him). This map could then be expanded to include information on the impact of the norms and values of the groups regarding various drinking behaviors. Such a process could be critical to help the client sort and identify specific forces in his environment on which to work during his STR program.

One possible approach to decreasing the client's vulnerability to forces from his sociocultural domain would be to train him as an observer of human interaction. With anthropologist-type observation skills, the client could learn about the ways his reference group imposes pressure for conformity and punishments for nonconformity on its members regarding drinking behavior.

Many of the difficulties in helping a client deal with his sociocultural domain are the result of inadequate assessment methods. If treatment staff cannot accurately assess the nature of the impact on a client regarding drinking behavior from reference groups, how can we expect that a client can be helped to change the effect of these forces on his behavior? Hopefully, the proposed classification system will provide an accurate assessment through the Sociocultural Factor. The same techniques used to make this assessment could be used in STR programs oriented to building the client's skills and to making appropriate changes in his sociocultural domain.

Work toward STR Objective 3 (structural change in the client's sociocultural domain) would ideally involve the participation of members of the client's various reference groups. Such involvement would be necessary if the client were attempting to work toward making a change in the group's norms and values regarding drinking. Since the context of the STR programs for DWIs would make this involvement difficult (it cannot be required), the STR programs should focus on the client/reference group interface. In other words, the focus of rehabilitation work toward a change in group norms should address the specific interaction between members of the reference group and the client. This could be accomplished through helping the client answer such questions as: What role do I perform in the group? Do I perform different roles in the group in different situations? Do I have primary influence on particular members of the group, all members, or none of the members?

STR Programs for DWIs

The programs presented in this section are offered as a guide to the development of integrated STR programs which work toward specific sets of STR objectives as indicated in the classification system. The modalities included in each program represent a synthesis of the available programs which show promise of effectiveness and relevance for DWIs and some new modalities. Chart 4 is the classification system with each of the cells numbered for reference in this section. Each of the numbered cells represents a cell from Charts 1, 2, or 3 in which the appropriate STR objectives were listed in Section III of this report.

Eleven modalities are listed as components in the STR programs recommended for DWIs. All but the modality called Follow-up Sessions are described in the appendices. Modalities labelled as courses can accommodate ten to 20 clients per group. Those labelled as workshops can accommodate ten to 15 clients per group. The Alcohol Education/Discussion Course (see Appendix A) and Alcohol Education/Discussion: Brief Course (see Appendix B) are designed to transmit information about alcohol to the client while providing a good deal of time for clients to discuss their pattern of alcohol use. The Introductory Discussion Course (see Appendix C) covers some of this material. The Alcohol Education/Discussion: Brief Course and Introductory Discussion Course also prepare the client for participation in the other modalities in his STR program. Participation in these courses should provide a client assessed in Category A of the Sociocultural Factor with sufficient exposure to and

Chart 4. The Classification System

		A			B			C		
		Using Adaptive Behaviors		Frequently Using Limited Number of Behaviors			Using Maladaptive Behaviors			
ADAPTABILITY FACTOR	SOCIO-CULTURAL FACTOR	No/Threatened Interference	Occasional Interference	No/Threatened Interference	Occasional Interference	Regular Interference	No/Threatened Interference	Occasional Interference	Regular Interference	Generalized Interference
A (POSITIVE FORCES)		1	4	7	10	13	16	19	22	25
B (AMBIGUOUS FORCES)		2	5	8	11	14	17	20	23	26
C (NEGATIVE FORCES)		3	6	9	12	15	18	21	24	27

discussion of the norms and values of his reference groups regarding alcohol use and abuse to facilitate his socialization.

The Monitoring Arousal: Brief Workshop (see Appendix D) and Monitoring Arousal Workshop (see Appendix E) help a client work toward building self-diagnostic skills in monitoring arousal of inner conflicts and stress, as well as identification of possible functionally adaptive behaviors as responses.

The Decision Making Workshop (see Appendix F) helps a client develop skills in decision making. These skills are applied to a decision regarding responsible drinking or abstinence, as well as to choosing appropriate behaviors as adaptive responses when experiencing inner conflict or stress. The Decision Making Workshop includes material to help the client to anticipate responses from his sociocultural domain and to incorporate this information into his decision making processes.

The Developing Alternatives Workshop (see Appendix G) helps a client to change his internal response to situations which had evoked inner conflict or stress in the past, as well as to develop knowledge of and skills in behaviors which are alternatives to alcohol abuse. The Blocking Life Interference Workshop (see Appendix H) is designed to facilitate a confrontation of the client with regard to his serious alcohol problem while providing him with some basic techniques for interrupting the self-sustaining pattern of inner conflict, stress, and alcohol abuse which is a part of his life.

The Social Environment Workshop (see Appendix I) is intended to help the client build his resistance (i.e., decrease his vulnerability) to group conformity pressures regarding drinking. The Social Domains Workshop (see Appendix J) is intended to help the client examine his sociocultural domain closely. Through this examination the client is prepared to make decisions regarding needed changes in his social environment which will help him grow, live a more satisfying life, and decrease pressures toward alcohol abuse. This workshop is included for DWIs assigned to cells where there is a danger of repeated incidents of alcohol abuse due to the norms and values of the reference groups regarding drinking.

Follow-up Sessions are recommended for each of the STR programs. They vary in length as a function of the assessment of the client's rating on the Severity of the Problem Scale. The content of Follow-up Sessions has not been described. In most situations, it would be a review of material from

prior modalities in the STR program and continued reinforcement of new behavior demonstrated by the client. Occasionally the Follow-up Sessions will include additional confrontation of the client, especially for those clients assessed as having Generalized Interference on the Severity of the Problem Scale.

There are a number of places in which clients assigned to various cells could participate in the same modality. Although the modality would be in a different context for clients assigned to different cells, they could go through the experience in the same group. For example, clients assigned to Cells 1, 2, or 3 could go through their STR program in the same group. The leader would have to arrange for discussions in which the clients from each of the cells could discuss material specifically relevant to them and not the others, but this could be accomplished easily for clients in these cells. Another example is that clients assigned to Cells 13, 14, 15, 19, 20, 21, 22, 23 and 24 could go through the Developing Alternatives Workshop in the same group. The modalities they would have received prior to this workshop, and those they would attend following this workshop would be different.

The discussion of each cell will begin with a statement of the STR objectives relevant for a DWI assessed into that cell. Next the modalities included in an STR program for that person will be listed with an indication of the time involved.

Cell 1

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Follow-up Sessions	2	4

Cell 2

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Decrease the client's vulnerability

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Follow-up Sessions	2	4

Cell 3

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Decrease the client's vulnerability
- Group structural change

<u>Modalities:</u>	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Follow-up Sessions	2	4

Cell 4

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Socialize the client

<u>Modalities:</u>	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Monitoring Arousal: Brief Workshop	2	4
Follow-up Sessions	3	6

Cell 5

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Decrease the client's vulnerability

<u>Modalities</u>	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Monitoring Arousal: Brief Workshop	2	4
Social Environment Workshop	2	4
Follow-up Sessions	3	6

Cell 6

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Decrease the client's vulnerability
- Group structural change

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Monitoring Arousal: Brief Workshop	2	4
Social Environment Workshop	2	4
Follow-up Sessions	3	6

Cell 7

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Monitoring Arousal: Brief Workshop	2	4
Follow-up Sessions	2	4

Cell 8

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Decrease the client's vulnerability

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Monitoring Arousal: Brief Workshop	2	4
Social Environment Workshop	2	4
Follow-up Sessions	2	4

Cell 9

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- *Decrease the client's vulnerability*
- Group structural change

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion Course	9	18
Monitoring Arousal: Brief Workshop	2	4
Social Domains Workshop	5	10
Follow-up Sessions	2	4

Cell 10

Objectives:

- Information on alcohol
- Decision on responsible drinking
- *Monitor arousal*
- *Skills in choosing alternatives*
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Monitoring Arousal Workshop	5	10
Decision Making Workshop	7	14
Follow-up Sessions	3	6

Cell 11

Objectives:

- Information on alcohol
- Decision on responsible drinking
- *Monitor arousal*
- *Skills in choosing alternatives*
- Decrease the client's vulnerability

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Monitoring Arousal Workshop	5	10
Decision Making Workshop	7	14
Social Environment Workshop	2	4
Follow-up Sessions	3	6

Cell 12

Objectives:

- Information on alcohol
- Decision on responsible drinking
- *Monitor arousal*
- *Skills in choosing alternatives*
- *Decrease the client's vulnerability*
- Group structural change

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Monitoring Arousal Workshop	5	10
Decision Making Workshop	7	14
Social Domains Workshop	5	10
Follow-up Sessions	3	6

Cell 13

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- *Change internal response*
- *Skills in alternatives*
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Introductory Discussion Course	3	6
Developing Alternatives Workshop	6 days	45
Follow-up Sessions	5	10

Cell 14

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- *Change internal response*
- *Skills in alternatives*
- Decrease the client's vulnerability

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Introductory Discussion Course	3	6
Developing Alternatives Workshop	6 days	45
Social Environment Workshop	2	4
Follow-up Sessions	5	10

Cell 15

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- *Change internal response*
- *Skills in alternatives*
- *Decrease the client's vulnerability*
- Group structural change

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Introductory Discussion Course	3	6
Developing Alternatives Workshop	6 days	45
Social Domains Workshop	5	10
Follow-up Sessions	5	10

Cell 16

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Introductory Discussion Course	3	6
Monitoring Arousal Workshop	5	10
Decision Making Workshop	7	14
Follow-up Sessions	3	6

Cell 17

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- Decrease the client's vulnerability

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Introductory Discussion Course	3	6
Monitoring Arousal Workshop	5	10
Decision Making Workshop	7	14
Social Environment Workshop	2	4
Follow-up Sessions	3	6

Cell 18

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Introductory Discussion Course	3	6
Monitoring Arousal Workshop	5	10
Decision Making Workshop	7	14
Social Domains Workshop	5	10
Follow-up Sessions	3	6

Cell 19

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- *Change internal response*
- *Skills in alternatives*
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Developing Alternatives Workshop	6 days	45
Follow-up Sessions	3	6

Cell 20

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- *Change internal response*
- *Skills in alternatives*
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Developing Alternatives Workshop	6 days	45
Social Domains Workshop	5	10
Follow-up Sessions	3	6

Cell 21

Objectives:

- Information on alcohol
- Decision on responsible drinking
- Monitor arousal
- Skills in choosing alternatives
- *Change internal response*
- *Skills in alternatives*
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Developing Alternatives Workshop	6 days	45
Social Domains Workshop	5	10
Follow-up Sessions	3	6

Cell 22

Objectives:

- Information on alcohol
- Decision on responsible drinking
- *Monitor arousal*
- *Skills in choosing alternatives*
- *Change internal response*
- *Skills in alternatives*
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Monitoring Arousal Workshop	5	10
Developing Alternatives Workshop	6 days	45
Follow-up Sessions	5	10

Cell 23

Objectives:

- Information on alcohol
- Decision on responsible drinking
- *Monitor arousal*
- *Skills in choosing alternatives*
- *Change internal response*
- *Skills in alternatives*
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Monitoring Arousal Workshop	5	10
Developing Alternatives Workshop	6 days	45
Social Domains Workshop	5	10
Follow-up Sessions	5	10

Cell 24

Objectives:

- Information on alcohol
- Decision on responsible drinking
- *Monitor arousal*
- *Skills in choosing alternatives*
- *Change internal response*
- *Skills in alternatives*
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Alcohol Education/Discussion: Brief Course	5	10
Monitoring Arousal Workshop	5	10
Developing Alternatives Workshop	6 days	45
Social Domains Workshop	5	10
Follow-up Sessions	5	10

Cell 25

Objectives:

- Block self-sustaining cycle
- *Admit alcohol problem*
- *Seek additional treatment*
- Socialize the client

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Blocking Life Interference Workshop	4 days	30
Follow-up Sessions	10	20

Cell 26

Objectives:

- Block self-sustaining cycle
- *Admit alcohol problem*
- *Seek additional treatment*
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Blocking Life Interference Workshop	4 days	30
Social Domains Workshop	5	10
Follow-up Sessions	10	20

Cell 27

Objectives:

- Block self-sustaining cycle
- *Admit alcohol problem*
- *Seek additional treatment*
- Decrease the client's vulnerability
- *Group structural change*

Modalities:

	<u>Number of Sessions</u>	<u>Number of Hours</u>
Blocking Life Interference Workshop	4 days	30
Social Domains Workshop	5	10
Follow-up Sessions	10	20

SECTION SIX:
RESEARCH, DEVELOPMENT AND EVALUATION NEEDS

This report is a step toward implementing effective programs for short-term rehabilitation of DWIs. Many more steps must be taken before we can assign DWIs to specific STR programs and feel confident that they will emerge with less likelihood of drinking abusively and drinking and driving in the future. As a conclusion of this report, it is important to outline some possible next steps.

Work on subsequent steps can be split into five phases. In decreasing order of priority, those phases are:

- development of a diagnostic instrument by which to assess clients into the classification system;
- development of STR objectives relevant for a client assessed on the classification system;
- refinement of the procedures for classifying a client;
- development and evaluation of the effectiveness and relevance of STR programs in helping clients attain the STR objectives; and
- integration of these programs with driving-oriented programs.

Development of a Diagnostic Instrument

Within the first phase of the continuation work, there are a number of questions which should be answered. These are listed below in decreasing order of importance.

1. Conceptual clarification of the classification system: (a) Can sociocultural factors be summarized in three distinct categories for each client? Is the resultant vector notion feasible? (b) Can a client's adaptability, in terms of his behavioral repertoire, be determined? (c) Should the physical condition of the client be entered into the classification with more emphasis than it is currently? (It is currently only one of the many possible types of interference assessed in the Severity of the Problem Scale.)

2. Development of a diagnostic instrument:
 - (a) Can an instrument be developed which is reliable to assess a client on each of the three variables (i.e., in terms of test-retest reliability, as well as internal reliability of scales)?
 - (b) Can an instrument be developed which provides a valid assessment of the client on these three variables? Validity must include construct validity, correspondence with information from collaterals, and significant association with other predictor variables (i.e., DMV record).

3. Scale construction of each variable:
 - (a) Is the periodicity of the types of interference a critical component of the Severity of the Problem Scale?
 - (b) Is the level or cause of stress and conflict in a client's life more important than his ability to respond with functionally adaptive behavior?
 - (c) Do variables such as sex and socioeconomic status affect a client's assessment on each of the variables in the classification system? Should they be given more weight than they presently have as a part of the Sociocultural Factor?

Development of STR Objectives

Within the second phase of the continuation work, there are a number of questions to be answered. These are listed below in decreasing order of importance.

1. Are the STR objectives representative of the realm of desirable changes for DWIs in an STR context?
2. Are the STR objectives appropriately grouped in the classification system? Would clients, collaterals, and counselors group the STR objectives in the same manner?
3. Is attainment of the STR objectives predictive of increased health and decreased alcohol abuse?
4. Are the specific objectives listed under the description of each of the STR objectives in need of clarification and/or expansion?

Refinement of Procedures

Within the third phase of the continuation work, there are a number of questions to be answered. These are listed below in decreasing order of importance.

1. How much time will it take to conduct the assessment of the client with this classification system? Will this be economical for the different caseloads of various locales around the country?
2. What will be the distribution of DWIs among the cells of the classification system? If the distribution is highly uneven, it may be relevant to collapse several categories.
3. Do particular client characteristics affect assignment to and predicted effectiveness of the STR programs?

Development and Evaluation of STR Programs

Within the fourth phase of the continuation work, there are a number of questions to be answered and steps to be taken. These are listed below in decreasing order of importance.

1. Should the survey be expanded to include drug therapies?
2. Materials must be developed for a variety of modalities which may be used in the STR programs.
3. Once these modalities have been developed, they must be integrated into STR programs.
4. Staff must be trained to deliver these programs.
5. Evaluation should be conducted on the programs to determine their effectiveness in reaching STR objectives and other criteria of effectiveness (e.g., reduction in recidivism).
6. Are there characteristics of counselors (i.e., their interpersonal styles) which affect the effectiveness of STR programs with DWIs?

Integration of Programs

The fifth phase of the continuation work would involve the integration of STR programs for DWIs with other countermeasures oriented toward driving behavior. Prior to implementation of any such program, research must be conducted to determine the impact of driving behavior relative to the impact of variables examined in the STR approach on drinking and driving problems.

APPENDICES

APPENDIX A:
ALCOHOL EDUCATION/DISCUSSION COURSE

Objectives

- Improve the client's knowledge about alcohol use and abuse.
- Obtain the client's decision whether responsible drinking is a realistic and desirable goal, or abstinence a necessary goal.
- Introduce the client to methods of handling pressure from his sociocultural environment regarding drinking.

Time Framework

This modality will be conducted in nine two-hour sessions. The sessions should be conducted once a week, and held during the evening.

Methods

Sessions 1 and 2:

- Introduction to course
- Presentation of information and discussion on the biomedical, social, and behavioral effects of alcohol
- Presentation and discussion of the legal implications of the DWI arrest and/or conviction

Session 3:

- Presentation of examples of stress and/or inner conflict in everyday life.
- Presentation of the dynamics of how different people use various behaviors as attempted adaptive responses to these inner conflicts or stresses
- Discussion of various specific behaviors linked to concrete examples of conflict/stress used by clients in their lives; use of workbook

self-study materials to examine each client's personal repertoire of attempted adaptive responses to inner conflict and/or stress, and continuation of this examination as a homework assignment

Session 4:

- Presentation on the use and abuse of alcohol in various cultures and subcultures
- Discussion of antecedents and consequences of alcohol use and abuse, focusing on personal anecdotes; use of clients' workbook materials to take an inventory of the antecedents and consequences of their personal use of alcohol
- Homework assignment: each client is to take notes on the antecedents and consequences of alcohol use of several people in his environment.

Session 5:

- Discussion of the adaptive potential of drinking in various personal times of inner conflict and/or stress

Session 6:

- Presentation on decision making
- Discussion of responsible drinking and abstinence, with each client making a decision and discussing the implications of that decision
- Acknowledgement by each client of personal responsibility for the DWI event as an incidence of alcohol abuse

Session 7:

- Presentation on the potency of reference groups in affecting a person's drinking behavior and behavior related to alcohol abuse
- Discussion of alcohol use norms of reference groups of the clients

- Use of workbook materials to examine each client's reference groups' norms regarding drinking and behavior related to alcohol abuse

Sessions 8 and 9:

- Discussion of alternative behavior which can be used as adaptive responses to inner conflict and/or stress other than drinking
- Development of a personal list of alternatives, using workbook materials
- Development of behavior to resist conformity pressure from reference groups regarding abusive drinking with a discussion of the cost/benefit analysis of conformity and nonconformity
- Discussion of responsibility to self and others, including society

Materials and Equipment Needed

A workbook should be used to help each client collect information about himself, to focus on insights from course discussions, and to record implications for changes in his personal life.

Some film or slide material may be used to present information on the effects of alcohol, its use and abuse in other cultures, and the impact of a reference group's norms regarding drinking on a member of the group.

Staff Training Needs

Staff members who conduct this modality should be well informed as to the effects of alcohol, and other contents of the course. They should be able to present information to the group in a manner which facilitates clients' understanding and stimulates issues for discussion. They should have the interpersonal skills needed to conduct group discussion sessions.

Additional Comments

For clients who have been assessed in Category A of the Sociocultural Factor, the discussion of reference

group forces regarding drinking should be oriented toward understanding how to utilize the reference group in preventing alcohol abuse, and how to maintain adherence to the chosen goal of responsible drinking or abstinence. Clients who have been assessed in Category B or C of the Sociocultural Factor will find that discussions in Sessions 7, 8, and 9 will help them to resist pressures from reference groups to drink abusively.

Many DWIs who are assigned to this modality will not believe that they have an alcohol problem. For many, the intent of this modality is not to convince them that they do have an alcohol problem, nor to inflict scare tactics upon them. The intent is to help them gain understanding of the way in which they use alcohol and the alternatives. The emphasis of this modality is on prevention of future possible incidents of alcohol abuse.

APPENDIX B:
ALCOHOL EDUCATION/DISCUSSION: BRIEF COURSE

Objectives

- Improve the client's knowledge about alcohol use and abuse.
- Provide an introduction to the STR modalities which the client will undergo.
- Introduce the client to methods of handling pressure from his sociocultural environment regarding drinking.

Time Framework

This modality will be conducted in five two-hour sessions. The sessions should be conducted once a week, and held during the evening.

Methods

Sessions 1 and 2:

- Introduction to the course and subsequent STR modalities
- Presentation of information and discussion on the biomedical, social, and behavioral effects of alcohol
- Presentation and discussion of the legal implications of the DWI arrest and/or conviction

Session 3:

- Presentation of examples of stress and/or conflict in normal lives
- Presentation on the dynamics of how different people use various behaviors as attempted adaptive responses to inner conflict or stress
- Discussion of various specific behaviors linked to concrete examples of conflict/stress used by

clients in their lives. Use of workbook self-study materials to examine each client's personal repertoire of attempted adaptive responses (including alcohol use) to inner conflicts or stress and the continuation of this examination as a homework assignment

Session 4:

- Presentation on the use and abuse of alcohol as an attempted adaptive response by people in various cultures
- Discussion of the antecedents and consequences of drinking episodes, and an assessment of the adaptive potential of drinking in various situations
- Homework assignment: the client is to observe and note the adaptive potential of drinking for various people in his reference groups.

Session 5:

- Presentation on the potency of reference groups in affecting a person's drinking behavior and behavior related to alcohol abuse
- Discussion of alcohol use norms of reference groups of the client
- Discussion of costs/benefits of conformity and nonconformity to group norms

Materials and Equipment Needed

A workbook should be used to help each client collect information about himself, focus on insights from course discussion, and record implications for changes in his personal life.

Some film or slide material may be used to present information on the effects of alcohol, its use and abuse in other cultures, and the impact of a reference group's norms regarding drinking on a member of the group.

Staff Training Needs

Staff members who conduct this modality should be well informed about the effects of alcohol, and other contents of the course. They should be able to present information to the group in a manner which facilitates clients' understanding and stimulates issues for discussion. They should have the interpersonal skills needed to conduct group discussion sessions. They need confrontation skills to prepare clients for the next steps in the STR program, because clients may deny the appropriateness and need for these steps.

Additional Comments

The focus of these sessions is on information and on preparation for next STR modalities. These sessions should provide a framework for examining the client's hostility, and for encouraging him to look at the STR modalities as opportunities to improve the quality of his life.

APPENDIX C:
INTRODUCTORY DISCUSSION COURSE

Objectives

- Improve the client's knowledge about alcohol use and abuse.
- Provide an introduction to the STR modalities which the client will undergo.
- Introduce the client to methods of handling pressure from his sociocultural environment regarding drinking.

Time Framework

This modality will be conducted in three two-hour sessions. The sessions should be conducted once a week, and held during the evenings.

Method

Session 1:

- Introduction to the course and subsequent STR modalities
- Presentation of the legal implications of the DWI arrest and/or conviction
- Presentation of examples of stress and inner conflict in normal lives
- Presentation on the dynamics of how different people use various behaviors as attempted adaptive responses to inner conflict or stress
- Discussion of various specific behaviors linked to concrete examples of conflict/stress used by clients in their lives; use of workbook self-study materials to examine each client's personal repertoire of attempted adaptive responses (including alcohol use) to inner conflict or stress and the continuation of this examination as a homework assignment

Session 2:

- Review of homework with a focus on adaptive vs. maladaptive consequences of behavior
- Acknowledgement by each client of personal responsibility for the DWI event as an incidence of alcohol abuse
- Discussion of the antecedents and consequences of behavior which is maladaptive; assessment by clients of the adaptive potential of behavior in their personal repertoire (i.e., examination of the costs and benefits of various behaviors)

Session 3:

- Presentation on the potency of reference groups in affecting a person's drinking and behavior related to alcohol abuse
- Discussion of the alcohol use norms of reference groups to which the client belongs
- Discussion of costs and benefits to the client for conformity and nonconformity to the norms of these groups
- Preparation for entrance into the subsequent STR modalities and discussion of how these modalities may help the client improve the adaptive potential of his personal repertoire

Materials and Equipment Needed

A workbook should be used to help each client collect information about himself, to focus on insights from the course discussion, and to record implications for changes in his personal life.

Some film or slide material may be used to present information on the impact of a reference group's norms regarding drinking on a member of the group.

Staff Training Needs

Staff members who conduct this modality should be well informed regarding the various functionally adaptive and maladaptive uses of alcohol. They should be able to

present information to the group in a manner which facilitates clients' understanding and stimulates issues for discussion. They should have the interpersonal skills needed to conduct group discussions. They need confrontation skills to prepare clients for the next steps in the STR program.

Additional Comments

The focus of these sessions is primarily preparation for the STR modalities which the client will attend following this introduction. These sessions should provide a framework for examining the client's hostility and encouraging him to look at the STR modalities as a means of improving the quality of his life.

APPENDIX D:
MONITORING AROUSAL: BRIEF WORKSHOP

Objectives

- Develop the client's ability to monitor the arousal of specific inner conflicts and/or stresses which elicit the need for an adaptive response.
- Identify behaviors which would be functionally adaptive responses once an inner conflict/stress is aroused.

Time Framework

This modality should be conducted in two two-hour sessions. The sessions can be conducted over two weeks, one session per week.

Methods

Session 1:

- Introduction of the concept of arousal of inner conflict and stress and how it affects behavior
- Role play of a situation in which conflict or stress is aroused, using an instrument on which the client can record his reactions and observe his level of arousal
- Discussion of the use of such an instrument to monitor arousal of various states (e.g., anger, powerlessness, elation)
- Homework assignment: the client is to monitor arousal during several real life events.

Session 2:

- Discussion of the material collected in the homework assignment
- Development of personal catalogues of each client's typical responses when specific states are aroused

- Development of a catalogue of each client's behavioral responses when aroused which may be more adaptive than his typical responses

Materials and Equipment Needed

A workbook would be helpful to guide the client through the concept of arousal. The workbook should contain a number of different instruments which he can use in his life to monitor arousal of various states. Space should be provided for the client's homework assignment, catalogue of typical responses, and catalogue of more adaptive responses.

Role play materials would be needed to conduct this modality.

Staff Training Needs

Staff would need to be aware of various methods for monitoring arousal, and have used them personally. The staff member should also be able to conduct a role play which will elucidate the intrapersonal dynamics of arousal of inner conflicts and stress and their effect on subsequent behavior.

Additional Comments

Many people have a personalized form of an arousal warning system. This workshop focuses on helping the client learn to use his internal warning system for arousal states which lead to alcohol use and abuse.

APPENDIX E:
MONITORING AROUSAL WORKSHOP

Objectives

- Develop the client's ability to monitor the arousal of specific inner conflicts and/or stresses which elicit the need for an adaptive response.
- Identify behaviors which would be functionally adaptive responses once an inner conflict/stress is aroused.

Time/Framework

This modality will be conducted in either of two formats:

1. five two-hour sessions conducted over a three week period; or
2. one and a half days, 9:00 a.m. to 5:30 p.m. on one day and 9:00 a.m. to 12:00 p.m. on the following day.

The format chosen will depend on the Severity level of the client as indicated by the classification system.

Method

Session 1:

- Introduction to the workshop
- Presentation on the dynamics of how inner conflicts or stress are aroused and lead to behavior
- Simple behavioral exercise in which clients learn the basic elements in an arousal warning system

Session 2:

- Role play (using videotape or audiotape recording)

- Use of monitoring instrument to help clients collect information on their aroused states
- Discussion of behavior which people use once aroused
- Homework assignment: client is to collect information on the types of inner conflict and/or stresses aroused by various life events.

Session 3:

- Review of homework assignments
- Individual examination of past life events with discussion of the role of arousal of inner conflicts and stress and the role of subsequent behavior
- Initiate the development of a catalogue of indicators (i.e., warning signs) of the arousal of various inner conflicts and/or stresses

Session 4:

- Role play (taped) in which clients practice the use of skills in monitoring the arousal of inner conflicts or stress
- Homework assignment: client is to practice these skills in monitoring arousal and bring an anecdote about one instance in which they were used.

Session 5:

- Individual development of a catalogue of arousal indicators
- Individual development of an inventory of behaviors which can be used subsequent to the arousal of various inner conflicts or stresses (this should be a personalized list)

Materials and Equipment Needed

A client workbook is needed. The workbook should include various instruments which the client can use in monitoring arousal of inner conflict and stress. The materials for the role plays should be included in the workbook. Audiotape or videotape recording and playback equipment would increase the effectiveness of utilizing the role plays in developing skills in monitoring arousal and linking these indicators to appropriate subsequent behavior.

Staff Training Needs

Staff conducting this modality would need to be aware of various methods for monitoring the arousal of inner conflict and stress, and have used them personally. The staff member must know how to conduct role plays and process the dynamics observed for maximum learning. They must be pragmatic in strongly encouraging clients to develop a catalogue of personal indicators of arousal and an inventory of possible subsequent behavior.

Additional Comments

For clients with Occasional Interference, as measured by the Severity of the Problem Scale, this modality would be conducted over three weeks. For clients with Regular Interference, this modality would be conducted over two consecutive days.

Many clients have internal indicators of arousal which they have used in the past. Whenever possible it is important to remind the client of these systems and rebuild their functional utility for him.

APPENDIX F:
DECISION MAKING WORKSHOP

Objectives

- Obtain the client's decision whether responsible drinking is a realistic and desirable goal, or abstinence a necessary goal.
- Increase the client's knowledge of appropriate behaviors and his ability to choose among them when inner conflict or stress is aroused.

Time Framework

This modality will be conducted in seven two-hour sessions. Sessions should be conducted once or twice a week for the necessary number of weeks.

When this modality is integrated with the Developing Alternatives Workshop, the Decision Making Workshop will be conducted in two seven-hour day-long sessions (9:00 a.m. to 5:00 p.m. each day).

Methods

Session 1:

- Introduction to decision making
- Use of case or film regarding various decisions people make daily
- Discussion on comparison between decisions concerning automatic behavior (such as breathing) and other decisions (such as going out for an evening)

Session 2:

- Presentation on assessing the consequences of a decision
- Simple behavioral exercise in which clients are encouraged to make several decisions

- Discussion of the various decisions available in the exercise and discussion of the costs and benefits of each

Session 3:

- Discussion of the consequences of drinking (several incidents of various quantity and frequency drinking patterns, as well as various places to drink)
- Discussion of the consequences of behavior related to alcohol abuse, such as drinking and driving
- Exercise with a progressive case study in which the leader reads aloud various aspects of the main character's life and asks clients to guess which decisions he made at various points; the group then discusses the impact of various possible decisions the character could have made.

Session 4:

- Presentation is made on the effect of antecedents to decisions
- Behavioral exercise is used to illustrate the impact of personal risk-taking style, aroused states (i.e., inner conflict or stress), and reference group pressures influencing decision making
- Homework assignment: each client is to collect information on how pressures from their reference groups affect their decision making.

Session 5:

- Completion by clients of Individual Events Analyses (in workbook self-study materials) of several events which occurred during the past week and several anticipated events in which alcohol use or abuse may be involved in the next two weeks
- Discussion of the antecedents and consequences of decision points in these events
- Development of a contingency model of various antecedents and consequences; for example, clients should complete sentences such as: If I feel powerless, I might _____, then I might _____.

If I feel competent, I might _____, then I might _____.

- Discussion should emphasize the variety of alternatives available at any decision point.

Session 6:

- Presentation on the implications of a decision to develop a responsible drinking pattern or maintain abstinence (both short-term and long-term implications should be discussed)
- Clients will make a decision as to their future drinking behavior.

Session 7:

- Preparation for the implementation of each client's decision as to his future drinking behavior, through the use of brief exercises and discussions
- Development of a plan to maintain this decision, anticipating various situations which will potentially interfere with the decision
- Presentation of available options to clients, taking care to explain the various costs and benefits of any of these options (which may include aversive electroconditioning regarding drinking, training in blood alcohol level discrimination, individual psychotherapy, etc.)

Materials and Equipment Needed

A workbook will be necessary to help the clients record insights from discussions. The workbook should provide self-instructional guides for analyzing decisions and assessing the costs and benefits of various alternative actions. It should also include forms for the development of the client's plan to implement his personal decision regarding his future drinking pattern. Role play and other exercises will also be needed.

Staff Training Needs

Staff conducting this modality should understand the dynamics of personal decision making. They should have the group counseling and interpersonal skills to conduct the various units in the workshop. Staff should be confrontive, as well as supportive, in their interpersonal style so as to emphasize the importance of the client making a decision about his future drinking behavior and to strongly encourage him in making the decision.

Additional Comments

The options offered at the end of this workshop are not elements of the STR program. They are entirely voluntary, and constitute additional rehabilitation work which the client may elect or not without any repercussions. Only those options which are easily available to clients should be offered.

APPENDIX G:
DEVELOPING ALTERNATIVES WORKSHOP

Objectives

- Substitute or suppress the arousal of the client's internal response to inner conflict and/or stress.
- Build the client's skills in behaviors which are alternatives to alcohol abuse.

Time Framework

This modality will be conducted in six one-day sessions. These sessions should be conducted in three two-day sessions. For example, this modality could be conducted on three consecutive weekends. It would also be possible to conduct these sessions one day per week over six consecutive weeks.

Methods

Session 1 (day 1):

- Introduction to modality and explanation of components
- Discussion on what can be gained by participation in this workshop
- Relaxation training
- Identification and prioritization of conflict/stress provoking stimuli
- Preparation of list of shared themes of such stimuli to be worked on during group sessions
- Introduction to instrument for monitoring arousal of inner conflict or stress
- Relaxation training

Session 2 (day 2):

- Relaxation training
- Systematic desensitization schedule of working on the least conflict/stress provoking stimuli identified on previous day; moving to work on next most conflict/stress provoking stimuli; and so forth
- Planning (goal setting) on practice of relaxation skills and monitoring arousal skills
- Brief review and evaluation of workshop to date

Session 3 (day 3):

- Sessions 1 through 4 of the Decision Making Workshop with relaxation training (see Appendix F)

Session 4 (day 4):

- Sessions 5 through 7 of the Decision Making Workshop with relaxation training (see Appendix F)

Session 5 (day 5):

- Social skills training through behavioral exercises and role plays (similar to units in Assertiveness Training, Power Motivation Training, behavioral contracting, etc.)

Session 6 (day 6):

- Training in self-development skills which the clients feel are personal alternatives to alcohol abuse
- Goal setting on short-term and long-term goals for maintaining decision regarding responsible drinking or abstinence, as well as attaining important life goals using alternatives learned in previous sessions

Materials and Equipment Needed

A client workbook is necessary to help the client record insights from discussions, self-study materials, goal-setting instruments, etc. Materials will also be needed for the behavioral exercises and role plays.

Staff Training Needs

Staff must be trained in conducting relaxation training (which may include meditation training), systematic desensitization, decision making, and goal setting. They must have the group counseling skills to move the group through the large amount of material smoothly, and to attain the objectives of the workshop.

Additional Comments

There are many options for material to be used in the social skills and self-development skills training sessions. These should be chosen with regard to the specific types of interference the clients have experienced due to alcohol consumption. For example, if the clients have difficulty obtaining or keeping employment, they should be trained in interviewing skills and skills in conflict resolution on the job. If they are having difficulties with their nuclear families, they should be trained in skills such as behavioral contracting which can be used at home. Whenever possible, material used in the workshop should be assigned as homework between sessions.

APPENDIX H:
BLOCKING LIFE INTERFERENCE WORKSHOP

Objectives

- Aid the client in blocking or inhibiting his self-sustaining pattern of inner conflicts and stresses.
- Elicit the client's admission that his drinking behavior is a severe problem that is stimulating and perpetuating many problems in his life.
- Acquire the client's commitment to seek long-term aid in handling his alcohol problem through various community resources.

Time Framework

This modality will be conducted over two weekend sessions. These sessions will consist of four one-day sessions.

Methods

Session 1 (day 1):

- Introduction to the modality and its components
- Discussion of what can be gained by participation in this workshop
- Inventory of problems, or potential problems which drinking is stimulating in each client's life (emphasize events which can be minimally distorted, such as DWI arrests and convictions)
- Mock DWI Trial (using model presented by the Baltimore ASAP in their videotape, "By a Jury of His Peers"); clients act in different roles as judge, arresting officer, defendant, defense attorney, prosecuting attorney, and jury; discuss case and act out trial using role play materials provided

Session 2 (day 2):

- Introduction to concept of inner conflict and stress
- Identification and prioritization of conflict/stress provoking stimuli
- Preparation of a list of shared themes of such stimuli to be worked on during group sessions
- Introduction to instrument for monitoring arousal of inner conflict or stress
- Relaxation training
- Systematic desensitization schedule of working on the least conflict/stress provoking stimuli identified on previous day; moving to work on next most conflict/stress provoking stimuli; and so forth
- Planning (goal setting) on practice of relaxation skills and monitoring arousal skills
- Brief review and evaluation of workshop to date

Session 3 (day 3):

- Introduction to decision making
- Presentation on assessing the consequences of a decision
- Discussion of consequences of decision to drink at various times
- Exercise with a progressive case study in which the leader reads aloud various aspects of the main character's life and ask clients to guess which decisions he made at various points; the group discusses the impact of various possible decisions the character could have made.
- Completion by clients of Individual Events Analyses on several events of the last two weeks which involved drinking
- Discussion of the antecedents and consequences of those events

Session 4 (day 4):

- Presentation on the long-term implications of continuing current drinking patterns
- Discussion of alternative ways to handle the individual's future
- Presentation of various community resources available to help with aspects of alcohol problem
- Decision analysis by client as to next steps regarding drinking behavior and seeking help to handle his problems due to drinking, resulting from drinking, or those which appear to perpetuate abusive drinking
- Decision to visit community resource to help him

Materials and Equipment Needed

A client workbook would be essential in helping the client handle all of the material and experiences presented in this workshop. Role play materials are needed for the Mock Trial and other exercises. A comprehensive listing of available community resources with complete descriptions of their services and fees is necessary.

Staff Training Needs

Staff must have group counseling skills, and skills in confrontation. Since confrontation of client's denial of a severe drinking problem is the core of the work in this modality, a staff member without confrontation skills would be ineffective in conducting this modality.

Additional Comments

It is critical to attainment of the objectives of this modality that clients begin to seriously consider, if not publicly admit, a severe drinking problem during the first three days. If the client is showing signs of his resistance toward the workshop and denial of a serious alcohol problem, it may be necessary to change the efforts of the third day into another round of confrontation meetings. Such meetings can be modeled after Vernon Johnson's (1973) approach to confrontation. Role plays can be constructed, or a psychodrama used in which the clients play the spouse

and friends of a particular client (i.e., members of his reference groups). Through these exercises the client is confronted with his behavior toward these people when drinking. The ideal confrontation takes place while the real people involved in the client's life are present. This may be difficult in a program for DWIs. Any use of people role playing in this manner requires staff with considerably advanced training in group therapy, due to the intensity of the emotions aroused.

APPENDIX I:
SOCIAL ENVIRONMENT WORKSHOP

Objectives

- Decrease the client's vulnerability to group forces with regard to drinking and drinking-related behavior.

Time Framework

This modality will be conducted in two two-hour sessions, preferably held on two evenings.

Methods

Session 1:

- Introduction to how sociocultural domain affects individual behavior
- Sociocultural Factors Analysis: preparation by clients of a map of the various reference groups to which they belong, including subcultural and cultural groups, on which forces from each group are plotted regarding drinking and behavior related to alcohol abuse.

Session 2:

- Discussion of observational skills in identifying pressures for conformity, rewards for conformity and punishments for nonconformity to group norms and values
- Identification of methods of resisting group pressure to drink or engage in behavior related to alcohol abuse
- Individual planning of implementation of such methods

Materials and Equipment Needed

Client workbook materials would be needed for plotting the client's sociocultural environment.

Staff Training Needs

Staff must be trained in observation of group norms and values. They should know the various ways reference groups exert pressure on members regarding drinking behavior. Staff should be trained in conducting Sociocultural Factors Analyses.

Additional Comments

The staff must help clients focus on methods of resisting group pressures to drink or engage in behavior related to alcohol abuse which is not consistent with their personal decision of responsible drinking or abstinence.

APPENDIX J:
SOCIAL DOMAINS WORKSHOP

Objectives

- Decrease the client's vulnerability to group forces with regard to drinking and drinking related behavior.
- Change the client's exposure to certain norms and values regarding drinking behavior and particular quantity/frequency levels.

Time Framework

This modality will be conducted in five two-hour sessions. The sessions should be conducted over several weeks, preferably held during the evenings.

Methods

Session 1:

- Introduction to how sociocultural domain affects individual behavior
- Sociocultural Factors Analysis: preparation by clients of a map of various reference groups to which they belong, including subcultural and cultural groups on which forces from each group are plotted regarding drinking and behavior related to alcohol abuse

Session 2:

- Examination by clients of various alternatives to handling group conformity pressure regarding drinking through the use of behavioral exercises and role plays
- Preparation by clients of list of various ways of handling such pressures (such as changing their roles in the group, withdrawing from the group, joining new groups, etc.)

Session 3:

- Examination of group membership; identification by clients of costs and benefits of continued membership in various reference groups
- Examination by clients of the costs and benefits of changing membership in various reference groups, and the possibility of building new reference groups or rebuilding old ones

Session 4:

- Discussion of actions which a client can take in helping his reference group change their norms and values regarding drinking
- Discussion of actions which a client can take to structure his sociocultural environment so that he can maintain his decision of responsible drinking or abstinence

Session 5:

- Planning by clients of methods for resisting group conformity pressure
- Description by clients of various strategies of altering their sociocultural environment to minimize pressures on them to drink and engage in behavior related to alcohol abuse
- Use of behavioral exercises or role plays to help clients practice those skills

Materials and Equipment Needed

A client workbook would be needed for the plotting of the client's sociocultural environment. Materials for exercises and role plays are also needed.

Staff Training Needs

Staff must be trained in observation of group norms and values. They should know the various ways reference groups exert pressure on members regarding drinking behavior. They should be trained in conducting Sociocultural Factors Analyses. They should also have interpersonal confrontation skills for use with clients who are resisting a change in their reference groups, or denying the impact of these groups on their drinking.

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ASAP	Alcohol Safety Action Project
BJA	British Journal of the Addictions
IJA	International Journal of the Addictions
JSA	Journal of Studies on Alcohol
QJSA	Quarterly Journal of Studies on Alcohol
NCAI	National Clearinghouse on Alcohol Information
NIAAA	National Institute of Alcohol Abuse and Alcoholism
NTIS	National Technical Information Service

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