

A SYSTEM FOR DIAGNOSIS, REFERRAL, AND REHABILITATION OF PERSONS CONVICTED OF DRIVING WHILE INTOXICATED VOLUME I: THE SYSTEM AND A PRELIMINARY FIELD TEST OF THE DIAGNOSTIC PROCEDURE

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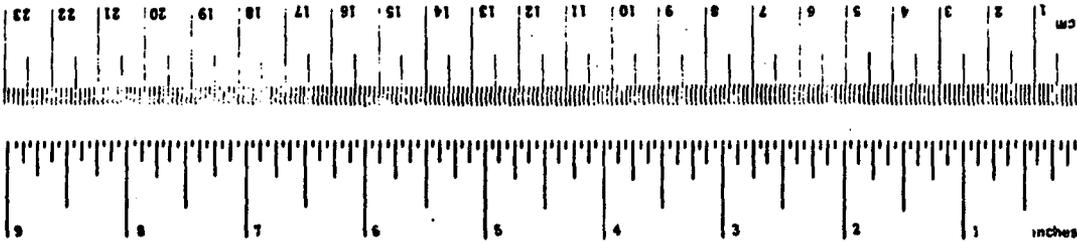
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16. Abstract A diagnostic, referral and treatment program was designed for persons convicted of driving while intoxicated. The assessment system measures the individual on an Adaptability Factor, a Sociocultural Factor and a Severity Factor. The assessment leads to identification of change objectives. A structured interview was developed and a preliminary field test was conducted. The results support further investigation of the validity of the interview.					
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Approximate Conversions from 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				
m 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				
cup	teaspoons	5	milliliters	ml
fl oz	tablespoons	15	milliliters	ml
c	fluid ounces	30	milliliters	ml
pt	cup	0.24	liters	l
qt	pints	0.47	liters	l
gal	quarts	0.35	liters	l
ft ³	gallons	3.8	liters	l
yd ³	cubic feet	0.03	cubic meters	m ³
	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

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



* 1 m = 2.54 inches. For other exact conversions and more detailed tables, see NBS Monograph 16, Publ. 750, Units of Weight and Measures, Part 2, 25, NIST Special No. 11-110, 28.

TECHNICAL SUMMARY

A diagnosis, referral, and treatment program was designed and developed for persons convicted of driving while intoxicated. The system begins with an assessment of the individual on three factors: the Adaptability Factor, the Sociocultural Factor, and the Severity Factor. The Adaptability Factor measures the degree to which the individual has and uses a repertoire of functionally adaptive behavior in response to inner conflict and stress. The level of stress experienced is not important, it is the manner in which the individual responds that is critical. The Sociocultural Factor measures the impact of a person's sociocultural environment on his/her alcohol use and abuse behavior. An individual's cultural and subcultural background, parents' behavior, and the disposition of his/her reference groups combine to create a social environment which pushes the person toward abstinence, controlled, responsible use of alcohol, or toward the abuse of alcohol and related behaviors.

Once an individual is assessed on these three factors, a set of desired changes can be identified that will enable the person to reduce the likelihood of driving while intoxicated in the future. These desired changes become objectives for the individual in an education or rehabilitation process. The essence of the system is that the person is referred to education or rehabilitation on the basis of the objectives determined to be appropriate for him/her.

Available programs should be selected if they have demonstrated their effectiveness in helping people reach these objectives. Some treatment programs available have evaluation studies which show their effectiveness in treating alcoholism but are of questionable relevance to persons convicted of driving while intoxicated.

In Volume 1, the reader will find the conceptual foundation for the system and a detailed discussion of the objectives developed from the assessment procedure. A structured interview was developed to measure DWIs on the classification system. Only a preliminary field testing of the interview was possible because a limited sample of persons convicted of driving while intoxicated was available to the investigator. The preliminary field test revealed construct validity for aspects of all three factors. A limited criterion validity study was conducted on the sample and some support was demonstrated for the factors. It was concluded that a representative sample of persons convicted of driving while intoxicated would have to be tested with the

interview before any conclusions, in support or in rejection of the interview and diagnostic system, could be made.

Also in Volume 1, the reader will find a detailed manual for administering the structured interview. The manual includes a question-by-question discussion of rationale, intent, and technique.

In Volume 2, the reader will find a detailed Instructor's Manual for the rehabilitation program developed to help multiple DWI offenders reach the objectives determined as appropriate for them. Also in Volume 2 is a copy of the materials, called the Journal, for the client. Included in the instructor materials are background notes for many of the sessions as well as detailed instructions on conducting the units.

PREFACE

The system we have developed for the diagnosis, referral, and rehabilitation of persons convicted of driving while intoxicated differs in a number of ways from traditional methods. First, the diagnosis is determined from an operant technique: a structured interview. The diagnosis consists of assessing the person on three dimensions: (1) his/her adaptability to the stress and/or inner conflicts of life; (2) the sociocultural environment, in terms of alcohol use and abuse, in which he/she lives and was raised; and (3) the degree to which the person's own alcohol consumption interferes with aspects of his/her life functioning. Second, once the diagnosis is made, a set of rehabilitation objectives is formulated. These rehabilitation objectives are determined by assessing the individual on the three dimensions of the diagnostic framework and deciding what changes in the individual would prevent his/her driving while intoxicated and other related behaviors in the future. Third, the individual is referred to the rehabilitation program (consisting only of educational activities, only of therapeutic activities, or some combination) which is most likely to help that individual accomplish his/her rehabilitation objectives.

Volume 1 includes a detailed discussion of the entire system. The conceptual foundation for the diagnostic framework is explained, and results from a preliminary attempt at validation of the diagnostic interview are presented. Volume 1 also contains both the actual form for the structured diagnostic interview and detailed instructions on techniques for conducting the interview. Volume 2 consists of an Instructor's Guide and a Client Journal for a rehabilitation program designed specifically for persons convicted more than once of driving while intoxicated.

For background information and a detailed critique of available treatment programs and modalities as to their appropriateness, relevance, and potential effectiveness with persons convicted of driving while intoxicated, the reader is referred to an Interim Report on this project entitled *Short-term Rehabilitation for Persons Convicted of Driving While Intoxicated*, published by the National Technical Information Services (Publication number PB 259 627, October, 1976).

In Volume 1, the reader will find an overview of the entire system. This includes a review of the conceptual foundation of the diagnostic framework, the development of the rehabilitation objectives, and the method of assignment to programs and/or modalities which may help accomplish these objectives. The reader will also find the results from the preliminary investigation into the validity of the DWICS (Driving While Intoxicated Classification System) interview.

A special acknowledgment for guidance and encouragement of the entire project must go to Mr. George McDonald, Dr. James Nichols, and Mr. Peter Ziegler of NHTSA. Each contributed a tremendous amount of effort in conceptualizing the project, reviewing and contributing to various sections, and making the project possible.

Of the many, many professionals who contributed to various sections of the project, I would like to thank Dr. James Burruss and Mr. Jeremy Cobb for their insightful and diligent input throughout every phase of the work. A special thanks to Ms. Elaine Boyle and her staff at the Fairfax County Diagnostic and Evaluation Unit of the Alcohol Safety Action Project for their participation in the field testing of the DWICS interview. I would like to extend special thanks to Dr. James A. Burruss for his statistical assistance, research advice, and analytic judgment during the validation analyses of the DWICS interview data.

In Appendix D of this volume, the reader will find a detailed description of the questions, intent, techniques for inquiry, and techniques for coding the person's responses in the DWICS (Driving While Intoxicated Classification System) interview. Although not a part of this volume, two protocols completed for actual interviewees and a tape cassette of the interview of Case Number 1 (of the sample completed protocols) are available for training purposes only through Mr. Peter Ziegler of the Research Institute of the National Highway Traffic Safety Administration.

The interview takes about 45 minutes to conduct. Although an attempt was made to develop reliability and validity data on the DWICS through an elaborate field test, only a small sample of people was interviewed. Since this was a biased sample--all of the interviewees were convicted of driving while intoxicated--the results are

included only in Volume 1 of this report. *Use of the DWICS interview and diagnostic system at this point must be considered experimental,* and should only be used within appropriate legal and ethical constraints.

I would like to acknowledge the support of Mr. George McDonald and Dr. James Nichols of the NHTSA during the development of the DWICS interview, and Mr. Peter Ziegler of NHTSA during the field testing of the interview. Also, I want to thank the many professionals who contributed their ideas and criticism to this part of the project. Certain individuals made special contributions. Drs. George O. Klemp, Jr., Joanne Martin, and Donald Cahalan made significant technical contributions to the development of items in the Adaptability, Sociocultural, and Severity Factors, respectively. The writing and rewriting of items, pilot testing of the interview, and construction of the interviewer's guide was made possible through the interest and perseverance of Dr. James Burruss, Mr. Jeremy Cobb, and Dr. Lawrence Rosini.

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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.

In modifications to the project, the following objectives were added:

- (a) Design an instrument which would assess a DWI on the Classification System;
- (b) Field test that instrument to determine validity and reliability of the instrument;
- (c) Design a special rehabilitation program for persons convicted of driving while intoxicated for the second, or more, time; and
- (d) Prepare materials and transfer the capability to conduct this program to project staff of a Comprehensive Driving Under the Influence Demonstration Project.

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 DWI's 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 who 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 macrosocial 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

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.

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.

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

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

SECTION TWO:
A DIAGNOSTIC APPROACH DESIGNED FOR
FACILITATING REFERRAL DECISIONS

The reader is referred to a report published by NITS, reference number PB 259 627 (DOT HS-802-055), October, 1976 for a detailed description of the conceptual framework on which the classification system is based. For the sake of brevity, the sections of this prior publication are not replicated here.

SECTION THREE:
REFERRAL TO PROGRAMS

The purpose of using a diagnostic or assessment process with persons convicted of driving while intoxicated is to determine what the appropriate countermeasure objectives are for the individual. These countermeasure objectives tell the client and the state (which represents society) what the desirable changes would be to reduce the likelihood that a person will drive while intoxicated in the future. In this report we have labelled these countermeasure objectives short-term rehabilitation objectives.

The diagnostic process must use methods which are: (a) reliable; (b) valid; (c) cost-effective; and (d) conceptually meaningful. Reliability is the degree to which this process will yield the same diagnosis when given the same information at another time. Validity of the process is the degree to which it measures that which it attempts to measure. Cost-effective means that it utilizes the least amount of information possible to make necessary decisions or recommendations. Conceptually meaningful refers to the capability of the process to yield change objectives.

Once the set of short-term rehabilitation objectives has been determined for the individual, the person must be assigned to a change program which will help him/her make the necessary changes. *The change objectives are the vehicle for matching the client and the education/rehabilitation program.*

Two factors must be considered in selecting appropriate programs to help the individual reach the short-term objectives: (1) effectiveness and (2) relevance. Programs should be proven to facilitate the attainment of the STR objectives before any assignments are made. The proof should be empirical and conform to acceptable standards for research in the field. A program which has not been evaluated or tested should only be used when there is nothing else available and there is sufficient theoretical justification for the potential effectiveness of the program.

Relevance is the degree to which the program is likely to accomplish an STR objective or set of STR objectives, and is appropriately tailored to the special needs of a person convicted of driving while intoxicated. Some of these special needs include:

- ethical concerns emanating from the nonvoluntary nature of the assignment to the program;
- resistance and hostility of an individual early in the program;

- a substantial amount of denial of alcohol abuse; and
- the lack of an alcohol abuse problem in some of the people convicted of driving while intoxicated.

The reader is referred to the Interim Report, mentioned in the Preface, which contains a detailed critique of available alcohol treatment programs and modalities as to their demonstrated effectiveness and potential relevance to the DWI population.

When programs do not exist to help a client attain the STR objectives which have been determined as appropriate for him/her, new programs must be designed and developed. The above mentioned Interim Report also includes numerous designs for programs and modalities for persons assessed as being in various categories of the classification system. Although many such designs were described, one was selected for development.

The Comprehensive Driving Under the Influence Project (CDUI Project) of Sacramento, California had need of a special program for persons convicted--for the second time in their recent past--of driving while intoxicated. The program was to help clients reach STR objectives appropriate for someone with:

- a limited repertoire or maladaptive repertoire in the Adaptability Factor;
- an environment which encourages heavy or abusive drinking, or presents conflicting messages regarding drinking and alcohol abuse; and
- regular interference on the Severity Factor.

The program is described in detail in Volume 2 of this report. In Volume 2 the reader will find the Instructor's Manual, Client Journal, and all necessary material for understanding and conducting the program.

SECTION FOUR:
PRELIMINARY FIELD TESTING OF THE DWICS INTERVIEW

To make the classification system usable, a diagnostic instrument had to be developed which could reliably and validly assess the DWI.

Method

Designing the Instrument

In the diagnostic system, each of the three factors was thought to tap different domains of human behavior. The various categories defined for each of the factors were considered to be discontinuous conditions. A structured interview format was selected for the initial version of the instrument as a result of considering the above two points and recognizing that few psychometric or sociometric techniques would aid in the collection of the information desired for this system.

Items for each of the factors were developed after reviewing relevant theoretical and prior research literature. Items were designed and/or selected primarily for their appropriateness to the conceptual scheme of the classification system. Where possible, items were selected which had been used in prior research. The final version of the instrument used in the field study is shown in Appendix A. When the questions involved a technique, content, or format which was new, the questions were pretested with an assortment of individuals. The entire DWICS Interview was pretested with DWIs and others being counseled for problems associated with alcohol abuse. The reader is referred to Volume 2 of this report for a detailed discussion of each item in the instrument.

The Adaptability Factor was conceptualized as having three components: (a) the scope and variety of a person's repertoire of potential, functionally adaptive behavior; (b) the consequences experienced by the person when attempting actions in response to conflict or stress; and (c) the degree of the individual's psychological flexibility versus rigidity. The scope and variety of a person's repertoire of potential adaptive behavior was addressed with questions concerning the individual's (a) recreational activities; (b) self-development activities; (c) organizational memberships; (d) habits or routines; and (e) drinking behavior. The consequences experienced when responding to conflict or stress

were assessed through coding of the clients' responses to questions concerning what they do when feeling stressed, conflicted, tense, or upset. The degree of psychological flexibility, which was conceptualized as the inverse of neuroticism, was measured through questions concerning a person's: (a) self-control activities; (b) willingness to seek help for personal problems; and (c) number of somatic disturbances.

The Sociocultural Factor was conceptualized as having three components: (a) demographic characteristics (i.e., subcultural and cultural characteristics); (b) parental behavior regarding alcohol use and abuse; and (c) pressures received from reference groups regarding drinking. Questions measuring demographic characteristics were adapted from prior questionnaires and interviews, covering such issues as age, sex, race, ethnic background, religious preference, place of residence, and so forth. Parental behavior regarding drinking was assessed through questions about the respondent's parents' drinking behavior and what the parents had told him/her regarding drinking. Questions were specially designed to elicit reference group involvement, the importance of the groups, and the disposition of the groups to alcohol use and/or abuse.

The Severity Factor was conceptualized as having five types of interference resulting from alcohol consumption: economic/financial, social/familial, psychological/spiritual, physical health, and citizen. The basic format was adapted from Cahalan and Room's measure of tangible consequences (Problem Drinking in American Men: Monographs of the Rutgers Center of the Studies on Alcohol No. 7, New Brunswick: Rutgers Center of Alcohol Studies, 1974). Items were added or dropped to conform to the theoretical notion of the types of interference and nature of the interview format.

Field Test Design

The original design involved interviewing 200 DWIs from each of two sites. These persons were to be a continuous sample of those convicted. Of these, 50 from each site were to be randomly assigned to a retest condition. Of the original sample of 200 from each site, 50 were to be randomly selected to participate in the collateral study. In the collateral study, two collaterals of the respondent would be interviewed with an appropriate version of the DWICS interview. The collateral interview form is shown in Appendix B. The site was then to collect data on the index arrest, prior motor vehicle and police records of the respondent. The Record Check instrument is shown in Appendix C.

Of the six sites which initially expressed interest in participating in the project, only two were sufficiently interested to begin the program. One of these sites presented substantial organizational difficulties to the investigator regarding continued

participation at an early stage in the process, before any data was collected, and had to be dropped from the study. Interviewer training took one day and used the Interviewer Training Manual (see Appendix D).

The one site which did participate required a redesign of the procedure for obtaining respondents for administrative and legal reasons. The resulting process at this site consisted of the following steps:

(a) Following conviction, all persons convicted of driving while intoxicated were sent a letter from the agency informing them as to the general objectives of the project and asking their cooperation in participating through volunteering.

(b) Within two weeks of mailing the letters, a volunteer at the agency telephoned each person and asked if he/she would participate. If no answer was made, two and sometimes three attempts were made to contact the person in the following two weeks.

(c) If the person said yes, he/she was scheduled for an interview.

(d) If he/she did not show up for the interview, he/she was called and asked to make another appointment. If the person did not show up for the second interview, he/she was dropped from further contact.

(e) If the person showed up for the interview, he/she was interviewed.

At the conclusion of the interview, the interviewer would open a sealed envelope which was attached to the subject's interview protocol. In the envelope were slips of paper telling the interviewer if the person was assigned to the retest and/or the collateral study. If the person was assigned to either or both of the additional testing studies, his/her cooperation was requested. If he/she said no, or if the interviewee was not assigned to any additional study, he/she was thanked and he/she left.

Subjects were not compensated for their participation. A subject's site identification code was assigned a special study identification code number. The only record of the legend linking these two sets of code numbers was destroyed within two months of the initial telephone call, maintaining the confidentiality of the information provided for this study. Department of Motor Vehicle and Police Department record checks,

as well as the information regarding the index arrest, were collected and coded prior to the destruction of the subject identification code legend. The persons conducting the interview attended a special one-day training program and were given a manual for the interview. Interviewers were compensated for their time, and the site was compensated for the Department of Motor Vehicle and Police Department record checks.

The interviews took from 25 to 90 minutes to conduct. The mean length was 48 minutes (with a standard deviation of 14 minutes).

Sample

The total sample consisted of 96 persons convicted of driving while intoxicated, 5 persons with retest interviews, and 2 persons with collateral interviews. The subjects were predominantly male (93 percent) and predominantly of the anglo-caucasian race (95 percent). They ranged in age from 16 to 61 years old (mean age was 38). The socioeconomic status (using Hollingshead's index) of the sample consisted of 9 percent Level I (Upper class), 27 percent Level II (Upper-Middle/Professional class), 30 percent Level III (Middle class), 19 percent Level IV (Working class), and 15 percent Level V (Lower class).

Log sheets were completed for all persons convicted of driving while intoxicated for the five months in which the study was being conducted. Information on education, income, age, Drinker Diagnosis Level made by the site, BAC at Index Arrest, and Prior Record were documented. Since only 19 percent of the total population from this site was interviewed, an analysis of the data from the log sheets was conducted to determine if the sample interviewed was representative.

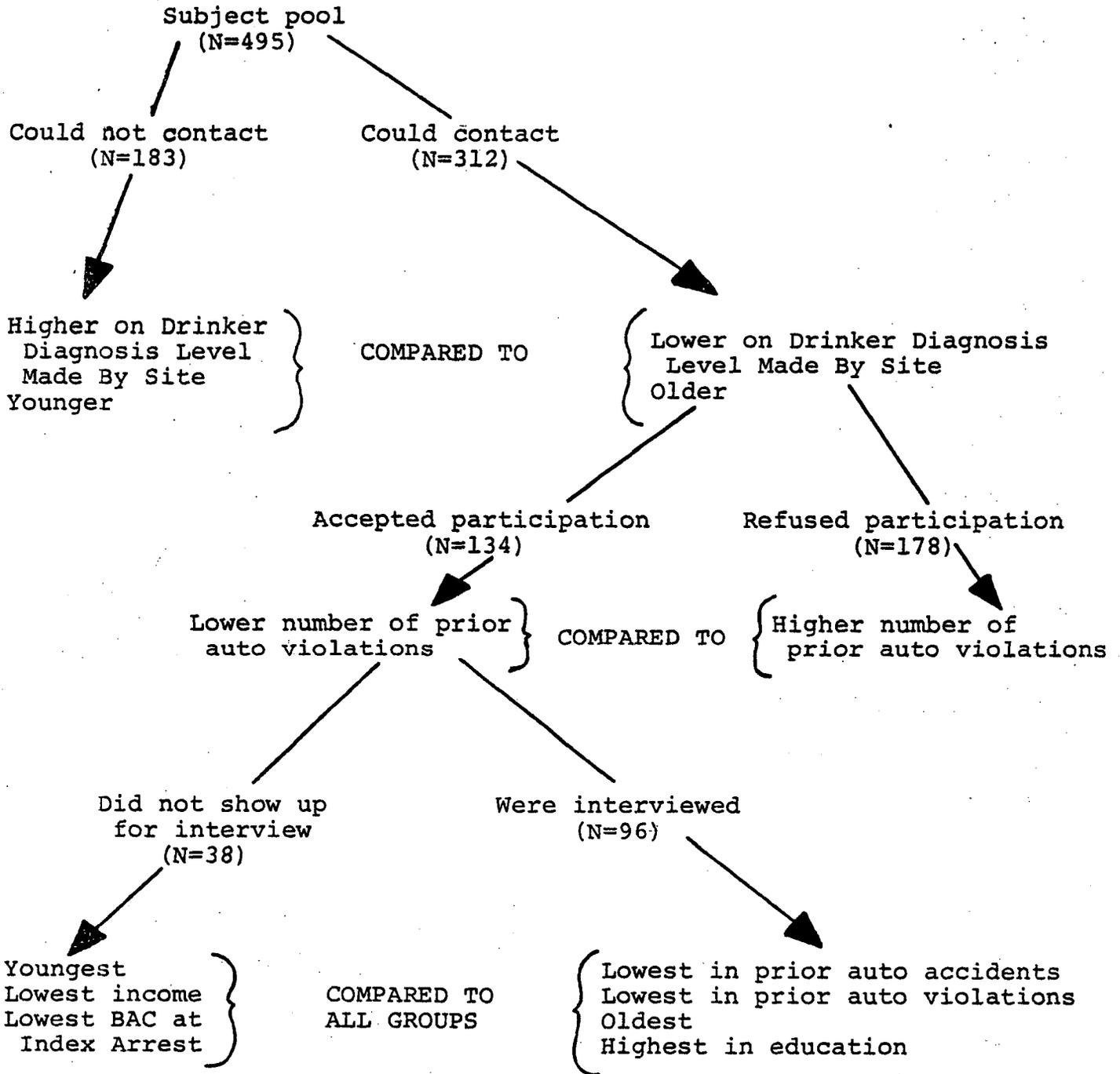
It was determined that, compared to those not contacted, those refusing participation, and those who did not show up for a scheduled interview, the persons interviewed:

- were the oldest;
- were the most educated;
- had the fewest prior accidents; and
- had the fewest prior violations.

Figure 2 shows the comparisons of the various groups. Only two-thirds of the total group could not be contacted by telephone. Of those contacted, slightly less than half agreed to participate. Of those who agreed, about three-quarters

Figure 2

Characteristics of Subjects Involved in the Study



showed up for the interview. Table 1 shows the means and significance levels of t-tests for the various groups.

The analysis does not support the notion that those interviewed were representative of the total DWI population of the field test site. In fact, *those interviewed represent a highly biased sample*. The remainder of the data analysis using this data is, therefore, of limited utility for generalizations made to DWI populations. Further analysis in this report is provided as a preliminary investigation into the instrument which may be useful in a future complete and appropriate field testing of the instrument.

Results

The Criteria Variables

Of the many variables on which data might have been collected from the record check, the only variables for which there was a distribution which allowed further analysis were:

- Drinker Diagnosis made by Site (coded on a scale of 1 to 8);
- BAC at Index Arrest;
- number of categories on NHTSA criteria;
- number of auto accidents from 1974 to 1977; and
- number of auto violations from 1974 to 1977.

One-third of the sample received a Drinker Diagnosis by Site of "3," another third received a "5," and the remainder was distributed among the other categories. A third of the sample had "0" on the NHTSA criteria, one third had "1" and the remainder was distributed up to a maximum of "6." Forty percent of the sample had a BAC between .10 and .15, 35 percent between .16 and .20, 18 percent between .20 and .25, and 8 percent had BACs between .26 and .31. Fifty percent had "0" violations in the last three years, 23 percent had "1," 20 percent had "2," 4 percent had "3," 2 percent had "4," and 1 percent had "5." Seventy-eight percent had "0" accidents in the last three years, 16 percent had "1," 4 percent had "2," 1 percent had "3," and 1 percent had "4."

Table 1
 Comparison of Subjects Involved in Study and Other DWIs

	Mean Score of Group ¹				Significance Level of Difference ²					
	Group A	Group B	Group C	Group D	AvsB	AvsC	AvsD	BvsC	BvsD	CvsD
Age N	31.7 182	33.9 178	28.0 38	38.6 94	+	++	+++	+++	+++	+++
Education N	4.14 183	4.33 178	4.13 38	4.72 95			+++		++	++
Income ³ N	2.97 182	2.90 178	2.46 37	-- --		+++	NA	++	NA	NA
Percent (%) of Males N	90 183	87 178	84 38	93 96	NA	NA	NA	NA	NA	NA
BAC N	.180 161	.181 152	.155 35	.176 77		+++		+++		++
Drinker Diagnosis By Site N	4.12 181	3.90 177	3.62 37	3.76 88	+	++	++			
Number of prior auto accidents N	.589 90	.578 102	.476 21	.361 83			++		+	
Number of prior auto violations N	2.90 89	2.81 104	2.00 21	1.93 83		+	+++		++	

¹Legend

Group A: Could not be contacted by telephone
 Group B: Refused participation in the study
 Group C: Did not show up for interview
 Group D: Interviewed

²Code for significance levels

+ p < .10
 ++ p < .05
 +++ p < .01

³Income for subjects interviewed was coded in a manner that did not allow for direct comparison

Table 2 shows the correlations of these variables. Violations and accidents in recent years do not appear to relate to any of the other variables. They do positively correlate with each other. Given the low frequencies of the occurrence of violations and accidents in this sample, and their similar nonassociation with the other variables, it was decided to combine them for further analysis by adding a person's number of accidents to his/her number of violations.

Since the NHTSA criteria include a "1" for a BAC of .15 or greater, it is not surprising that NHTSA criteria and BAC showed a significant positive correlation. The convergence of the NHTSA criteria, Drinker Diagnosis by Site, and BAC, suggest that all three are measuring a similar characteristic. BAC was selected as a criterion variable for further analysis, as was Recent Accidents and Violations (RAV). The NHTSA criteria and Drinker Diagnosis By Site involve perceptions of the staff of agencies, and, therefore, are potentially less reliable than the BAC at index arrest and prior motor vehicle record.

The responses from the collateral interviews could have been a source of validation of data. Unfortunately, there was an insufficient number of collateral interviews for analysis. Similarly, there was an insufficient number of retest interviews to determine the test-retest reliability of the instrument.

Construction of the Severity Factor

The responses to the 40 items in Question 55 (the question devoted to the Severity Factor) were factor analyzed. Stability of the factors presented a problem since the recommended number of subjects times items should be between four and ten; in this analysis, it was only two. Eigenvalues of the factors suggested a strong factor and a second substantial factor. Any factor after the second appeared to account for small amounts of variance (less than 10 percent). Two factors were rotated using a VARIMAX rotation. Items with a loading on one factor of .500 or greater and a loading on one factor at least .200 greater than the loading on the other factor were selected for a second factor analysis. These items were factored and rotated using a VARIMAX rotation. With 19 items and 96 subjects, the stability of the factors was expected to be greater than in the previous analysis. The items and their factor loadings are shown in Table 3.

Factor I was termed the Social Consequences Scale because of the heavy loading on items relating to missing social interactions with others, or having negative interactions with others. Factor II was termed the Individual Consequences Scale because of the heavy loading on items having to do with physical and spiritual consequences of drinking, as well as solitary effects of drinking

Table 2
Intercorrelation of the Criteria Variables

	BAC	NHTSA Criteria	Violations	Accidents
Drinker Diagnosis By Site	.482 ³ (75) ⁴	.576 ³ (90)	.018 (86)	.074 (86)
BAC	--	.487 ³ (77)	-.137 (74)	.054 (74)
NHTSA Criteria		--	-.045 (88)	.126 (88)
Violations			--	.250 ² (90)

¹p < .05

²p < .01

³p < .001

⁴ () indicates sample size

Table 3
Factor Structure of the Severity Factor

Item	Rotated Factor Loadings	
	I	II
Did not participate in regular family activities like meals because you were drinking	.3466	.6480
Skipped a number of regular meals while you were drinking	.3762	.6560
Did not participate in family recreational activities because of your drinking	.3035	.8368
Your drinking was very displeasing to a relative (other than your spouse)	.3521	.6482
A policeman questioned you or warned you because of your drinking	.0024	.5759
Were in some kind of hospital or rest home for an illness connected with drinking	.0402	.7475
Had trouble with the law about drinking, when driving was not involved	.0543	.7483
You stayed intoxicated for several days at a time	-.0336	.5897
Drank in order to change the way you felt	.2970	.4995
Friends or neighbors indicated you should cut down on your drinking	.6088	.1076
Once you started drinking it was difficult for you to stop before you became completely intoxicated	.5456	.2765
Spent too much money on drinks, or after drinking	.5239	.2712
Have awakened the next day not being able to remember some of the things you had done while drinking	.4510	.0677
Took a drink first thing when you got up in the morning	.7526	.1354
Took a few quick drinks before going to a party to make sure you had enough	.4763	.0021
Missed regular religious observance because of your drinking	.8013	.1798
Sensed an understanding of the meaning of life when drinking	.6253	.0537
People at work indicated you should cut down on your drinking	.7228	.1122
Have gotten high or tight when on the job	.6350	.2090

(e.g., trying to get high quickly before a party). The Social Consequences Scale and Individual Consequences Scale are significantly positively correlated ($p=.511$, $N=96$, $p<.001$). The Social Consequences Scale is positively correlated with BAC at a near significant level ($r=.167$, $N=77$, $p<.07$) and not associated with RAV. The Individual Consequences Scale was significantly, positively correlated with BAC ($r=.245$, $N=77$, $p<.01$) and with RAV ($r=.280$, $N=90$, $p<.01$).

Construction of the Adaptability Factor

To assess the consequences of attempted adaptive responses, the answers to question 28 were coded into solitary responses, impulsive responses, and social responses. The consequences score was then multiplied by the frequency score to determine the potential impact of the consequence on the individual. The product was summed for each type of response and then divided by the number of responses to determine the average impact of each type of response. Since the solitary responses could not be assessed as to their adaptive or maladaptive potential, the impulsive response score was subtracted from the social response score to yield an adaptive consequences score. This score was negatively correlated with BAC at a significant level ($r=-.216$, $N=77$, $p<.03$) and not significantly related to RAV.

The sum of the frequency of recreational activities and self-development activities was recoded into a trichotomy. Number of organizational memberships was also trichotomized. The same was done to self-control activities, habits, and somatic difficulties. The latter three were combined with willingness to seek help to form a psychological flexibility scale. The former three items were summed to form a repertoire scale. Upon closer statistical examination the psychological flexibility scale deteriorated, lacking any consistent item to scale correlations. It was discovered that the habits item appeared to correlate highly with the repertoire scale and items within it. It was then added to the repertoire scale. The repertoire scale was significantly positively correlated with BAC ($r=.257$, $N=77$, $p<.01$). It was not significantly correlated with RAV.

The adaptive consequences score was significantly correlated with the repertoire scale ($r=.187$, $N=96$, $p<.05$).

Construction of the Sociocultural Factor

The Sociocultural Factor was composed of the demographic and parental background characteristics and reference group impact. Since the impact of a reference group is a function of the importance of the group to the individual, importance was determined on a seven-point scale by taking the square root of the product of the number of hours spent with the group (recoded onto a seven-point scale) times the difficulty in separating from the group. The centrality of drinking was taken from the third question which asked how often anyone in the group is drinking when the group is together. The product of the importance and centrality of drinking was taken to determine the degree of impact which the group may have on the respondent regarding drinking. To normalize the distribution, the square root of the product was taken.

The last question regarding each reference group asked the respondent to rate the disposition of the group regarding alcohol use and abuse. It was thought that the former six questions would prepare the respondent for an accurate assessment. Table 4 shows the significant correlations of each of the reference group items with the seventh question, where 21 of the 23 significant correlations were in the predicted direction. It was, therefore, decided to use the response to the seventh question as the data for the disposition of the group. Responses to this question were dichotomized above and below the median. The result was multiplied times the product mentioned above. The result was the reference group impact score. This score does not show any significant correlation to BAC or RAV.

The parental drinking variables were examined. It was determined that frequency of each parent's drinking (question 17) was highly correlated with each of the other parental drinking variables. As a result, all were dropped from further analysis with the exception of the two frequency variables.

Of the demographic variables, some were dropped from analysis because of a lack of distribution. For example, sex and race had to be dropped due to lack of distribution. Religious preference was jointly coded with ethnic background to determine an ethno-religious grouping. Occupation and education were joined to determine Hollingshead's Index of Social Position, which is a measure of SES. Age, size of the place of residence, size of the place of upbringing, ethnoreligious group, SES, mother's drinking frequency, and father's drinking frequency were recoded to a zero or one. One was indicative of a characteristic appearing in the research literature associated with alcohol abuse and/or alcoholism. If there was conflicting evidence or no evidence, the code was zero. The scores were then summed for a demographic

Table 4

Comparison of Responses to Disposition
of Reference Group Questions

Other Questions by Group	Response to Overall Rating of Disposition of the Group (Question 27, high indicates alcohol abuse)				
	Group 1	Group 2	Group 3	Group 4	Group 5
Frequency of intoxication in group N	.350 ³ 95	.727 ³ 90	.682 ³ 65	.536 ³ 31	.213 8
Frequency of abstinence in group N	-.393 ³ 95	-.393 ³ 90	-.561 ³ 65	-.637 ³ 31	-.836 ² 8
Number of people drunk in group N	.351 ³ 95	.461 ³ 90	.537 ³ 65	.586 ³ 31	.241 8
Number of people abstinent in group N	-.192 ¹ 95	-.445 ³ 90	-.562 ³ 65	-.541 ³ 31	-.704 ¹ 8
Encouragement of intoxication N	-.014 94	-.222 ¹ 90	-.171 65	-.299 ¹ 31	-.355 8
Encouragement of abstinence N	-.415 ³ 94	-.241 ² 90	-.231 ¹ 65	.097 31	NA ⁴

¹p<.05

²p<.01

³p<.001

⁴NA means that no variance in the variable was found; this made a correlation impossible to compute.

score. The demographic score was not significantly correlated with BAC or RAV.

Construct Validity

At the conclusion of the interview, the interviewer was asked to judge the respondent on each of the three factors in the diagnostic system. Table 5 shows the correlations of these judgments with the six measures emanating from the DWICS interview. Each of the interviewer judgments was coded such that a high score was indicative of conditions relating to alcohol abuse. It would be expected that the interviewer's judgment as to the Adaptability Factor would correlate negatively with the Adaptive Consequences Score and the Repertoire Scale. It was negatively correlated with the former, but not significantly associated with the latter. It would be expected that the interviewer's judgment as to the Sociocultural Factor would correlate negatively with the reference group impact score and positively with the demographic score. It was negatively correlated with the former and not significantly related to the latter. It would be expected that the interviewer's judgment as to the Severity Factor would be positively correlated with the Social Consequences Scale and Individual Consequences Scale. It was positively correlated with each.

The self-report of the frequency drunk was significantly positively correlated with BAC ($r=.338$, $N=77$, $p<.001$). Since this variable, as a self-report item, has been shown to be related to many characteristics in the literature, it was correlated with the DWICS measures. The results also appear in Table 5. Frequency drunk is negatively correlated with the Adaptive Consequences Score and Reference Group Impact Score; it is positively correlated with the Social Consequences Scale and Individual Consequences Scale. All of these correlations are statistically highly significant.

These findings suggest that at least four of the six DWICS measures are assessing aspects of the three factors which appeared accurate to the interviewers. The correlation of these same four with the self-report of frequency drunk lends more support to the construct validity of these measures.

Criterion Validity

To explore the criterion validity of the three factors in the classification system, a multivariate statistical approach had to be taken. Prior reporting of correlation coefficients

Table 5

Correlation of Variables, Interviewer Judgment,
and Self-Report Frequency Drunk

DWICS Variable	Interviewer Judgment			Frequency Drunk N=92
	Adaptability Factor N=91	Sociocultural Factor N=91	Severity Factor N=90	
Adaptive Consequences Score	-.306 ²	-.110	-.325 ³	-.367 ³
Repertoire Scale	-.169 ¹	-.116	-.059	-.155
Reference Group Impact Score	-.219 ¹	-.462 ³	-.324 ³	-.398 ³
Demographic Score	-.034	-.128	.053	-.013
Social Consequences Scale	.301 ²	.328 ³	.468 ³	.495 ³
Individual Consequences Scale	.211 ¹	.238 ²	.487 ³	.623 ³

¹p<.05²p<.01³p<.001

does not account for intercorrelation amongst the factors and criteria. Multiple regressions were computed on BAC and RAV with the following six independent variables: Individual Consequences Scale; Social Consequences Scale; Demographic Score; Reference Group Impact Score; Repertoire Scale; and Adaptive Consequences Score.

A summary is shown in Table 6 for the regression on BAC and in Table 7 for the regression on RAV. The Repertoire Scale, the Adaptive Consequences Score, and the Individual Consequences Scale jointly yield a value which is significantly associated with BAC. It appears that the Adaptability Factor is predominantly responsible for "predicting" BAC. The Individual Consequences Scale, the Adaptive Consequences Score, and the Social Consequences Scale jointly yield a value which is significantly associated with RAV. It appears that the Severity Factor is predominantly responsible for "predicting" RAV.

Since the RAV measure combined violations and accidents that occurred in the last three years, regressions were computed with the same independent variables of accidents and violations separately. They appear in Tables 8 and 9, respectively. Accidents appear to be "predicted" by the Individual Consequences Scale and the Social Consequences Scale. Although the Demographic Score is stepped into the equation to jointly yield a value significantly associated with Accidents, it does not have as much impact as the two scales composing the Severity Factor. Table 9 shows that the Individual Consequences Scale is the only independent variable which is significantly associated with Violations. The value yielded by the joint impact of this scale and the Adaptive Consequences Score is not significantly associated with Violations.

Many of these independent variables did not load in the regression equations with an individual impact at a statistically significant level. As a result, the occasional reversal of sign from the predicted direction does not deserve the attention which it would if the individual loadings were significant.

To further examine the construct validation of these variables, a regression was computed on Frequency Drunk and is shown in Table 10. The overall value produced by the five independent variables is significantly associated with Frequency Drunk. The Severity Factor scales loaded positively and significantly, while the Reference Group Impact score and the Repertoire Scale loaded negatively and significantly (one each from the Socio-cultural and Adaptability Factors). The combination of these five variables yielded a multiple R of .729, which is highly significant.

Table 6
Regression on BAC

Item	Coefficient	Beta	F	Significance Level
Repertoire Scale	.742	.299	7.365	.01
Adaptive Consequences Score	-.211	-.203	2.832	ns
Individual Consequences Scale	.125	.169	2.052	ns
Constant	9.81			

OVERALL: $R=.402$, $R^2=.162$, $df=3,72$, $F=4.63$, $p<.01$

Table 7
Regression on RAV

Item	Coefficient	Beta	F	Significance Level
Individual Consequences Scale	.082	.387	9.823	.01
Adaptive Consequences Score	.036	.119	1.057	ns
Social Consequences Scale	-.023	-.115	.871	ns
Constant	.393			

OVERALL: $R=.324$, $R^2=.105$, $df=3,85$, $F=3.33$, $p<.05$

Table 8
Regression on Recent Accidents

Item	Coefficient	Beta	F	Significance Level
Individual Consequences Scale	.050	.479	17.327	.01
Social Consequences Scale	-.026	-.265	5.327	.01
Demographic Score	-.064	-.093	.879	ns
Constant	.114			

OVERALL: $R=.416$, $R^2=.173$, $df=3,85$, $F=5.929$, $p<.01$

Table 9
Regression on Recent Violations

Item	Coefficient	Beta	F	Significance Level
Individual Consequences Scale	.035	.221	3.671	.05
Adaptive Consequences Score	.038	.168	2.125	ns
Constant	.435			

OVERALL: $R=.216$, $R^2=.047$, $df=2,86$, $F=2.112$, $p=n.s.$

Table 10

Regression on Frequency Drunk

Item	Coefficient	Beta	F	Significance Level
Individual Consequences Scale	.105	.460	26.058	.01
Reference Group Impact Score	-.049	-.299	15.367	.01
Social Consequences Scale	.031	.146	2.600	.05
Repertoire Scale	-.090	-.117	2.382	.05
Adaptive Consequences Score	-.031	-.096	1.261	ns
Constant	2.501			

OVERALL: $R=.729$, $R^2=.531$, $df=5,85$, $F=19.281$, $p<.01$

Since there appears to be some covariation within the cluster of criterion variables, a canonical correlation was computed and is shown in Table 11. It appears that BAC and Accidents account for most of the variation within the criterion variables. Violations do not appear to be associated with the other two criterion measures.

The variate composed of the independent variables is predominantly affected by the Individual Consequences Scale and the Repertoire Scale in the positive direction, and the Social Consequences Scale, the Adaptive Consequences Score, and the Reference Group Impact Score in the negative direction. The Demographic Score does not appear to be related to the other independent variables. The two variates are significantly associated with each other.

Discussion

The results of the various construct validity and criterion validity tests are summarized in Table 12. The Individual Consequences Scale appears to have the strongest and most consistent validity. The Social Consequences Scale has strong construct validity but no support for criterion validity. The Adaptive Consequences Score and Reference Group Impact Score have strong construct validity, and minor support for criterion validity. The Demographic Score did not demonstrate any type of validity. The Repertoire Scale showed slight construct validity, but stronger criterion validity in the direction opposite to that predicted in its construction.

A Biased Sample

This investigation can only be approached as a preliminary investigation due to the extreme bias inherent in the characteristics of the sample that provided the interview data. They represented an exceptionally distinct 20 percent of the entire population of DWIs at this site. The findings cannot be considered generalizable to any population of DWIs, nor can they be considered an adequate test of the DWICS interview diagnostic system.

Need for Criterion Measures

Even with a representative sample of DWIs, the information collected in this field test would have questionable generalizability due to the nature of the criterion variables. The lack

Table 11
 Canonical Correlation Analysis

<u>Item</u>	<u>Coefficients of Variate One</u>
Individual Consequences Scale	.830
Social Consequences Scale	-.265
Reference Group Impact Score	-.222
Demographic Score	-.085
Repertoire Scale	.486
Adaptive Consequences Score	-.258

<u>Item</u>	<u>Coefficients of Variate One</u>
BAC	.723
Accidents	.590
Violations	.243

OVERALL: $r=.505$, $\chi^2=30.63$, $df=18$, $p=.032$

Table 12
Summary of Validity

		Individual Consequences Scale	Social Consequences Scale	Repertoire Scale	Adaptive Consequences Score	Reference Group Impact Score	Demographi Score
C O N S T R U C T I V E	Interviewer Judgment	✓	✓	--	✓	✓	--
	Frequency Drunk Correlation	✓	✓	--	✓	✓	--
	Frequency Drunk Regression	✓	✓	✓	✓	✓	--
C O R R E L A T I O N	BAC	✓	--	X	✓	--	--
	RAV	✓	--	--	--	--	--
J O I N T E R P R E T I V E M E A S U R E M E N T S	BAC	--	--	X	--	--	--
	Accidents	✓	X	--	--	--	--
	Violations	✓	--	--	--	--	--
	RAV	✓	--	--	--	--	--
Canonical Correlation		✓	X	X	✓	✓	--

Legend

- ✓ = significant association in predicted direction
- = no significant association
- X = significant association in direction
opposite to prediction

of a number of criterion variables in the midst of the lack of any single criterion variable in which investigators place confidence for predicting driving while intoxicated reduces the probability of any sound criterion validity tests. The best predictor of driving while intoxicated is a prior conviction for this same offense. Unfortunately, this is a relatively infrequent event, especially in the lives of people in the biased sample of this study. Errors in obtaining accurate motor vehicle records have hampered diagnostic studies of DWIs for years. Most driving records appear to have veracity for two to three years only, and that assumes minor degrees of mobility.

SECTION FIVE:
RECOMMENDATIONS AND NEXT STEPS

The reader should expect a recommendation for another, more comprehensive field testing of the DWICS diagnostic system as well as a systematic evaluation of the rehabilitation program designed for multiple offenders. Fortunately, both of these recommendations were anticipated a number of months prior to the writing of this report. Both studies are in progress in the Sacramento CDUI Project.

The simplification of the DWICS interview through further validation studies could result in a substantially shorter interview that allows agency personnel to determine desired STR objectives for a person convicted of driving while intoxicated. It is also possible that aspects of the DWICS interview and the rehabilitation program may be appropriate and relevant for certain populations but not others. Only further, careful, and comprehensive study will tell.

REFERENCES

- Barten, H. H. The expanding spectrum of the brief therapies. In H. H. Barten (Ed.), Brief therapies. New York: Behavioral Publications, 1971.
- Cahalan, D., & Room, R. Problem drinking among American men. Monographs of the Rutgers Center of Alcohol Studies No. 7. New Brunswick, New Jersey: Rutgers Center of Alcohol Studies, 1974.
- Cull, J. G., & Hardy, R. E. Alcohol abuse and rehabilitation approaches. Springfield, Illinois: Charles C. Thomas, 1974.
- Durkin, H. E. The development of systems theory and its implications for the theory and practice of group therapy. In L. R. Wolberg & M. L. Aronson (Eds.), Group Therapy: 1975. New York: Stratton Intercontinental Medical Book Corporation, 1975.
- Gallant, D. M., Faulkner, M., Stoy, B., Bishop, M. P., & Langdon, D. Enforced clinic treatment of paroled criminal alcoholics. Quarterly Journal of Studies on Alcohol, 1968, 29, 77-83.
- Glatt, M. The alcoholic and the help he needs. New York: Taplinger Publishing Co., 1974.
- Goby, M. J., Filstead, W. J., & Rossi, J. J. Structural components of an alcoholism treatment program. Quarterly Journal of Studies on Alcohol, 1974, 35, 1266-1271.
- Hoff, E. C. Alcoholism: The hidden addiction. New York: The Seabury Press, 1974.
- Krimmel, H. E., & Falkey, D. B. Short-term treatment of alcoholics. Social Work, 1962, 7(3).
- Rosenberg, C. M., & Liftik, J. Use of coercion in the outpatient treatment of alcoholism. Journal of Studies on Alcohol, 1976, 37, 58-65.
- Scott, E. M. Group therapy for alcoholics: The beginning phase. Paper presented at Alcohol and Drug Problems Association, 24th Annual Meeting, Bloomington, Minnesota, 1973.
- Seixas, F. A., & Hopson, A. L. The effect of rehabilitation on the driving behavior of problem drinkers. (DOT-HS-801-110) Springfield, Virginia, NTIS, 1973.

Sifneos, P. E. Two different kinds of psychotherapy of short duration. American Journal of Psychiatry, 1967, 123, 1069-1974.

Steiner, C. Games alcoholics play. New York: Grove Press, 1971.

Stewart, E. I., & Malfetti, J. L. Rehabilitation of the drunken driver: A corrective course in Phoenix, Arizona for persons convicted of driving under the influence of alcohol. New York: Columbia University Press, 1971.

APPENDIX A

DWICS
FIELD STUDY

DATE _____

Time Begun _____

Time Finished _____

Name of Interviewer: _____

Site: _____

Subject Code Number: _____

Site Subject ID Number: _____

The DWICS Interview package was developed for the NHTSA under contract number DOT-HS-5-01253. The package was developed for the NHTSA by McBer and Company. Disclosure of this information is voluntary.

McBer and Company
137 Newbury Street
Boston, Massachusetts 02116

1. AGE _____

--	--

2. DATE OF BIRTH _____ / _____ / _____
month day year

--	--	--	--	--	--

3. SEX

--

- 1 Male
- 2 Female

4. RACE

--

- 1 Caucasian/Anglo
- 2 Black
- 3 American Indian
- 4 Oriental
- 5 Other

5. CURRENT RELIGIOUS PREFERENCE

--

- 1 Protestant
- 2 Catholic
- 3 Jewish
- 4 Other Religious Preference
- 5 No Religious Preference

6. Before the age of 18, what was your religious up-bringing?

- 1 Protestant
- 2 Catholic
- 3 Jewish
- 4 Other Religious Preference
- 5 No Religious Preference

7. What is the population of the place where you currently live?

_____/_____
City State

- 1 In the country
- 2 Town of less than 5,000
- 3 City of 5,000 to 99,999
- 4 City of 100,000 or more
- 5 Can't estimate

8. What was the population of the place where you lived before you were 16? If you lived in several places answer for the place in which you lived the most number of years before you were 16.

_____/_____
City State

- 1 In the country
- 2 Town of less than 5,000
- 3 City of 5,000 to 99,999
- 4 City of 100,000 or more
- 5 Can't estimate

9. EDUCATION (Circle highest completed)

GRADE SCHOOL								HIGH SCHOOL				COLLEGE/POST H.S. FORMAL TRAINING				POST COLLEGE				
1	2	3	4	5	6	7	8	1	2	3	4	1	2	3	4	1	2	3	4	4+

10. CURRENT MARITAL STATUS (Check one box)

- 1 Single
- 2 Married
- 3 Separated
- 4 Divorced
- 5 Widowed

11. NUMBER OF TIMES MARRIED, INCLUDING CURRENT MARRIAGE (Circle number)

0 1 2 3 4 5 6 6+

12. What is your current occupation?

Enter title and/or brief description

--	--

13. Which one of the following categories best describes your occupation at the present time? Check one.

- 1 Professional (for example, doctor, lawyer, college teacher, banker, engineer, executives of large businesses, etc.)
- 2 Manager/Mid-level Professional (for example, managers in large businesses, proprietors of medium businesses, professionals without advanced degrees, noncollege teachers, military officers-- Captain or below, social workers, etc.)
- 3 Administrator (for example, proprietors of small businesses, salespeople, lower level managers, owners of farms, etc.)
- 4 Clerical/Technician (for example, clerks, office workers, lab technicians, inspectors, etc.)
- 5 Skilled Labor/Craftsperson (for example, plumber, machinist, foreman, policeman, etc.)
- 6 Machine Operator/Semiskilled (for example, delivery person, maid, janitor, waiter/waitress, bus driver, roofer, pump operators, meat cutters, etc.)
- 7 Unskilled Labor (for example, construction laborer, farm laborer, factory worker, etc.)
- 8 Housewife
- 9 Student
- 10 Not working

14. (a) In what country were you born?

--	--

United States _____ Other (specify) _____

(b) In what country was your father born? _____

--	--

(c) In what country was your mother born? _____

--	--

(d) Which one country did most of your ancestors come from? _____

--	--

15. Before the age of 18, did your father ever make clear to you how you should use alcoholic beverages?

1 YES

2 NO

If "YES", did his comments (check one):

1 Discourage drinking or state that abstinence is important (i.e., drinking is bad)

2 Mention what types of drinking are acceptable and what types are unacceptable

3 Encourage drinking

16. Before the age of 18, did your mother ever make clear to you how you should use alcoholic beverages?

1 YES

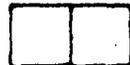
2 NO

If "YES", did her comments (check one):

1 Discourage drinking or state that abstinence is important (i.e., drinking is bad)

2 Mention what types of drinking are acceptable and what types are unacceptable

3 Encourage drinking



17. When you were between the ages of 6 and 18, indicate how frequently your father and mother each drank alcoholic beverages. (Check the most frequent category applicable.)

	Father	Mother	
1	<input type="checkbox"/>	<input type="checkbox"/>	Not applicable
2	<input type="checkbox"/>	<input type="checkbox"/>	Never
3	<input type="checkbox"/>	<input type="checkbox"/>	Once or more a year
4	<input type="checkbox"/>	<input type="checkbox"/>	Once or more a month
5	<input type="checkbox"/>	<input type="checkbox"/>	Once or more a week
6	<input type="checkbox"/>	<input type="checkbox"/>	At least once a day

18. When you were between the ages of 6 and 18, how would you describe your father's drinking pattern? (Check one which describes most extreme drinking pattern during those years.)



- 1 Not applicable
- 2 Do not know
- 3 Abstained (never drank alcoholic beverages)
- 4 Drank alcoholic beverages, but always within socially acceptable limits and never got into trouble because of his drinking
- 5 Drank alcoholic beverages and occasionally exceeded socially acceptable limits or occasionally got into any trouble because of his drinking
- 6 Drank alcoholic beverages and regularly exceeded socially acceptable limits or regularly got into any trouble because of his drinking
- 7 Could not control his drinking

19. When you were between the ages of 6 and 18, how would you describe your mother's drinking pattern? (Check one which describes most extreme drinking pattern during those years.)

- 1 Not applicable
- 2 Do not know
- 3 Abstained (never drank alcoholic beverages)
- 4 Drank alcoholic beverages, but always within socially acceptable limits and never got into trouble because of her drinking
- 5 Drank alcoholic beverages and occasionally exceeded socially acceptable limits or occasionally got into any trouble because of her drinking
- 6 Drank alcoholic beverages and regularly exceeded socially acceptable limits or regularly got into any trouble because of her drinking
- 7 Could not control her drinking

20. Did either of your parents ever see you when you were intoxicated or extremely high between the ages of 6 and 18?

- 1 YES 2 NO

If "YES", what did they say or do the last time this occurred? (Check which one best describes their response.)

- 1 Physically punished me at the time or later (e.g., hit me)
- 2 Verbally punished me at the time or later
- 3 Ignored it at the time but mentioned it later
- 4 Ignored it completely or never mentioned it at all
- 5 Laughed or joked about it
- 6 Made positive statements to me at the time or afterwards
- 7 Joined me in continuing to drink

REFERENCE GROUP ASSESSMENT



21. People spend their nonworking time (i.e., leisure time) with some people, spend weekday evenings or weekends with other people, or get together with certain people often. Whom do you see or spend your nonworking time with?

List names which identify the people or groups:

_____	_____
_____	_____
_____	_____
_____	_____

Examples:

- * *Spouse or mate*
- * *Spouse and children (nuclear family)*
- * *Friends with whom the person lives*
- * *Parents*
- * *Extended family (brothers, sisters, cousins, in-laws, etc.)*

- * *Friends from childhood, or old friends*
- * *Friends who are neighbors*
- * *Friends who are co-workers, colleagues*
- * *Friends who are schoolmates (or fellow students)*
- * *Friends or acquaintances with whom he/she drinks plays cards, gambles, etc.*

- * *Social club*
- * *Acquaintances at a public drinking establishment*
- * *Professional, or occupational associates (such as union)*
- * *Self-help, or self-development group*
- * *Church group*
- * *Members of civic or volunteer organization*
- * *People with whom you play sports, or attend sporting events*

If the respondent has listed more than five reference groups, ask the respondent to identify the five with whom he/she spends the most nonworking time. Circle these five in the list at the top of the page.

YELLOW CARD

1	2	3	4	5	6	7
Very easy					Very difficult	

BLUE CARD

1	2	3	4	5	6	7
Never			About half of the time		Nearly every time	

GOLD CARD

1	2	3	4	5	6	7
None of you			About half of you		All of you	

ORANGE CARD

- 1 Excluded the person from the group in the future
- 2 Excluded the person from the present activity
- 3 Got angry with the person
- 4 Complained about their behavior to the person
- 5 Complained about their behavior to others
- 6 Expressed concern to the person about their state or mood
- 7 Expressed concern to others about the person's state or mood
- 8 Did not mention it or ignored it
- 9 Joked or laughed about it
- 10 Encouraged drinking
- 11 Not Applicable

GREEN CARD

1	2	3	4	5	6	7
Abstaining from drinking					Drinking to intoxication	

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- | | <u>Answers</u> | |
|---|----------------|---|
| 22.1 How much nonworking time per week have you spent with these people on the average in the past month? Response should be converted to average number of hours per week. | _____ | <input type="text"/> <input type="text"/> |
| | <u>(Hours)</u> | |
| 23.1 YELLOW CARD
How easy would it be for you to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. | _____ | <input type="text"/> |
| 24.1 BLUE CARD
When you are with these people, how often are any of you drinking? Choose a number on the card shown. | _____ | <input type="text"/> |
| 25.1 When you have been with these people during the past year: | | |
| (a) BLUE CARD
How often have any of you become intoxicated, or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (b) BLUE CARD
How often have any of you had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| (c) GOLD CARD
How many of you have ever drunk to the point of being intoxicated or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (d) GOLD CARD
How many of you have ever had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| 26.1 When you have been with these people, how have they usually responded to a person who: | | |
| (a) ORANGE CARD
Has become intoxicated, or extremely high? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| (b) ORANGE CARD
Has abstained from drinking at the time? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| 27.1 GREEN CARD
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. | _____ | <input type="text"/> |

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- | | <u>Answers</u> | |
|---|----------------|---|
| 22.2 How much nonworking time per week have you spent with these people on the average in the past month? Response should be converted to average number of hours per week. | _____ | <input type="text"/> <input type="text"/> |
| | <u>(Hours)</u> | |
| 23.2 YELLOW CARD
How easy would it be for you to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. | _____ | <input type="text"/> |
| 24.2 BLUE CARD
When you are with these people, how often are any of you drinking? Choose a number on the card shown. | _____ | <input type="text"/> |
| 25.2 When you have been with these people during the past year: | | |
| (a) BLUE CARD
How often have any of you become intoxicated, or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (b) BLUE CARD
How often have any of you had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| (c) GOLD CARD
How many of you have ever drunk to the point of being intoxicated or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (d) GOLD CARD
How many of you have ever had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| 26.2 When you have been with these people, how have they usually responded to a person who: | | |
| (a) ORANGE CARD
Has become intoxicated, or extremely high? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| (b) ORANGE CARD
Has abstained from drinking at the time? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| 27.2 GREEN CARD
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. | _____ | <input type="text"/> |

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- | | <u>Answers</u> | |
|---|----------------|---|
| 22.3 How much nonworking time per week have you spent with these people on the average in the past month? Response should be converted to average number of hours per week. | _____ | <input type="text"/> <input type="text"/> |
| | <u>(Hours)</u> | |
| 23.3 YELLOW CARD
How easy would it be for you to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. | _____ | <input type="text"/> |
| 24.3 BLUE CARD
When you are with these people, how often are any of you drinking? Choose a number on the card shown. | _____ | <input type="text"/> |
| 25.3 When you have been with these people during the past year: | | |
| (a) BLUE CARD
How often have any of you become intoxicated, or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (b) BLUE CARD
How often have any of you had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| (c) GOLD CARD
How many of you have ever drunk to the point of being intoxicated or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (d) GOLD CARD
How many of you have ever had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| 26.3 When you have been with these people, how have they usually responded to a person who: | | |
| (a) ORANGE CARD
Has become intoxicated, or extremely high? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| (b) ORANGE CARD
Has abstained from drinking at the time? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| 27.3 GREEN CARD
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. | _____ | <input type="text"/> |

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- | | <u>Answers</u> | |
|---|----------------|---|
| 22.4 How much nonworking time per week have you spent with these people on the average in the past month? Response should be converted to average number of hours per week. | _____ | <input type="text"/> <input type="text"/> |
| | <u>(Hours)</u> | |
| 23.4 YELLOW CARD
How easy would it be for you to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. | _____ | <input type="text"/> |
| 24.4 BLUE CARD
When you are with these people, how often are any of you drinking? Choose a number on the card shown. | _____ | <input type="text"/> |
| 25.4 When you have been with these people during the past year: | | |
| (a) BLUE CARD
How often have any of you become intoxicated, or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (b) BLUE CARD
How often have any of you had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| (c) GOLD CARD
How many of you have ever drunk to the point of being intoxicated or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (d) GOLD CARD
How many of you have ever had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| 26.4 When you have been with these people, how have they usually responded to a person who: | | |
| (a) ORANGE CARD
Has become intoxicated, or extremely high? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| (b) ORANGE CARD
Has abstained from drinking at the time? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| 27.4 GREEN CARD
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. | _____ | <input type="text"/> |

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- | | <u>Answers</u> | |
|---|----------------|---|
| 22.5 How much nonworking time per week have you spent with these people on the average in the past month? Response should be converted to average number of hours per week. | _____ | <input type="text"/> <input type="text"/> |
| | <u>(Hours)</u> | |
| 23.5 YELLOW CARD
How easy would it be for you to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. | _____ | <input type="text"/> |
| 24.5 BLUE CARD
When you are with these people, how often are any of you drinking? Choose a number on the card shown. | _____ | <input type="text"/> |
| 25.5 When you have been with these people during the past year: | | |
| (a) BLUE CARD
How often have any of you become intoxicated, or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (b) BLUE CARD
How often have any of you had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| (c) GOLD CARD
How many of you have ever drunk to the point of being intoxicated or extremely high? Choose a number on the card shown. | _____ | <input type="text"/> |
| (d) GOLD CARD
How many of you have ever had nothing to drink at all? Choose a number on the card shown. | _____ | <input type="text"/> |
| 26.5 When you have been with these people, how have they usually responded to a person who: | | |
| (a) ORANGE CARD
Has become intoxicated, or extremely high? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| (b) ORANGE CARD
Has abstained from drinking at the time? Choose the most appropriate answer, or the one that occurs most often. | _____ | <input type="text"/> |
| 27.5 GREEN CARD
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. | _____ | <input type="text"/> |

Interviewer Code for Question 28:

Consequences

What were the consequences (results) of your action? Check one.

- 1 = The problem or source of feelings was resolved
- 2 = Feelings were lessened, or eased
- 3 = There was no impact on feelings or the problem
- 4 = Upset, tense, or bothered feelings increased
- 5 = Another problem or source of upset, tense, or bothered feelings was stimulated

Frequency

Of the times you felt upset, tense, or bothered, how often did you do this?

- Check one.
- 1 = Rarely
 - 2 = Occasionally
 - 3 = Often
 - 4 = Always

28. We all get upset, tense, or bothered from time to time, either because something specific happened or because we are generally feeling that way. Think of a time, or times, in the last year when you were feeling upset, tense, or bothered. What did you do at that time?

--	--

Once respondent answers, then ask, "What was the impact that doing that had on the feelings or problem?"

What did you do?

Consequences

Frequency

(a)

--	--

(b)

--	--

(c)

--	--

(d)

--	--

(e)

--	--

(f)

--	--

(g)

--	--

(h)

--	--

Interviewer Code for Question 29-31:

How often in the last year?

- | | |
|-----------------------------|---------------------------|
| 1 = Never | 5 = Several times a month |
| 2 = Once last year | 6 = Once a week |
| 3 = Several times last year | 7 = Several times a week |
| 4 = Once a month | 8 = Daily |

	<u>Last Year</u>	<u>How often?</u>	
29. In the last year, have you:			<input type="checkbox"/>
(a) Gone on a diet or tried to control your weight?	YES NO	_____	<input type="checkbox"/>
(b) Participated in a physical fitness program?	YES NO	_____	<input type="checkbox"/>
(c) Tried to control your smoking?	YES NO	_____	<input type="checkbox"/>
(d) Tried to avoid eating certain foods?	YES NO	_____	<input type="checkbox"/>
(e) Tried to control your drinking?	YES NO	_____	<input type="checkbox"/>
(f) Participated in religious activities?	YES NO	_____	<input type="checkbox"/>
(g) Meditated?	YES NO	_____	<input type="checkbox"/>
30. What do you do for relaxation or recreation (e.g., hobbies, sports)?		<u>How often have you done this last year?</u>	<input type="checkbox"/>
(a) _____		_____	<input type="checkbox"/>
(b) _____		_____	<input type="checkbox"/>
(c) _____		_____	<input type="checkbox"/>
(d) _____		_____	<input type="checkbox"/>
(e) _____		_____	<input type="checkbox"/>
31. What self-improvement, or self-development activities do you do that you have not mentioned?		<u>How often have you done this last year?</u>	<input type="checkbox"/>
(a) _____		_____	<input type="checkbox"/>
(b) _____		_____	<input type="checkbox"/>
(c) _____		_____	<input type="checkbox"/>
(d) _____		_____	<input type="checkbox"/>
(e) _____		_____	<input type="checkbox"/>
(f) _____		_____	<input type="checkbox"/>

32. People have different preferences about where to go for help if they need it. If you felt the need for help, which of the following types of people would you go to?

	<u>Would Go To:</u>		
	YES	NO	
(a) Minister, priest, rabbi	YES	NO	<input type="checkbox"/>
(b) Psychiatrist, psychologist, social worker	YES	NO	<input type="checkbox"/>
(c) Parents, or relatives	YES	NO	<input type="checkbox"/>
(d) Spiritual or holy persons (guru, monk, mystic, healer)	YES	NO	<input type="checkbox"/>
(e) Friends	YES	NO	<input type="checkbox"/>
(f) Astrologer, or fortune teller	YES	NO	<input type="checkbox"/>
(g) Self-help group	YES	NO	<input type="checkbox"/>

33. Do you currently belong to any organizations? List them.

	<u>Are you currently an officer?</u>		
	YES	NO	
(a) _____	YES	NO	<input type="checkbox"/>
(b) _____	YES	NO	<input type="checkbox"/>
(c) _____	YES	NO	<input type="checkbox"/>
(d) _____	YES	NO	<input type="checkbox"/>
(e) _____	YES	NO	<input type="checkbox"/>

34. How many miles do you usually drive each year? Check one.

- 1 Less than 5,000 miles per year
- 2 Between 5,000 and 15,000 miles per year
- 3 More than 15,000 miles per year

35. Now, I would like to ask you about your regular habits:

- | | | | |
|--|-----|----|--------------------------|
| (a) Do you have a regular exercise program (jogging, calisthenics, etc.)? | YES | NO | <input type="checkbox"/> |
| (b) Do you go through a routine in getting up in the morning? | YES | NO | <input type="checkbox"/> |
| (c) Do you go through a routine when going to bed at night? | YES | NO | <input type="checkbox"/> |
| (d) Do you eat lunch every day at the same time? | YES | NO | <input type="checkbox"/> |
| (e) Do you take a drink before dinner? | YES | NO | <input type="checkbox"/> |
| (f) Do you watch a particular television show (daily or weekly)? | YES | NO | <input type="checkbox"/> |
| (g) Do you smoke regularly (daily or weekly)? | YES | NO | <input type="checkbox"/> |
| (h) Do you take aspirin once a week or more, on the average? | YES | NO | <input type="checkbox"/> |
| (i) Do you take tranquilizers or sleeping pills once a week or more, on the average? | YES | NO | <input type="checkbox"/> |
| (j) Do you have any other regular (routine) habits? Please specify: | | | <input type="checkbox"/> |

36. In the last three months, have you been bothered by any of the following difficulties? Have you been experiencing less, more, or about the same amount of this difficulty as in the prior three months?

	Past several months		Change since prior months			
	YES	NO	LESS	SAME	MORE	
(a) Headaches						<input type="checkbox"/>
(b) Digestive problems						<input type="checkbox"/>
(c) Sleeping problems						<input type="checkbox"/>
(d) Nervousness						<input type="checkbox"/>
(e) Fatigue/weakness						<input type="checkbox"/>
(f) Muscular aches						<input type="checkbox"/>
(g) Colds or flu						<input type="checkbox"/>

37. What kind of alcoholic beverages do you drink? Interviewer should check those mentioned in categories listed below.

- 1 Beer
- 2 Distilled spirits (e.g., gin, whiskey, brandy)
- 3 Wine (i.e., table wine)
- 4 Fortified wines (e.g., sherry, port) and liqueurs

Do you ever drink anything else? Interviewer should return to the above list and check any additional types of beverages named.

If respondent drinks Beer, ask the next three questions. If not, go to question 41.

38. On the average during the last year, how often have you drank beer? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

39. On the average, how many cans (glasses) of beer did you drink each time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> Do not drink beer | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

40. During the last year, what is the most number of cans (glasses) of beer which you drank at any one time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> None | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

If respondent drinks Distilled spirits, ask the next three questions. If not, go to question 44.

41. On the average during the last year, how often have you drank distilled spirits? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

42. On the average, how many drinks of distilled spirits did you have each time? Check one.

- | | |
|---|---------------------------------------|
| 1 <input type="checkbox"/> Do not drink spirits | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

43. During the last year, what is the most number of drinks of distilled spirits which you drank at any one time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> None | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

If respondent drinks wine, ask the next three questions. If not, go to question 47.

44. On the average during the last year, how often have you drank wine? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

45. On the average, how many glasses of wine did you drink each time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> Do not drink wine | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

46. During the last year, what is the most number of glasses of wine which you drank at any one time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> None | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

If respondent drinks fortified wines or liqueurs, ask the next three questions. If not, go to question 50.

47. On the average during the last year, how often have you drank fortified wines or liquers? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

48. On the average, how many glasses of fortified wine or liqueurs did you drink each time? Check one.

- | | |
|---|---------------------------------------|
| 1 <input type="checkbox"/> Do not drink fortified | 6 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> wines or liquers | 7 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> Less than 1 | 8 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 1 to 2 | |
| 5 <input type="checkbox"/> 3 to 4 | |

49. During the last year, what is the most number of glasses of fortified wine or liqueurs which you drank at any one time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> None | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

50. When you drink, how often do you drink in your home?
Check one.

- 1 Never/almost never
- 2 Once in a while
- 3 Fairly often

51. When you drink, how often do you drink in a friend's home?
Check one.

- 1 Never/almost never
- 2 Once in a while
- 3 Fairly often

52. When you drink, how often do you drink in restaurants, clubs
or bars? Check one.

- 1 Never/almost never
- 2 Once in a while
- 3 Fairly often

53. How often in the last year have you been intoxicated, or
extremely high? Check one.

- 1 Never
- 2 Once
- 3 Several times last year
- 4 Once a month
- 5 Several times a month
- 6 Once a week
- 7 Several times a week
- 8 Daily

54. How often in the last year, have you drank alone? Check one.

- 1 Never
- 2 Once
- 3 Several times last year
- 4 Once a month
- 5 Several times a month
- 6 Once a week
- 7 Several times a week
- 8 Daily

Interviewer Code for "How Often..." question:

- | | |
|------------------------------------|----------------------------------|
| 1 = <i>Never</i> | 5 = <i>Several times a month</i> |
| 2 = <i>Once last year</i> | 6 = <i>Once a week</i> |
| 3 = <i>Several times last year</i> | 7 = <i>Several times a week</i> |
| 4 = <i>Once a month</i> | 8 = <i>Daily</i> |

55. I am going to list experiences that many people have reported in connection with drinking. For each experience, please tell me whether or not you have had this experience in connection with drinking during the last year.

	<u>Last year</u>		<u>How often last year</u>	
(1) Became the life of the party	YES	NO	_____	<input type="checkbox"/>
(2) Friends or neighbors indicated you should cut down on your drinking	YES	NO	_____	<input type="checkbox"/>
(3) Your drinking contributed to your getting hurt in an accident other than an auto accident	YES	NO	_____	<input type="checkbox"/>
(4) Tossed down several drinks pretty fast, to get a quicker effect from them	YES	NO	_____	<input type="checkbox"/>
(5) Got high or tight when drinking by yourself	YES	NO	_____	<input type="checkbox"/>
(6) Did not participate in regular family activities, like meals, because you were drinking	YES	NO	_____	<input type="checkbox"/>
(7) Felt nauseous or vomited during or after drinking	YES	NO	_____	<input type="checkbox"/>
(8) Had trouble with the law about driving after drinking	YES	NO	_____	<input type="checkbox"/>
(9) Stayed away from work because of a hangover	YES	NO	_____	<input type="checkbox"/>
(10) Once you started drinking it was difficult for you to stop before you became completely intoxicated	YES	NO	_____	<input type="checkbox"/>
(11) Asked to leave a social event because of your drinking or your behavior which others thought was related to you drinking	YES	NO	_____	<input type="checkbox"/>
(12) Spent too much money on drinks, or after drinking	YES	NO	_____	<input type="checkbox"/>

Interviewer Code for "How Often..." question:

1 = Never

2 = Once last year

3 = Several times last year

4 = Once a month

5 = Several times a month

6 = Once a week

7 = Several times a week

8 = Daily

	<u>Last year</u>		<u>How often last year</u>	
(13) A physician suggested you cut down on your drinking	YES	NO	_____	<input type="checkbox"/>
(14) Skipped a number of regular meals while you were drinking	YES	NO	_____	<input type="checkbox"/>
(15) Did not participate in family recreational activities because you were drinking	YES	NO	_____	<input type="checkbox"/>
(16) Your drinking was very displeasing to a relative (other than your spouse)	YES	NO	_____	<input type="checkbox"/>
(17) Found all worries disappeared	YES	NO	_____	<input type="checkbox"/>
(18) Have awakened the next day not being able to remember some of the things you had done while drinking	YES	NO	_____	<input type="checkbox"/>
(19) A policeman questioned you or warned you because of your drinking	YES	NO	_____	<input type="checkbox"/>
(20) Took a drink first thing when you got up in the morning	YES	NO	_____	<input type="checkbox"/>
(21) Were in some kind of hospital or rest home for an illness connected with drinking	YES	NO	_____	<input type="checkbox"/>
(22) Your husband (wife) indicated you should cut down on your drinking	YES	NO	_____	<input type="checkbox"/>
(23) Got into a heated argument	YES	NO	_____	<input type="checkbox"/>
(24) Took a few quick drinks before going to a party to make sure you had enough	YES	NO	_____	<input type="checkbox"/>
(25) Missed regular religious observance because of your drinking	YES	NO	_____	<input type="checkbox"/>

Interviewer Code for "How Often..." question:

1 = Never

2 = Once last year

3 = Several times last year

4 = Once a month

5 = Several times a month

6 = Once a week

7 = Several times a week

8 = Daily

		<u>Last year</u>		<u>How often last year</u>	
(26)	Had trouble with the law about drinking, when driving was not involved	YES	NO	_____	<input type="checkbox"/>
(27)	Sensed an understanding of the meaning of life when drinking	YES	NO	_____	<input type="checkbox"/>
(28)	People at work indicated you should cut down on your drinking	YES	NO	_____	<input type="checkbox"/>
(29)	Your drinking was involved in losing a friendship or drifting apart from a friend	YES	NO	_____	<input type="checkbox"/>
(30)	Got into a fight	YES	NO	_____	<input type="checkbox"/>
(31)	You stayed intoxicated for several days at a time	YES	NO	_____	<input type="checkbox"/>
(32)	Have gotten high or tight when on the job	YES	NO	_____	<input type="checkbox"/>
(33)	Drank in order to change the way you felt	YES	NO	_____	<input type="checkbox"/>
(34)	Kept on drinking after you had promised yourself not to	YES	NO	_____	<input type="checkbox"/>
(35)	Lost a job, or nearly lost one, because of your drinking	YES	NO	_____	<input type="checkbox"/>
(36)	Had an illness connected with drinking which kept you from working or your regular activities for a week or longer	YES	NO	_____	<input type="checkbox"/>
(37)	Your husband (wife) left because of your drinking	YES	NO	_____	<input type="checkbox"/>
(38)	Drinking may have hurt your chances for promotion or raises or better jobs	YES	NO	_____	<input type="checkbox"/>
(39)	Your hands shook the morning after drinking	YES	NO	_____	<input type="checkbox"/>
(40)	Had an argument with husband (wife) while you were drinking	YES	NO	_____	<input type="checkbox"/>

To be completed by the Interviewer immediately following the interview:

1. What was the subject's attitude toward the interview?
Check one.

- 1 Hostile
- 2 Suspicious, guarded
- 3 Casual, impersonal
- 4 Friendly, cooperative

2. What was the subject's condition at the time of the interview?
Check one.

- 1 No evidence of drinking
- 2 Some evidence of drinking
- 3 Intoxicated or high
- 4 Apparently hung over

3. How would you classify the subject on each of the three following dimensions? Check one for each factor.

Adaptability Factor

- 1 Using a variety of functionally adaptive behavior in response to conflict/stress
- 2 Using limited number of functionally adaptive behavior frequently in response to conflict/stress
- 3 Using maladaptive behavior in response to conflict/stress

Sociocultural Factor

- 1 Sociocultural environment which encourages controlled, or responsible drinking
- 2 Sociocultural environment which presents no clear message regarding drinking, or ambiguous messages regarding drinking
- 3 Sociocultural environment which encourages heavy, or uncontrolled drinking

Severity of the Problem

- 1 No/Threatened Interference due to alcohol use
- 2 Occasional Interference due to alcohol use
- 3 Regular Interference due to alcohol use
- 4 Generalized Interference due to alcohol use

APPENDIX B

DWICS
FIELD STUDY:
COLLATERAL INTERVIEW

DATE _____

Time Begun _____

Time Finished _____

Name of Interviewer: _____

Site: _____

Subject Code Number: _____

Referent DWI Subject Code Number: _____

Referent DWI Site Subject ID Number: _____

The DWICS Interview package was developed for the NHTSA under contract number DOT-HS-5-01253. The package was developed for the NHTSA by McBer and Company. Disclosure of this information is voluntary.

McBer and Company
137 Newbury Street
Boston, Massachusetts 02116

1. Name of referent DWI: _____ (name) _____

2. What is your relationship to _____ (name) _____?

3. How long have you known _____ (name) _____?

_____ Years (round off to nearest whole year)

4. On the average during the last year, how many hours per week do you spend with _____ (name) _____?

_____ Hours

REFERENCE GROUP ASSESSMENT



5. People spend their nonworking time (i.e., leisure time) with some people, spend weekday evenings or weekends with other people, or get together with certain people often. Who does (name) see or spend his/her nonworking time with?

List names which identify the people or groups:

_____	_____
_____	_____
_____	_____
_____	_____

Examples:

- * Spouse or mate
- * Spouse and children (nuclear family)
- * Friends with whom the person lives
- * Parents
- * Extended family (brothers, sisters, cousins, in-laws, etc.)

- * Friends from childhood, or old friends
- * Friends who are neighbors
- * Friends who are co-workers, colleagues
- * Friends who are schoolmates (or fellow students)
- * Friends or acquaintances with whom he/she drinks, plays cards, gambles, etc.

- * Social club
- * Acquaintances at a public drinking establishment
- * Professional, or occupational associates (such as union)
- * Self-help, or self-development group
- * Church group
- * Members of civic or volunteer organization
- * People with whom you play sports, or attend sporting events

If the respondent has listed more than five reference groups, ask the respondent to identify the five with whom the referent DWI spends the most nonworking time. Circle these five in the list at the top of the page.

YELLOW CARD

1	2	3	4	5	6	7
<i>Very easy</i>					<i>Very difficult</i>	

BLUE CARD

1	2	3	4	5	6	7
<i>Never</i>		<i>About half of the time</i>			<i>Nearly every time</i>	

GREEN CARD

1	2	3	4	5	6	7
<i>Abstaining from drinking</i>					<i>Drinking to intoxication</i>	

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- 6.1 How much nonworking time per week has (name) spent with these people on the average in the past month? Response should be converted to average number of hours per week. Answers
(Hours)
- 7.1 *YELLOW CARD*
How easy would it be for (name) to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. _____
- 8.1 *BLUE CARD*
When (name) is with these people, how often are any of them drinking? Choose a number on the card shown. _____
- 9.1 *GREEN CARD*
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. _____

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

- 6.2 How much nonworking time per week has (name) spent with these people on the average in the past month? Response should be converted to average number of hours per week. Answers
(Hours)
- 7.2 *YELLOW CARD*
How easy would it be for (name) to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown. _____
- 8.2 *BLUE CARD*
When (name) is with these people, how often are any of them drinking? Choose a number on the card shown. _____
- 9.2 *GREEN CARD*
How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown. _____

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

6.3 How much nonworking time per week has (name) spent with these people on the average in the past month? Response should be converted to average number of hours per week.

Answers

--	--

(Hours)

7.3 *YELLOW CARD*

How easy would it be for (name) to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown.

--

8.3 *BLUE CARD*

When (name) is with these people, how often are any of them drinking? Choose a number on the card shown.

--

9.3 *GREEN CARD*

How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown.

--

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

6.4 How much nonworking time per week has (name) spent with these people on the average in the past month? Response should be converted to average number of hours per week.

Answers

--	--

(Hours)

7.4 *YELLOW CARD*

How easy would it be for (name) to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown.

--

8.4 *BLUE CARD*

When (name) is with these people, how often are any of them drinking? Choose a number on the card shown.

--

9.4 *GREEN CARD*

How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown.

--

NAME OF GROUP: _____

Complete the following questions for this group. Place the answers for each question to the right.

Answers

6.5 How much nonworking time per week has (name) spent with these people on the average in the past month? Response should be converted to average number of hours per week.

--	--

(Hours)

7.5 *YELLOW CARD*

How easy would it be for (name) to have nothing to do with these people (i.e., not spend time with them)? Choose a number on the card shown.

--

8.5 *BLUE CARD*

When (name) is with these people, how often are any of them drinking? Choose a number on the card shown.

--

9.5 *GREEN CARD*

How would you describe the group's overall behavior regarding drinking when together? Choose a number on the card shown.

--

Interviewer Code for Question 10:

Consequences

What were the consequences (results) of his/her action? Check one.

- 1 = The problem or source of feelings was resolved
- 2 = Feelings were lessened, or eased
- 3 = There was no impact on feelings or the problem
- 4 = Upset, tense, or bothered feelings increased
- 5 = Another problem or source of upset, tense, or bothered feelings was stimulated

Frequency

Of the times he/she felt upset, or bothered, how often did he/she do this? Check one.

- 1 = Rarely
- 2 = Occasionally
- 3 = Often
- 4 = Always

10. We all get upset, tense, or bothered from time to time, either because something specific happened or because we are generally feeling that way. Think of a time, or times, in the last year when (name) was feeling upset, tense, or bothered. What did he/she do at that time?

--	--

Once respondent answers, then ask, "What was the impact that doing that had on (name)'s feelings or the problem?"

What did (name) do?

Consequences

Frequency

- (a)
- (b)
- (c)
- (d)
- (e)
- (f)
- (g)
- (h)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Interviewer Code for Question 11:

How often in the last year?

- 1 - Never
- 2 = Once last year
- 3 = Several times last year
- 4 = Once a month

- 5 = Several times a month
- 6 = Once a week
- 7 = Several times a week
- 8 = Daily

11. What does (name) do for relaxation or recreation (e.g., hobbies, sports)?

How often has he/she done this in the last year?

- (a) _____
- (b) _____
- (c) _____
- (d) _____
- (e) _____

	<input type="checkbox"/>
_____	<input type="checkbox"/>

12. What kind of alcoholic beverages does (name) drink? Interviewer should check those mentioned in categories listed below.

- 1 Beer
- 2 Distilled spirits (e.g., gin, whiskey, brandy)
- 3 Wine (i.e., table wine)
- 4 Fortified wines (e.g., sherry, port) and liqueurs

Does he/she drink anything else? Interviewer should return to the above list and check any additional types of beverages named.

If referent subject drinks beer ask the next two questions. If not, go to question 15.

13. On the average during the last year, how often has (name) drank beer? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

14. On the average, how many cans (glasses) of beer did (name) drink each time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> Do not drink beer | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

If referent subject drinks distilled spirits, ask the next two questions. If not, go to question 17.

15. On the average during the last year, how often has (name) drank distilled spirits? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

16. On the average, how many drinks of distilled spirits did (name) have each time? Check one.

- | | |
|---|---------------------------------------|
| 1 <input type="checkbox"/> Do not drink spirits | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

If referent subject drinks wine, ask the next two questions. If not, go to question 19.

17. On the average during the last year, how often has (name) drank wine? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

18. On the average, how many glasses of wine did (name) drink each time? Check one.

- | | |
|---|---------------------------------------|
| 1 <input type="checkbox"/> Did not drink wine | 5 <input type="checkbox"/> 5 to 6 |
| 2 <input type="checkbox"/> Less than 1 | 6 <input type="checkbox"/> 7 to 10 |
| 3 <input type="checkbox"/> 1 to 2 | 7 <input type="checkbox"/> 11 or more |
| 4 <input type="checkbox"/> 3 to 4 | |

If referent subject drinks fortified wines or liqueurs, ask the next two questions. If not, go to question 21.

19. On the average during the last year, how often has (name) drank fortified wines or liqueurs? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

20. On the average, how many glasses of fortified wine or liqueurs did (name) drink each time? Check one.

- | | |
|--|---------------------------------------|
| 1 <input type="checkbox"/> Did not drink fortified wines or liqueurs | 4 <input type="checkbox"/> 3 to 4 |
| 2 <input type="checkbox"/> Less than 1 | 5 <input type="checkbox"/> 5 to 6 |
| 3 <input type="checkbox"/> 1 to 2 | 6 <input type="checkbox"/> 7 to 10 |
| | 7 <input type="checkbox"/> 11 or more |

21. How often in the last year has (name) been intoxicated, or extremely high? Check one.

- | | |
|--|--|
| 1 <input type="checkbox"/> Never | 5 <input type="checkbox"/> Several times a month |
| 2 <input type="checkbox"/> Once | 6 <input type="checkbox"/> Once a week |
| 3 <input type="checkbox"/> Several times last year | 7 <input type="checkbox"/> Several times a week |
| 4 <input type="checkbox"/> Once a month | 8 <input type="checkbox"/> Daily |

Interviewer Code for "How Often..." question:

1 = Never

2 = Once last year

3 = Several times last year

4 = Once a month

5 = Several times a month

6 = Once a week

7 = Several times a week

8 = Daily

22. I am going to list experiences that many people have reported in connection with drinking. For each experience, please tell me whether or not (name) has had this experience in connection with drinking during the last year.

	<u>Last year</u>		<u>How often last year</u>	
(1) Became the life of the party	YES	NO	_____	<input type="checkbox"/>
(2) Friends or neighbors indicated he/she should cut down on his/her drinking	YES	NO	_____	<input type="checkbox"/>
(3) His/her drinking contributed to his/her getting hurt in an accident other than an auto accident	YES	NO	_____	<input type="checkbox"/>
(4) Tossed down several drinks pretty fast, to get a quicker effect from them	YES	NO	_____	<input type="checkbox"/>
(5) Got high or tight when drinking by himself/herself	YES	NO	_____	<input type="checkbox"/>
(6) Did not participate in regular family activities, like meals, because he/she was drinking	YES	NO	_____	<input type="checkbox"/>
(7) Felt nauseous or vomited during or after drinking	YES	NO	_____	<input type="checkbox"/>
(8) Had trouble with the law about driving after drinking	YES	NO	_____	<input type="checkbox"/>
(9) Stayed away from work because of a hangover	YES	NO	_____	<input type="checkbox"/>
(10) Once he/she started drinking it was difficult for him/her to stop before he/she became completely intoxicated	YES	NO	_____	<input type="checkbox"/>
(11) Asked to leave a social event because of his/her drinking or behavior which others thought was related to his/her drinking	YES	NO	_____	<input type="checkbox"/>
(12) Spent too much money on drinks, or after drinking	YES	NO	_____	<input type="checkbox"/>

Interviewer Code for "How Often..." question:

1 = Never

2 = Once last year

3 = Several times last year

4 = Once a month

5 = Several times a month

6 = Once a week

7 = Several times a week

8 = Daily

	<u>Last year</u>		<u>How often last year</u>	
(13) A physician suggested he/she cut down on his/her drinking	YES	NO	_____	<input type="checkbox"/>
(14) Skipped a number of regular meals while he/she was drinking	YES	NO	_____	<input type="checkbox"/>
(15) Did not participate in family recreational activities because he/she was drinking	YES	NO	_____	<input type="checkbox"/>
(16) His/her drinking was very displeasing to a relative (other than his/her spouse)	YES	NO	_____	<input type="checkbox"/>
(17) Found all worries disappeared	YES	NO	_____	<input type="checkbox"/>
(18) Has awakened the next day not being able to remember some of the things he/she had done while drinking	YES	NO	_____	<input type="checkbox"/>
(19) A policeman questioned him/her or warned him/her because of his/her drinking	YES	NO	_____	<input type="checkbox"/>
(20) Took a drink first thing when he/she got up in the morning	YES	NO	_____	<input type="checkbox"/>
(21) Was in some kind of hospital or rest home for an illness connected with drinking	YES	NO	_____	<input type="checkbox"/>
(22) Her (his) husband (wife) indicated she (he) should cut down on her (his) drinking	YES	NO	_____	<input type="checkbox"/>
(23) Got into a heated argument	YES	NO	_____	<input type="checkbox"/>
(24) Took a few quick drinks before going to a party to make sure he/she had enough	YES	NO	_____	<input type="checkbox"/>
(25) Missed regular religious observance because of his/her drinking	YES	NO	_____	<input type="checkbox"/>

Interviewer Code for "How Often..." question:

1 = Never

2 = Once last year

3 = Several times last year

4 = Once a month

5 = Several times a month

6 = Once a week

7 = Several times a week

8 = Daily

		<u>Last year</u>		<u>How often last year</u>	
(26)	Had trouble with the law about drinking, when driving was not involved	YES	NO	_____	<input type="checkbox"/>
(27)	Sensed an understanding of the meaning of life when drinking	YES	NO	_____	<input type="checkbox"/>
(28)	People at work indicated he/she should cut down on his/her drinking	YES	NO	_____	<input type="checkbox"/>
(29)	His/her drinking was involved in losing a friendship or drifting apart from a friend	YES	NO	_____	<input type="checkbox"/>
(30)	Got into a fight	YES	NO	_____	<input type="checkbox"/>
(31)	He/she stayed intoxicated for several days at a time	YES	NO	_____	<input type="checkbox"/>
(32)	Has gotten high or tight when on the job	YES	NO	_____	<input type="checkbox"/>
(33)	Drank in order to change the way he/she felt	YES	NO	_____	<input type="checkbox"/>
(34)	Kept on drinking after he/she had promised himself/herself not to	YES	NO	_____	<input type="checkbox"/>
(35)	Lost a job, or nearly lost one, because of his/her drinking	YES	NO	_____	<input type="checkbox"/>
(36)	Had an illness connected with drinking which kept him/her from working or his/her regular activities for a week or longer	YES	NO	_____	<input type="checkbox"/>
(37)	Her (his) husband (wife) left because of her (his) drinking	YES	NO	_____	<input type="checkbox"/>
(38)	Drinking may have hurt his/her chances for promotion or raises or better jobs	YES	NO	_____	<input type="checkbox"/>
(39)	His/her hands shook the morning after drinking	YES	NO	_____	<input type="checkbox"/>
(40)	Had an argument with husband (wife) while she (he) was drinking	YES	NO	_____	<input type="checkbox"/>

To be completed by the Interviewer immediately following the interview:

1. What was the subject's attitude toward the interview?
Check one.

- 1 Hostile
- 2 Suspicious, guarded
- 3 Casual, impersonal
- 4 Friendly, cooperative

2. What was the subject's condition at the time of the interview? Check one.

- 1 No evidence of drinking
- 2 Some evidence of drinking
- 3 Intoxicated or high
- 4 Apparently hung over

APPENDIX C

DWICS FIELD STUDY:

RECORD CHECK

DATE _____

Name of Recorder: _____

Site: _____

Subject Code Number: _____

Site Subject ID Number: _____

The DWICS Interview package was developed for the NHTSA under contract number DOT-HS-5-01253. The package was developed for the NHTSA by McBer and Company. Disclosure of this information is voluntary.

McBer and Company
137 Newbury Street
Boston, Massachusetts 02116

PROJECT DRINKER CLASSIFICATION _____

CHECK ALL OF THE FOLLOWING WHICH APPLY TO THE CLIENT:

- Diagnosis as an alcoholic by a competent medical or treatment facility
- Self admission of alcoholism or problem drinking
- A BAC of .15 percent or more at the time of arrest
- A record of one or more prior alcohol-related arrests
- A record of previous alcohol-related contacts with medical, social, or community agencies
- Reports of marital, employment or social problems related to alcohol
- Diagnosis of problem drinker on the basis of approved structured written diagnostic interview instruments, i.e., MAST, Mortimer-Filkins, NCA and Johns Hopkins diagnostic tests.

MORTIMER-FILKINS SCORES

Questionnaire (Form A)

Interview (Form B)

Total

MICHIGAN ALCOHOLISM SCREENING TEST SCORE

NATIONAL COUNCIL ON ALCOHOLISM TEST SCORE

OTHER PLEASE SPECIFY:

INDEX ARREST INFORMATION

CHARGE ARRESTED FOR (Check one)

- 1 Driving under the influence, driving while intoxicated, or equivalent
- 2 Lesser alcohol related offense (driving while impaired, etc.)
- 3 Nonalcohol related offense (reckless driving, careless and negligent driving, etc.)

CHARGE CONVICTED OF (Check one)

- 1 Driving under the influence, driving while intoxicated, or equivalent
- 2 Lesser alcohol related offense (driving while impaired, etc.)
- 3 Nonalcohol related offense (reckless driving, etc.)
- 4 Not convicted of any offense as yet

BLOOD ALCOHOL CONCENTRATION

% code 2 digits (i.e., .1 = 10); leave blank if no BAC is available and specify reason below

- 98 refused test or not taken
- 99 test taken but no available

APPENDIX D
INTERVIEWER MANUAL

I. PURPOSE

The Driving While Intoxicated Classification System (DWICS) was designed as a diagnostic method for use with persons convicted of driving while intoxicated. Through the use of DWICS, an agency should be able to accurately assess the nature of the person's drinking/driving problem and assign him/her to an appropriate re-education or rehabilitation program.

The DWICS interview is a structured, or guided interview. The interviewer is looking for specific types of information in response to each question. The objective of this Manual is to aid interviewers in learning how to conduct the DWICS interview most effectively so as to enable the diagnosis of the client to be based on the most reliable information possible.

The following section of the Manual has detailed instructions regarding each question in the DWICS interview.

General Instructions

Record the information as accurately as possible. Do not mark anything in the little square boxes which appear in the right-hand margins of each page; they are for computer coding purposes.

Prior to each interview write the date, then record the starting time and ending time of the interview. On the inside of the cover page, write your name, the site for which you are working, the Subject Code Number (assigned by the DWICS Study), and the Site Subject ID Number (code number by which the site identifies the client).

Many of the questions in the DWICS have a set of categories in which the respondent's answer must be coded.

The interview is designed so that you should read or ask the question and then listen for the respondent's answer. If the answer appears to fall into one of the categories in the group listed below the question, then check the appropriate box or line next to that category. You should then ask the respondent to confirm the selection. For example,

Question zz. How do you feel when you wake up
in the morning?

_____ Angry and grouchy
_____ Apathetic and lazy
_____ Pleasant and cheerful
_____ Sleepy

You have asked the client, "How do you feel when you wake in the morning?" To which the client answers, "Well, I say hello to the birds and sing while I walk about getting ready to go to work." You place a check on the line next to the "Pleasant and cheerful" response. Then you ask the respondent to confirm your coding of his/her response by asking, "So you would say that you usually feel pleasant and cheerful when you wake up in the morning?" The client answers, "Yes." You now move on to the next question.

If the client does not confirm your coding of the answer, then you must ask for clarification. You may do so by repeating the question, asking the client to explain his/her response, or by listing the alternative categories and asking him/her which answer is closest to how he/she actually feels in the morning. Reading the categories to the client should be used when the interviewer does not seem to be understanding the client's response.

As you read through the instructions for each question, you will find that for some questions you do not have to confirm your coding of the respondent's answer (e.g. when

you code the respondent's sex). For some questions, you may wish to list the alternative responses for the client after asking the question. For other questions you only indicate the alternative responses to clarify an answer which might be codable into several of the available categories. Remember, this is a structured interview, not a questionnaire. The respondent answers in his/her own words, the interviewer then writes down in which category of those listed the response is.

II. INSTRUCTIONS FOR EACH QUESTION

Question #1

Intent: To determine the respondent's age at the time of the interview.

Techniques: Ask how old the respondent is.

Question #2

Intent: To determine the respondent's exact age (in months and years).

Techniques: Ask the respondent when he/she was born.

Question #3

Intent: To determine the physical sex of the respondent.

Techniques: Do not ask the respondent, merely check the appropriate box.

Coding Clarifications: A respondent's sexual preference is not of interest, but merely his/her gender.

Question #4

Intent: To determine respondent's racial identity.

Techniques: Do not ask respondent. Determine by observation. However, if the racial group is not clearly determinable, ask, "What is your racial identity?"

Coding Clarifications: Respondent must be coded into 1 of the 4 categories.

Common Problems: In instances where clarification is necessary, respondent may answer with a cultural or national group --not a racial group-- such as "Cuban;" or with mixed origins, such as "My father was Chinese and my mother white." In those instances, the interviewer should force a choice between the four categories by naming them and saying, "If I limit you to these four, which comes closest to your racial identity?"

Question #5

Intent: To determine respondent's current religious preference.

Techniques: Ask, "What is your current religious preference?"

Common Problems: Respondent may answer with something like, "I suppose I'm Catholic, but I don't go to church anymore." Interviewer should ask, "Do you consider yourself a Catholic currently, or would you classify yourself as having no religious preference?"

Question #6

Intent: To determine respondent's religious upbringing.

Techniques: Ask, "Before the age of 18, what was your religious upbringing?"

Common Problems: Respondents may sometimes answer, "Well, before age 10 my mother took us to the Catholic church, but after she got remarried, we didn't go to church anymore." In instances like these, the interviewer should ask "What was the predominant religious influence during your growing up?" List the categories only if the respondent is having trouble with choosing a category. The principle is to force a choice by asking the respondent to classify himself.

Question #7

Intent: To determine the name and population of respondent's current residence.

Techniques: Ask, "Where do you currently live? Write the name of the city/town and state in the space provided. Then ask, "What's the population --pause-- roughly?"

Coding Clarifications: In instances of small towns of less than 5,000 clarify whether person lives in the town or out in the country, e.g., on a farm, then code accordingly.

Common Problems: The respondent may have difficulty estimating the size of the place. The categories are so broad that a "can't estimate" response should appear rarely. The interviewer may know the population of the city or town. The name of the city or town is more important than a subjective estimate of the population.

Question #8

Intent: To determine the name and population of the respondent's principle residence before age 16.

Techniques: Ask, "Where did you live before you were 16?"
Write the city and state in the space provided.
"What was the population at that time?"

Coding Clarifications: In instances of small towns of less than 5,000, clarify whether respondent lived in the town or out in the country, for example on a farm. Code accordingly.

Common Problems: Some respondents may have lived in several places. In those instances ask for and record the place and the population in which the person lived and the most number of years. Some respondents may state that the city or town grew a lot while he/she was growing up. In those instances ask for and record the population that applied for the most number of years before age 16.

Question #9

Intent: To determine the highest level of formal education or training which the respondent has received.

Techniques: Ask the respondent what the highest grade he/she has completed in school.

Coding Clarifications: If the respondent has completed high school, the interviewer should circle "4" under high school. An Associate's Degree from a post-secondary school is equivalent to "2" under College/Post High School Formal Training, regardless of the length of time it took him/her to complete the degree program. Completion of a junior college program is usually equivalent to "2" under College/Post High School Formal Training. A doctorate is equivalent to "4/4+" under Post College. A Masters Degree is equivalent to "2" under Post College. A law degree is equivalent to "3" under Post College.

Common Problems: A respondent may have attended two colleges and received a Bachelor's Degree from each. Although this person has completed eight years of college education, their highest grade completed is "4" under College/Post High School Formal Training. A respondent may have completed a six-month or one-year vocational training program. This would be coded as a "1" under College/Post High School Formal Training.

Question #10

Intent: To determine the respondent's marital status at the time of the interview.

Techniques: Ask the respondent his/her current marital status.

Coding Clarifications: A person who is married but not legally divorced is considered "separated." The "separated" category may refer to a legal status of being separated or an informal status of not living together under an assumption of being separated.

Question #11

Intent: To determine the number of times the respondent has been married.

Techniques: Ask the respondent how many times he/she has been married, including the current marriage. This question refers to his/her lifetime total.

Coding Clarifications: If he/she is currently single and has never been married, circle the "0".

Question #12

Intent: To determine the respondent's current occupation.

Techniques: Ask, "What is your current occupation?"

Coding Clarifications: Record the respondent's occupation as he/she states it. The Interviewer should add a summary statement if that seems helpful toward the goal of obtaining an occupational category for question 13.

Common Problems: The respondent may state that he/she works several jobs. In those instances probe to get the respondent to describe his/her predominant occupation. Again, ask, "If I limited you to one single occupation that best describes what you do, what would it be?" Some respondents may be full time students with part-time jobs and fail to mention student status as the predominant occupational category. A probe is necessary in those instances: "Are you also a full-time student?" The respondent may state that he/she is unemployed or retired. Record the respondent's answer and also ask, "What was your last occupation before you stopped working or were laid off?" "How long has it been since you were working at that occupation?" Specify in months and years.

Question #13

Intent: To code the respondent's occupation into a category.

Techniques: This question is not asked. Rather the interviewer codes the response in question 12 into one of these categories. The interviewer should familiarize him/herself in advance with the occupational categories.

Coding Clarifications: The titles of the categories are not as important as the examples of occupations which are included in each category. For example, "Manager" and "Administrator" could be seen as equivalent; yet the examples are what define the classification. A secretary is coded as Clerical/Technician (Box "4").

Common Problems: To differentiate between a proprietor of a medium business and a proprietor of a small business may require additional questioning on the part of the interviewer. Also, the interviewer may wonder how to code a plumber who has his own business with several other plumbers on a crew. Is this person's occupational category "skilled labor" or "administrator"? Again, additional questioning may be needed to clarify and get the sense of the job that most closely matches the examples.

Question #14 a)

Intent: To determine the respondent's country of birth.

Techniques: Ask the question as written.

Coding Clarifications: Write in the name of the country.

Question #14 b)

Follow the instructions for 14a.

Question #14 c)

Follow the instructions for 14a.

Question #14 d)

Intent: To determine the respondent's dominant national identity.

Techniques: Ask the question as written.

Coding Clarifications: Write in the name of one country.

Common Problems: It is not uncommon to have a father's side of the family come from one country and a mother's side from another. For example, "My father came from Greece and my mother from the United States." In such an instance, press for one national identity by asking, "If you could only choose one country that best describes your ancestry or with which you are most identified, which one would it be?"

If the respondent answers "Africa," he/she must be asked to specify: North, South, East, West, Central.

Question #15

Intent: To determine the direct communications from the father to the respondent about the respondent's use of alcoholic beverages. If the father did make direct statements, then respondent is asked to classify his comments.

Techniques: Ask the question as written. Omit the alternatives if the answer to the first part is "no." If the answer is "yes," ask, "What did his comments indicate you should or should not do?" If the response is not codable into one of the three categories, read the alternatives to the respondent and get him/her to choose.

Coding Clarifications: There are 3 possibilities: discouraging drinking without qualification, encouraging drinking without qualification, or making distinctions about such things as how much one should drink, how often, under what circumstances, and what type of beverages.

Common Problems: The respondent may state that his/her father made things clear by example or that his comments about others made his attitudes obvious. These are not sufficient to be coded as a "yes" answer. The interviewer should probe, if only by re-asking the question, "Did your father make it clear directly to you how you should use alcoholic beverages?" The

intent of the question is to determine if the father directly talked about the respondent's use of alcoholic beverages. The respondent may answer "yes" but then be unable to classify the comments or may state that the father was at one time discouraging and another time encouraging. Or the respondent may have had more than one father. In any of those instances press for the dominant communication or message. For example, "Well, which type of comment was strongest or had the most impact?"

Question #16

Intent: To determine the direct communications from the mother to the respondent on the respondent's use of alcoholic beverages. If the mother did make direct statements, then the respondent is asked to classify her comments.

Techniques: Ask the question as written. Omit alternatives if the answer to the first part of the question is "no." If the answer to the first part is "yes", ask, "What did her comments indicate you should or should not do?" If the response is not codable into one of the three categories, read the alternatives to the respondent and get him/her to choose.

Coding Clarifications: See question 15 on the preceding page, follow those instructions.

Common Problems: See question 15 on the preceding page, follow those instructions.

Question #17

Intent: To determine how often the respondent's father and mother each drank alcoholic beverages.

Techniques: It may be helpful to ask the question first for one parent, then again for the other. If the question is read as is, then add, "First your father." Once you obtain an answer, ask, "And now your mother." For each parent confirm the category with the respondent.

Coding Clarifications: "Not applicable" is used if the respondent is an orphan or did not know one parent due to death or separation. You should check the "most frequent" category which is appropriate.

Common Problems: The respondent may indicate that a parent drank more frequently at one time and less frequently at another for the 12 years that are relevant. In those cases, probe to determine what was most characteristic over the greatest period of time. Record that answer.

Question #18

Intent: To determine his/her father's drinking pattern at its most extreme during the years when the respondent was between 6 and 18.

Techniques: Ask the question as written. If the response is clearly in one category, code it as such, then confirm your coding. If it is not clearly in one category, read the several alternatives which are the potential categories and ask the respondent to choose.

Coding Clarifications: In the response categories "socially acceptable limits" refers to what others saw as acceptable amounts versus what was seen as unacceptable. "Any trouble" includes trouble with the law, strangers, friends, or family ranging from arrests to arguments and complaints.

Common Problems: The Interviewer should be clear and make clear to the respondent that unlike question 17 where the most frequent category was desired, here, the most extreme drinking pattern is the desired response. For example, "could not control his drinking" is the answer to record even if this were only true for the respondent's father for a short period of the time. Likewise, the other response categories refer to a period of time. The sense of the question is: "Was there ever a period of time when you were between 6 and 18 when your father (for example) drank alcoholic beverages and regularly exceeded socially acceptable limits...?"

Question #19

Intent: To determine his/her mother's drinking pattern at its most extreme during the years when the respondent was between 6 and 18.

Techniques: Ask the question as written, and follow the same procedure as in question 18.

Coding Clarifications: See question 18 on the preceding page.

Common Problems: See question 18 on the preceding page.

Question #20

Intent: To determine the disposition of either parent toward seeing his/her child intoxicated.

Techniques: Ask the question as written. If the respondent asks for clarification, ask, "Were you ever with either or both parents when you were drunk?" If the answer is "yes," only then ask the second part of the question. In asking the second part be clear that you want the last time that the event occurred or the time that was closest to the respondent's 19th birthday. Do not read alternatives. Allow the respondent to describe the parental response. Use categories as clarifying questions; for example, in response to "punished me" ask, "physically or mentally?," and "at the time or later?"

Coding Clarifications: Although it will occur rarely, a respondent may indicate that both parents observed him/her intoxicated. One parent made one type of response and the other parent made another type of response. In this case, code the response, from either parent, which was the most supportive of the child drinking to intoxication.

A nonverbal punitive response by a parent should be coded as a verbal punishment. For example, the respondent says, "My mother didn't say anything but she gave a look that I knew meant trouble. I used to get that look when I was younger just before a spanking." This should be coded "Verbally punished..."

"Ignored it" is the same as "did not notice," "did not know," "did not mention it," or "just accepted it as a matter of course." This last answer deserves a clarifying probe.

Common Problems: The respondent should be asked to clarify if he/she was ever in the presence of either or both parents when he/she was intoxicated. "See you" is sometimes interpreted as "being aware." The intent of the question is not to determine how "aware" the parents were but rather whether the respondent was in their presence or not. Parental lack of awareness should be coded as "ignored it completely."

Question #21

Intent: To determine with what people --singly or in groups-- the respondent spends his/her non-working time. To determine whether the individuals the respondent spends time with can be grouped together in meaningful ways -- representing his/her characteristic associations. The intent of the question is not to produce a strictly accurate map of the respondent's associates, but rather to arrive at some rough groupings in which people have things in common and who have identifiable patterns of drinking or not drinking. These groups will then be examined one at a time to determine the influence they have on the respondent's drinking practices.

Techniques: Read the question as written. Then paraphrase it in other terms. State something like, "I would like you to think about the different people that you spend your non-working time with. Think about all your non-working time." (Pause) "Do they fall into any clear groups? Could you group them together in any meaningful way?" (Pause) "Could you name the groups, using first names and relation to you?"

If the respondent lists an individual indicating the existence of a 2-person group (a dyad), press to find similarities which would enable groupings to be made. Once clear groups have been named, ask the respondent to rank them in order of most time to least time spent with them. It will help you to write those numbers beside the groups and ask about the groups in order from most time for 22.1 to least time for 22.5. If the respondent has trouble naming groupings, some examples from the list may be cited. If the respondent names many groups select the five groups with whom most of his/her time is spent.

Coding Clarifications: Simply write the first names and/or relation to the respondent if relevant (e.g., wife) on the lines provided.

Common Problems: Lunch is non-working time. Relatives can be a group. A spouse, mate, roommate can constitute a group. Any combination of the respondent and one other person can be a group. Try to have the respondent find some commonalities among dyads. Although the dyads may not spend time together, there may be enough in common between those people that they could be considered a larger group of the respondent's associates. Ask the respondent if those single other people named could be grouped together in any meaningful way. Being with a spouse may be one group. Being with a spouse and children or parents may be another group. Being with a spouse and other friends may be a group. If so, make sure that the respondent and spouse are considered as one group in their alone time and the spouse plus friends as another distinct group.

Examples From Actual Protocols:

- I.
 1. Linda (spouse)
 2. Business associates (fellow employees like Dennis, Jim, or Bob)
 3. New friends/neighbors (like Paul, Peter, Dave)
 4. National Guard friends
 5. Family (extended)

- II.
 1. Bob and Frank
 2. Wizzie
 3. Gary and Joan
 4. Charlie and Betty

- III.
 1. Old college friends
 2. New school friends
 3. Work colleagues
 4. Other working associates
 5. Family

- IV.
 1. Older work friends
 2. Old friends from school
 3. Strangers in clubs
 4. Groups I play sports with
 5. Relatives I board with

- V.
 1. Wife
 2. Other couples who are friends
 3. Male friends

Question #22

Intent: To determine the average number of hours per week in the past month that the respondent has spent with this particular group named in question 21.

Techniques: Read the question as written.

Coding Clarifications: Record the answer in hours. If the respondent says, "An average of one evening a week," the interviewer should then ask, "Would you say that these evenings are about three hours long?" Pursue the amount of time in the respondent's category of "evening" until you get a number.

Common Problems: If the person has listed his/her spouse as one of the groups, the respondent may ask if time that they are together in the house (although they may be in different rooms) is considered time together. The answer would be "yes." In obtaining the estimate of time per week, you must start with the respondent's method of assessing time (e.g., number of evenings, number of meals, etc.), then work with the respondent to convert this into number of hours.

Question #23

Intent: To determine how easily the respondent could separate himself from this group. In other words, how hard would it be for the respondent to leave the group?

Techniques: For this and the remaining questions to be asked about each reference group (through question 27), you should begin by stating, "Now by choosing a number on the Yellow Card answer the following question: How easy would it be for you to have nothing to do with these people?" If the respondent looks puzzled, you can add, "For example, for you to not spend any time with these people?" You hold out the Yellow Card so the respondent can read it while you are asking the question. If the respondent seems to be having difficulty with the scale you can add, "The numbers represent points on a scale, like a meter or a measuring stick which ranges from 'Very Easy' at one end to 'Very Difficult' at the other end." Once the respondent gives you a number record it.

Coding Clarifications: Merely record the number.

Common Problems: Occasionally respondents will say something like "4 1/2." In this situation, ask whether it is "4" or "5." Do not accept anything between digits on the scale.

Question #24

Intent: To determine how frequently, when the respondent is with the group, anyone in the group is drinking alcoholic beverages.

Techniques: Show the Blue Card and ask the question.

Coding Clarifications: Record the number chosen. Only accept a digit as a response (e.g., do not accept "4 1/2").

Common Problems: If every time the group is together, someone in the group is drinking, then the answer should be "7." This would be a correct answer whether it was the same person that was drinking each time, or a different person (still a member of the group) who was drinking each time. The response should be an indication of the proportion of the times when the respondent is with this group and anyone in the group is drinking over the total number of times the respondent is with this group. This proportion is translated by the respondent into one of the numbers on the scale shown on the Blue Card.

Instructions to the Interviewer:

Questions 25 (a) and (b) ask about the frequency of specific events in the reference group; how many times certain things occur of the times when the respondent has been with the group.

Question #25 (a)

Intent: To determine the number of times, or frequency, during the past year when the respondent has been with the group that anyone in this group, including the respondent, has become intoxicated, or extremely high.

Techniques: Show the Blue Card and ask the question as written. In the case of dyads, where it is just the respondent and one other person, be sure to use the following words instead of reading the question as it appears on the page, "How often have either of you become intoxicated or extremely high?"

Coding Clarifications: The Blue Card, as noted above, is a continuum of the number of times ranging from never, or at no time ("1"), to about half the time ("4"), to nearly every time ("7"). Numbers in between represent intermediate fractions. For example, "3" indicates a little less than half of the time.

Common Problems: The respondent may indicate a number such as "5 1/2." Ask the respondent to choose either "5" or "6." "Is it closer to '5' or '6'?"

Question #25 (b)

Intent: To determine the number of times, or frequency, during the past year when the respondent has been with the group that anyone in this group, including the respondent, has abstained from drinking (e.g., had nothing to drink at all). The question does not ask how many have abstained -- only how many times has there been someone who abstained.

Techniques: Still showing the Blue Card, go back to the question's main heading and lead in by asking, "When you have been with these people (or this person if the group is a dyad) during the past year how often has anyone abstained or had nothing to drink?" You may rephrase it to ask, "How many times has there been someone in the group who (or have either of you, if the group is a dyad) abstained from drinking?"

Coding Clarifications: Again, the Blue Card offers responses representing proportions of times when together from never, none of the times, ("1") to nearly every time we are together ("7").

Common Problems: Be sure to force a choice between any answers that fall in between like "3 to 4" or "between 3 and 4" by asking, "Which is it closer to?"

Instructions to the Interviewer:

Questions 25 (c) and (d) ask about the quantity, or number of members of the reference group who are involved in a specific event in the reference group; what percentage of the total number of members of the reference group have acted in this manner at any time when the respondent has been with the group.

Question #25 (c)

Intent: To determine the proportion of persons in the group who have ever drunk to intoxication when the respondent has been with the group during the past year. The question asks the respondent to consider, at a glance, each person in the group and to ask him/herself whether that person has ever drunk to the point of intoxication. The answer can be everyone even though everyone may not have been intoxicated at the same time.

Techniques: Showing the Gold Card, go back to the question heading, "When you have been with these people (or this person if a dyad) during the year, how many of you have ever drunk to the point of being intoxicated or extremely high? Choose a number on the card shown." In the case of a two-person group tell the respondent the possible answers are "1" (neither of you have done this), "4" (one of you has done this), or "7" (both of you have done this although not necessarily at the same time).

Coding Clarifications: The Gold Card represents a continuum of proportions of group membership ranging from none ("1") of the group to about half of the group ("4") to everyone in the group ("7").

In the case of a dyad the possible answers are neither person ("1"), one person ("4"), or both people ("7"). In a dyad, if a respondent had been drunk many times, but the other person only once, the correct response would still be "7." The question asks what proportion of the group have ever been intoxicated in the past year when the respondent has been present, and in this example both persons have been intoxicated at least once.

Common Problems: Be sure to force the choice of a single digit. Only accept "1," "4," or "7" in the case of dyads.

Question #25 (d)

Intent: To determine the proportion of persons in the group who have ever abstained at times that the respondent has been with them during the past year.

Techniques: If it seems necessary, go back to the main heading of this question. Showing the Gold Card, ask the question as written or clarify by asking, "How many of you have ever not drunk at all when you've been together?"

Coding Clarifications: For dyads, "1," "4," or "7" are the only acceptable responses. In any group if every member has abstained at least once during the year but only once, the correct response would be "7." Remember, the question asks about the proportion of persons in the group who have ever abstained when the respondent has been with them in the past year.

Common Problems: Force the choices of a single digit. Accept only "1," "4," or "7" in the case of dyads.

Question #26 (a)

Intent: To determine the usual (most frequent) response by the group when the respondent has been with them in the past year to a person who has become intoxicated or extremely high. In the case of a dyad, the intent of the question is to ask about the response of the other person to drinking to intoxication by the respondent. If the respondent in the dyad has not drunk to intoxication, then the correct response is "not applicable" even if a frequent topic of conversation might be the drinking to intoxication of a non-present third party.

Question #26 (b)

Intent: To determine the usual, most frequent response by the group when the respondent has been with them in the past year to a person who has abstained from drinking at the time. In the case of a two-person group, the intent of the question is to ask about the response of the other person to the respondent's abstaining. If the respondent has never abstained when with the other person, then the correct response is "not applicable."

Techniques: Showing the Orange Card, ask, "When you have been with these people (or this person if a dyad) in the past year how have they (he or she) usually responded to a person who has abstained from drinking at the time? Choose the answer that best describes what happens most often."

Coding Clarifications: "Not applicable" is the appropriate box if no one in the group has abstained when the respondent has been with them in the past year. Coding Clarifications discussed in question 26(a) apply here.

Common Problems: If the respondent has difficulty with choosing the most usual response, encourage him to think about what occurs most frequently, more than any other. Common Problems discussed in question 26(b) apply here.

Question #27

Intent: To determine the respondent's overall perception of the group's general behavior regarding drinking when it is together.

Techniques: Showing the Green Card, ask, "How would you describe the group's overall behavior (or the overall behavior of you as a pair for a dyad) regarding drinking when you are together?"

Coding Clarifications: The response continuum ranges from, "1" which means in general abstaining, to "7" which means in general drinking to intoxication.

Common Problems: Allow only one digit to be chosen. Force choices between 2 alternatives. For example, if the respondent says, "between '3' and '4'," then ask, "Which is most characteristic, '3' or '4'?" The respondent may indicate that sometimes the group abstains except for one individual and at other times all except 2 or 3 drink to intoxication. Even in this extreme example, the respondent should be encouraged to choose one number which best represents the group's usual and most characteristic behavior.

Techniques: Show the Orange Card, and ask, "When you have been with these people (or this person if a dyad) in the past year how have they usually responded to a person who has become intoxicated or extremely high? Choose the answer that best describes what happens most often."

Coding Clarifications: "Did not mention it" or "ignored it" includes the situation in which no one seems to notice. It may also include a somewhat more active gesture of avoiding mentioning or noticing the intoxicated person.

"Encouraged drinking" includes people encouraging further drinking.

"Not applicable" is the appropriate box if no one in the group has become intoxicated when the respondent has been with them in the past year.

Common Problems: Instances may arise where the respondent has difficulty choosing the most usual response. He or she should be encouraged to think about what occurs most frequently. That is, which response happens the most times, more than any other? Even if many of the listed responses are characteristic of the group, the respondent should select the one that in his/her eyes best describes the group's response.

Some question might arise as to whether the "intoxicated person" must be a member of the group and/or whether the drinking to intoxication takes place in the presence of the group or before arriving at a gathering. The intent of the question is to determine the norms and values of the reference group as they are applied to the members of the group, not to outsiders. Whether the intoxicated person has arrived in an intoxicated state or becomes so does not matter. The response to the person, however, is what is asked about.

Special Instructions Regarding Questions #22 through #27

After completing questions 22 through 27 for each of the groups, return to the answers provided for all of the groups.

- (a) Examine the time spent with each group. Allowing an average work week of 40 hours, 56 hours for sleep, there is a maximum of 72 hours left.

If the respondent has not indicated a large portion of his time (accounted for 35 to 72 hours), ask what he/she does with his/her non-working time. "Do you spend time alone? Doing what?"

- (b) Examine the perceived difficulty in separating from a group and compare it with the number of hours spent with the group.

If there are disparities, probe as to why the group is so important. For example, the person spends only 3 hours per week with the group but indicates extreme difficulty in leaving the group (reflected in his/her choice of "6" on the yellow card). If a disparity in the opposite direction occurs, probe as to why he/she spends so much time with a group that does not seem important to him/her.

- (c) If you discover information which suggests incorrect responses by the respondent to a specific question, go back to that question and check the accuracy of his/her response.

Question #28

Intent: To determine the nature and range of behaviors the respondent uses to cope with stress and inner conflict and to determine the frequency of use and effectiveness of each strategy.

Techniques: Since the respondent may employ a broader range of strategies than he/she is aware of, the question is posed in a way that simply elicits the actual behaviors of the respondent when under stress. It is important that the respondent tell you a specific behavior, like, "I talked to a friend," or, "I went out drinking with some of my co-workers."

The interviewer should ask about the consequences and frequency of the use of each behavior as the respondent mentions it, rather than listing all the behaviors first and going back for the other information.

Once the respondent mentions the behavior, the interviewer asks for the impact or effect of that behavior on the stressful feelings or problem: "What happened?" "How did things turn out?" The interviewer then determines which coding category most closely fits the respondent's answer, and presents it to the respondent as a question to make sure it is accurate. The interviewer then codes the response into one of the five categories shown.

The interviewer then asks how often the respondent has done this in the last year, and codes the response into the frequency categories shown. The interviewer needs to be aware that the respondent may also use these behaviors when not under stress, and therefore should ask, "Now, when you were feeling upset, tense, or bothered, how often did you _____?" State the four alternative answers for the respondent to choose.

Coding Clarifications: Sometimes the interviewer's judgment is necessary to determine whether mention of similar behaviors is one or more activity. For example, "I read a book or a magazine" most probably is one activity, whereas, "I read or watched television" is two. Similarly, "I did something physical like jogging or calisthenics" would be two separate activities, whereas, "I'd move around or walk to clear my head" would probably be one.

Coding clarifications regarding consequences and frequency are best arrived at by asking the respondent directly which alternative is most appropriate.

Common Problems: The respondent may not know what you want when you ask, "What did you do at the time?" The interviewer should make clear that anything the respondent did when he/she was feeling tense is important. However, the interviewer should refrain from giving an example and should simply repeat or rephrase the question until the respondent understands.

The respondent may have trouble remembering what he/she did when feeling that way. The interviewer should refresh the respondent's memory by asking specifically about those feelings related to work, to family, to friends outside the family, or feeling that way in general. Once talking about a specific incident the respondent will usually recall a behavioral response.

The respondent may stop after mentioning one or two behaviors. The interviewer should ask, "Are there any others?" "Is there anything more?" until it becomes clear that the respondent's range of behavior has been completed. Do not, however, collect more than ten behaviors in the rare event that a respondent employs an unusually broad range of strategies.

The respondent's answer to the question about consequences may not immediately fit one of the coding categories. Usually the answer suggests in which direction, if any, the feelings changed, and the interviewer can present the respondent with the appropriate options to choose from. Sometimes, however, the answer does not suggest one of the options. Then the interviewer should begin to probe by presenting the respondent with Category number "1," asking, "Was there no impact, or effect on those feelings?" and use the answer to suggest the next alternative, if necessary.

Examples From Actual Protocols:

<u>What did you do?</u>	<u>Consequences</u>	<u>Frequency</u>
I. (a) talked to a friend	1	4
(b) watched TV	2	2
(c) wrote a poem	1	2
(d) had an extra 2 beers	4	4
(e) worked out (physical exercise)	2	2
II. (a) called people up	2	3
(b) cried/screamed	2	2
(c) wrote letters	2	2
(d) went to bed and read trashy novels	5	2
(e) ate sweets	5	3

Question #29

Intent: To determine the number of activities relating to self-control used by the respondent and to determine the frequency with which each activity has been practiced throughout the past year.

Techniques: The interviewer reads each question verbatim, and circles "yes" or "no." When the answer is "yes" the interviewer asks how often the respondent has done that activity in the past year, presenting the respondent with two or three of the coding categories to illustrate how the question should be answered. The interviewer then enters the number which corresponds to that answer on the line to the right of the question.

Coding Clarifications:

1 = Never	= Never
2 = Once	= Once in the past year
3 = Several times last year	= Two or more times in the past year, but no monthly pattern
4 = Once a month	= Once a month, as a regular pattern
5 = Several times a month	= Two or more times a month, but no weekly pattern
6 = Once a week	= Once a week, as a regular pattern
7 = Several times a week	= Two or more times a week, but no daily pattern
8 = Daily	= Every day, as a regular pattern

Some activities, like going on a diet or controlling smoking, are not single actions, but usually occur over a period of time. The interviewer should determine the duration of the diet, or the length of time the respondent tried to cut down or stop smoking, and code accordingly. Thus, if the respondent dieted for 2 continuous months, the appropriate coding category is "3" ("Several times last year"). If the respondent stopped smoking after his/her first attempt to stop smoking, then the appropriate answer is "Once." If the respondent has stopped smoking and started again three times during the past year, whether he/she is currently smoking or not, his/her response should be coded "Several times a year."

The questions are posed as specific behaviors, and therefore "promising myself I'll stop smoking" is different than actually trying. What is important is the number of times the respondent actually tried to control or avoid the behaviors mentioned.

Special Note on Questions Concerning Frequency

Questions about frequency are intended to be operant measures, which means that you ask the respondent, "On the average during the last year, how often did you blurp?" First, wait for and obtain the respondent's answer. Second, force him/her to be specific. Third, use the coding categories as confirming probes. Fourth, check the appropriate box on the protocol. If there is any confusion, start the confirming probes with the most frequent category which may be applicable.

DO NOT USE A PREPARED CARD WITH THE FREQUENCY CATEGORIES LISTED.

Coding Classifications for Questions 29, 30, 31, 53, 54, 55(1-40) Only

<u>Category</u>	<u>Interpretation</u>
1 = Never	= Never
2 = Once	= Once in the past year
3 = Several times last year	= Two or more times in the past year, but no monthly pattern
4 = Once a month	= Once a month, as a regular pattern
5 = Several times a month	= Two or more times a month, but no weekly pattern
6 = Once a week	= Once a week, as a regular pattern
7 = Several times a week	= Two or more times a week, but no daily pattern
8 = Daily	= Every day, as a regular pattern

In choosing the coding category which best represents the respondent's answer, remember that you are attempting to discover not only the frequency of occurrence but any patterns which may exist. The question you have asked begins with, "On the average..." as an initial attempt to uncover a pattern. Most of the time, the respondent's answers will be relatively easy to code. There will occasionally be responses for which the interviewer must infer a pattern. For the sake of reliability, a number of examples of coding somewhat ambiguous responses are listed below.

<u>Respondent's Answer</u>	<u>Coding Category</u>
● I jog once a week for about seven months each year.	Several times a month
● I have dieted every day for the last month (with no other dieting period).	Daily
● I have dieted every day for the last month. I also went on a diet once in the winter and again at the beginning of the summer.	Several times a year
● I go hunting every day hunting season.	Several times a year
● I get drunk every family holiday. (How often?) Birthdays, Christmas, anniversaries.	Once a month

The importance of frequency questions being operant measures arises from the bias of respondents to minimize the frequency of occurrence of "socially disapproved" events and bias toward maximizing the frequency of "socially approved" events.

Question #30

Intent: To determine the nature and range of recreational or relaxational activities of the respondent and to determine the frequency of each activity in the past year.

Techniques: People do many things for relaxation and recreation. Hobbies and sports are only examples, and the respondent should be encouraged to mention whatever activities he/she does for relaxation or recreation. The question is asked directly. For each activity listed determine the frequency of its use. Use the same scale for coding frequency as in question 29.

Coding Clarifications: Some recreational activities are seasonal: hunting, fishing, skiing, going to the beach. In season, the respondent may do these weekly, or even daily. The appropriate response for such an activity is "3" ("Several times a year"), since they are not done weekly or daily throughout the year.

Examples From Actual Protocols:

I.	(a) go out on Fridays	6
	(b) yard sales on Saturdays	6
	(c) go to a show or a movie	3
	(d) go bowling	5
	(e) have coffee with girl friends	8
II.	(a) read	7
	(b) walk	7
	(c) sightsee at museums or parks	6
	(d) watch TV	7
	(e) go on picnics	3
III.	(a) go skiing, running, hiking	3
	(b) reading	8
	(c) watch TV	7
	(d) writing	7
	(e) visit people	7

Question #31

Intent: To determine the nature and range of self-improvement or self-development activities which the respondent does in addition to other activities and to determine the frequency of these activities in the past year.

Techniques: The question is asked directly. The frequency of the activity is determined for each activity listed.

Coding Clarifications: The same scale for coding frequency is used as for questions 29 and 30.

Common Problems: If a respondent mentions an activity listed in the answer to question 30, do not repeat it. Re-state the question emphasizing the last phrase, "that you have not mentioned before."

Examples From Actual Protocols:

I.	(a) read history	8
II.	(a) take courses in a master's program	3
	(b) take a summer school course	3
III.	(a) reading	8
	(b) exercise class	2

Question #32

Intent: To determine the type and number of resources the respondent would turn to for help with personal difficulties.

Techniques: The interviewer asks the question verbatim, and presents the respondent with each set of potential helpers. "Would you go to a minister, priest, or rabbi?" "Would you go to a psychiatrist, psychologist, or social worker?" The interviewer then circles "yes" or "no" in the columns on the right.

Common Problems: The respondent answers "No" to all of them. Ask the respondent where he/she would go if help were needed. It may be that the respondent would not seek help with personal difficulties, in which case all "Noes" are appropriate. However, it may be that the respondent did not recognize his/her preferred source of help in the alternatives mentioned, and consequently said "No" to them all. In that case, code the respondent's preferred source of help in the closest available category. For example, going to your spouse or in-laws for help should be coded as a "Yes" to "Parents or relatives."

Question #33

Intent: To determine the number of organizations to which the respondent currently belongs and to determine whether the respondent is an officer in any of them or not.

Techniques: The interviewer asks the question verbatim, and records the organizations the respondent mentions. For each organization mentioned, the interviewer asks if the respondent holds office, and circles "Yes" or "No" in the columns on the right. If the respondent is not a member of any organization, enter "None" on the first line.

Coding Clarifications: It is not necessary to record the full name of the organizations or associations the respondent mentions. The interviewer may use abbreviations or shorthand names, particularly if they are well-known ("Masons," "VFW," etc.). If they are not well-known, the interviewer should enter an identifying note (such as "union," "professional association," "social club," etc.) after the name or initials.

More important is the number of organizations to which the respondent currently belongs. Each organization is entered on a separate line, with the officer status recorded for each. For example, if the respondent answers "three sportsman clubs" enter "Sportsman Club" on each of three lines.

Common Problems: If the respondent is a member of more than five organizations, continue listing them on the space below question 33. Continue to determine whether or not the respondent is an officer in any additional organizations listed.

Examples From Actual Protocols:

- I. (a) Sportsman club
(b) Sportsman club
(c) Sportsman club
(d) VFW
(e) Masons
(f) American Legion

- II. (a) College alumni club
(b) College alumni club
(c) Teachers Union
(d) Tennis club

- III. (a) Union

Question #34

Intent: To determine the number of miles a year the respondent drives.

Techniques: Ask the question as written.

Coding Clarifications: Code the answer as given. If the respondent has trouble giving an answer, read the alternatives to him/her.

Question #35

Intent: To determine the number of specific habits or routines which the respondent follows regularly.

Techniques: The questions are introduced with the statement on the protocol; circle "yes" or "no" in the columns to the right as the respondent answers.

Coding Clarifications: Habits must be regular in order to be coded "yes."

Question (a): Regular exercise program. This question does not define how often exercise is taken. If the respondent adheres to a regular schedule of exercise, daily or weekly, the response is coded "yes."

Questions (b) and (c): Morning and nightly routines. This question asks for a particular sequence of actions that the respondent invariably follows. Simply getting up, showering, and dressing would not constitute a routine. But always rising at the same time, first turning on the radio, then putting water on for coffee, showering and shaving with particular rituals, and all of that done in the same sequence would constitute a routine. The regular adherence to a specific sequence is important; the number of activities is not.

Question (d): Eating lunch at the same time every day. If the respondent always begins lunch within a fifteen-minute span, the response is coded "yes."

Question (e): Taking a drink before dinner. If the respondent invariably has a drink before dinner, or if not having a drink before dinner is an exception to the rule, the response is coded "yes."

Question (f) through (j). These questions are self-explanatory, and should present no coding problems.

Question #36

Intent: To determine whether the respondent has experienced somatic difficulties in the past three months and to determine whether there has been a change in their occurrence in comparison to the three months before that period.

Techniques: There are seven somatic difficulties listed, with two questions for each. First, ask if the respondent has experienced the specific difficulty in the past three months. Second, ask if the respondent has experienced this difficulty less, more, or in the same amount as in the preceding three months. The interviewer asks both questions for each somatic difficulty in turn, and circles the answers on the protocol. Remember, ask about changes in the level of occurrence of each difficulty whether or not the respondent has experienced the difficulty in the past three months.

Coding Clarifications: This question asks for somatic difficulties, regardless of origin. It is not necessarily a measure of psychosomatic difficulties, or hypochondria. Thus, even if the respondent caught a cold because it was going around at work, or if he/she has a muscular ache from physical exercise, the response is coded "yes."

Question #37

Intent: To determine what kinds of alcoholic beverages the respondent drinks.

Techniques: The question is asked directly and the appropriate boxes checked. If the respondent mentions only one or two of the beverage types listed, the interviewer asks if he/she drinks anything else, asking specifically about the types of beverages which the respondent did not originally mention.

Coding Clarifications: How frequently a type of beverage is consumed is not important here. If the respondent ever drinks one of the beverages listed, the box is checked.

Malt liquor and ale are classified as Beer. Vodka, scotch, bourbon, rye, blended whiskeys, rum, brandy and cognac are all classified as Distilled Spirits. Champagne is classified as a Wine (i.e., table wine).

Question #38

Intent: If the respondent drinks beer, to determine how often the respondent has drunk beer in the past year.

Techniques: The question is asked directly, and the appropriate box checked.

Coding Clarifications:

1 = Never	= Never
2 = Once	= Once in the past year
3 = Several times last year	= Two or more times in the past year, but no monthly pattern
4 = Once a month	= Once a month, as a regular pattern
5 = Several times a month	= Two or more times a month, but no weekly pattern
6 = Once a week	= Once a week, as a regular pattern
7 = Several times a week	= Two or more times a week, but no daily pattern
8 = Daily	= Every day, as a regular pattern

If the respondent reported in question 37 that he/she does not drink beer, check "Never" on this question.

Question #39

Intent: If the respondent drinks beer, to determine how many cans or glasses of beer the respondent consumed each time during the last year.

Technique: The question is asked directly, and the appropriate box checked.

Coding Clarifications: If the respondent reported on question 37 that he/she does not drink beer, check "None" on this question.

Question #40

Intent: If the respondent drinks beer, to determine the maximum amount of beer the respondent drank at any one time during the last year.

Techniques: The question is asked directly, and the appropriate box checked.

Coding Clarifications: If the respondent reported in question 37 that he/she does not drink beer, check "Do not drink beer" on this question.

Questions #41 to #49

The questions asked about beer consumption are asked in the same manner about the respondent's consumption of distilled spirits, wine, and fortified wine. If there are beverage types which the respondent reported not drinking (question 37), check box "1" for each question referring to that beverage type.

Coding Clarifications: Regarding wine or fortified wines, a quart bottle is roughly equivalent to 8 glasses and should be coded as "7 to 10." A pint of wine would be coded as "3 to 4."

Question #50

Intent: To determine how often, when drinking, the respondent drinks at home.

Techniques: The interviewer asks the question directly, and presents the respondent with the three choices for responding. The appropriate box is checked. The opening phrase of the question refers to all of the times the respondent has been drinking during the last year.

This and the next two questions concern a respondent's "relative" statements as to the location of drinking in context of *the number of times he/she drinks*.

Question #51

Intent: To determine how often, when drinking, the respondent drinks in a friend's home.

Techniques: Same as in question 50.

Question #52

Intent: To determine how often, when drinking, the respondent drinks in restaurants, clubs, or bars.

Techniques: Same as in question 50.

Question #53

Intent: To determine how often the respondent became intoxicated in the past year.

Techniques: The question is asked directly.

Coding Clarifications:

1 = Never	= Never
2 = Once	= Once in the past year
3 = Several times last year	= Two or more times in the past year, but no monthly pattern
4 = Once a month	= Once a month, as a regular pattern
5 = Several times a month	= Two or more times a month, but no weekly pattern
6 = Once a week	= Once a week, as a regular pattern
7 = Several times a week	= Two or more times a week, but no daily pattern
8 = Daily	= Every day, as a regular pattern

If the respondent is having difficulty answering, you may begin to list the alternatives. If you list some alternatives, begin by saying, "Daily, several times a week, once a week, etc." and pause. Let the respondent then tell you the frequency. It is important to start at the most frequent end of the scale if you are presenting alternatives.

Question #54

Intent: To determine how often the respondent drank alone in the last year.

Techniques: Same as in question 53.

Coding Clarifications: The respondent may ask if alone means no one else is in the house or at a bar. This question refers to not having anyone with you while drinking. Therefore, if someone else is in the house but not in the same room, for this question that would be considered alone. As to public drinking establishments, if the person did not enter with someone and talks to no one while he/she is at the establishment, it would be considered drinking alone.

Question #55

Intent: To determine which of the listed experiences the respondent has had in connection with drinking in the past year and to determine the frequency of their occurrence.

Techniques: There are forty statements of experiences people report having in connection with drinking. The interviewer introduces these statements by reading to the respondent the instructions written on the protocol. After reading each statement to the respondent, the interviewer circles "Yes" or "No" on the columns to the right of the statement. When the answer is "Yes" the interviewer asks how often the respondent has had that experience connected with drinking in the past year. The interviewer then enters the number which corresponds to the answer on the line to the right of the statement.

Coding Clarifications:

1 = Never	= Never
2 = Once	= Once in the past year
3 = Several times last year	= Two or more times in the past year, but no monthly pattern
4 = Once a month	= Once a month, as a regular pattern
5 = Several times a month	= Two or more times a month, but no weekly pattern

- | | |
|--------------------------|--|
| 6 = Once a week | = Once a week, as a regular pattern |
| 7 = Several times a week | = Two or more times a week, but no daily pattern |
| 8 = Daily | = Every day, as a regular pattern |

If the respondent is in school and not working, all items about work should be translated to refer to school. Similarly, if the respondent is both working and in school, these items should be translated to refer to both.

The interviewer may have to probe until the respondent's answer is codable into the frequency categories. The interviewer should attempt to get specific behavioral evidence to justify the level of frequency chosen. The simplest way to do this is to check back with the respondent to confirm the coding of the respondent's response. For example, asking the respondent, "So you would say that this occurred about once a week during the past year?" This would justify coding "6" ("Once a week") on the line to the right of the statement.

Common Problems: If the respondent stopped drinking at some point during the last year, ask the questions about the time when he/she was still drinking.

Several of the items may pose a problem if the respondent went on a binge and stayed drunk for a month. If this occurred, for those experiences involved you should determine how regularly each experience occurred during the binge and then determine how regularly each experience occurred during other times. Using both answers, derive a representative answer for the year. It will be rare to find someone who went on a "binge" for 20 or more consecutive days and did not drink in a similar manner for the rest of the year. For example, if a respondent went on a weekend binge three times in January, nine in February, then about once a month from March to November, you should classify any experience occurring during the binges as "Once a month."

III. INSTRUCTIONS FOR CONDUCTING COLLATERAL INTERVIEWS

Collateral interviews should follow the same procedures as the interviews with the DWI's. There are two differences in the interviews. First, the Collateral Interview consists of fewer questions. The interviewer should familiarize himself/herself with the Collateral Interview before conducting one. The second difference is that you are asking a person about another person's behavior and past experiences. You must remember to repeat the referent person's name in the context of the questions so that the respondent remembers that the interview is about this other person. The referent DWI, or referent subject, is the person who has been convicted of driving while intoxicated (e.g., the person about whom the questions in the Collateral Interview are being asked).

When asking the questions about the referent DWI's reference groups, remember you are asking about the amount of time the referent DWI spends with each specific group (question 6), how difficult it would be for the referent DWI to leave each specific group (question 7), and how many of the members of the group drink during the times that the referent DWI is with them. The last question asked about each specific reference group asks for the respondent's opinion (not his/her estimate of the referent DWI's opinion). When you ask question 9, make it clear that you want the respondent's view of each specific group's disposition regarding alcohol use or abuse.

When asking the items in question 22, be careful to be accurate with the gender. The masculine and feminine have both been listed in the phrasing of these items, but you should only use the gender appropriate for the referent DWI.