

A MULTIDIMENSIONAL ASSESSMENT OF VIRGINIA'S ALCOHOL SAFETY
ACTION PROGRAM

by

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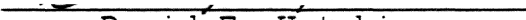
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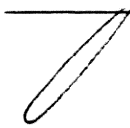
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(ABSTRACT)

The Alcohol Safety Action Program was introduced in the early 1970's as a comprehensive systems approach for reducing alcohol-related automobile crashes. This dissertation gathers evidence and insights helpful to planners, evaluators, policy-makers, and program implementors. Specifically, A.S.A.P. "Level II" effectiveness in reducing the recidivism rate among program participants was examined. A combination of quantitative and qualitative assessments of the program was performed to gain in-depth insight and to determine which program elements seem associated with its success or failure.

Quantitative analysis emphasized A.S.A.P. and non-A.S.A.P. participant two-year recidivism rates. Participants from two Virginia localities in 1977-80 were examined. Independent variables commonly held by both types of participants are age, sex, court delay, and prior offense records. Variables unique to each program were also examined.

Qualitative insights were gathered through interviews with current A.S.A.P. participants prior to and following program completion, past program participants, and course instructors.

An approximate three-to-one difference in recidivism rate was found between A.S.A.P. and non-A.S.A.P. participants. Variables significantly related to recidivism were prior D.W.I. offenses, court delay, prior reckless driving offenses, and age. Differences based on location were also found.

The interviews demonstrate basic satisfaction with the course. Participants cited the overall arrest experience as having the largest impact, with the course providing supportive information. The factor emerging to deter future behavior was the negative experience - the "hassle" - associated with the D.W.I. offense.

Overall, it appears that the blend of the educational and punitive approaches makes the A.S.A.P. program more effective than the alternative approaches being used. Specific recommendations emerging from the research are of four general types: administrative mechanisms, laws and policies, the A.S.A.P. course, and evaluation.

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I am also thankful to individual members of my dissertation committee for the variety of assistance - technical, conceptual, and emotional - provided throughout the many phases of this project. I am particularly indebted to

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DEDICATION

This dissertation is dedicated to my parents,
who have inspired me with the belief
that all things are possible.

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Chapter I

INTRODUCTION

The involvement of alcohol in highway crashes has been cited for many years as a contributing factor to these crashes. Why is it that individuals drive automobiles after having consumed alcohol, particularly when it is a widely known fact that alcohol is a depressant upon all of the body's functions? More important, what is being done to prevent such tragedies from occurring? What efforts are being made to deal effectively with the American public, both with regard to minimizing such crashes and with regard to deterring an individual arrested for involvement in an alcohol-related crash from repeating that behavior?

To provide focused attention to this timely social issue, this dissertation is directed toward gathering some evidence and insights which will be helpful to planners, evaluators, policy-makers, and those charged with the implementation of programs. Specifically, there are many approaches currently being implemented which attempt to reduce the loss of life, personal injury, and property damage related to alcohol abuse. One such approach centers around the handling of individuals arrested for driving while under the influence of alcohol. Some rehabilitative programs have replaced the

traditional sanctions of loss of the driver's license, a jail sentence, and a fine. The question of interest for this dissertation centers around the effectiveness of these rehabilitation efforts - are they effective in ameliorating the overall drinking driver problem, and under what conditions and for what types of individuals are they most effective?

In this initial chapter, a conceptual framework will be developed for the research undertaken. The role of alcohol in the American society, its involvement in traffic crashes, some understanding of prevention efforts, and attempts to ameliorate the problem will be introduced. This foundation will provide a basis for critical examination of a specific program - the Alcohol Safety Action Program - currently utilized throughout the country.

A HISTORICAL PERSPECTIVE

Alcohol has been a part of the American society for many years. The annual consumption of absolute alcohol¹ in 1880 was 1.72 gallons per person; one hundred years later, it was

¹ The term "absolute alcohol" refers to the amount of ethyl alcohol present in all alcoholic beverages. Ethyl alcohol is the intoxicating ingredient present in distilled spirits, wine, and beer. Although quantities vary within each type of alcoholic beverage, the following percentages are used to compute absolute alcohol: distilled spirits (41.4%); wine (12.9%); and beer (4.5%).

2.71 gallons per person, with most of the increase occurring during the past twenty years (U.S. Department of Health and Human Services, 1981, p. 17). Hearty drinking may have had its roots in the nineteenth century, as this was a period of marked social and political change. A spirit of individualism characterized much of American life during these formative years. Beyond this, an emphasis upon egalitarianism appears to have been symbolized by the cultural emphasis upon drinking to the point of inebriation - this was known as the "barbeque law" (Rorabaugh, 1979). Not only did drinking in groups give citizens the feeling of independence and liberty, but all men were "equal before the bottle, and no man was allowed to refuse to drink" since such refusal was "viewed as proof that the abstainer thought himself to be better than other people" (Rorabaugh, p. 151).

During this time, one major theme still having an impact today emerged. This was emphasis upon individualism in the use of alcoholic beverages. One's drinking habits were seen as an individual - indeed, a private - matter. The imposition of restrictions which would reduce excessive alcohol consumption was viewed as contrary to this individualistic spirit. In fact, what emerged was the feeling that one had a "right" to drink, and that nothing ought to interfere with this "right."

This emphasis upon individualism and one's "right" to drink resulted in many years of tolerance for the abuse associated with alcohol. American leaders did search for ways of dealing with the disruptive and other undesirable social consequences of abusive drinking. A well-known "solution" - the temperance movement - made alcohol use the only area of personal behavior which has resulted in two constitutional amendments. Such an extreme approach - the attempt to limit drinking itself - has reinforced the behavioral standard implicit in individualism whereby individuals do not interfere with the drinking behavior of others. Not only has the individualistic spirit been quite strong, but any efforts to assist others in modifying personal drinking behaviors may immediately be perceived as attempts to eliminate completely all drinking.

Just as the consumption of alcohol appears to be a virtually "taboo" area for social intervention, so also is the "right" of an individual to drive an automobile. The automobile seems to be integral to the lives of many Americans due to the prestige, convenience, and independence associated with it. Automobile use has become central to the lifestyle of Americans, and the idea that it is a privilege to drive seems to have become lost. Paralleling the apparent inability to intervene with one's alcohol consumption habits

is the apparent sanctity of driving an automobile. Further, the skill necessary to operate an automobile is often minimized as a relatively facile and automatic function. In reality, a variety of skills, from perception and judgment to coordination and reflex time, are essential for the safe operation of an automobile.

Merging these two fundamental themes provides the foundation for this dissertation's concerns. An individual may be skilled at driving an automobile, and may cause others no problem after the consumption of alcoholic beverages if he or she does not drive. Yet this person becomes a social threat if the decision is made to drive an automobile after consuming alcohol. Since alcohol is a depressant, reaction times are slowed, judgment is impaired, visual perception ability is decreased, and coordination is hampered. Clearly, one's ability to drive an automobile successfully, and thus safely, is decreased. Concurrently, one's chances of becoming involved in a crash are significantly increased after the consumption of several drinks.

It is the coupling of this risky situation with three additional points that makes this such a difficult area for intervention. First, many people (perhaps most) are reluctant to intervene with an individual's decision to drive while under the influence of alcohol. This reluctance to

intervene in another's driving behavior parallels the perceived inappropriateness of intervening with one's drinking behavior. Second, individuals typically fail to acknowledge the potential for their own involvement in an automobile crash. This may be due to a lack of knowledge about the deleterious impact of alcohol upon driving abilities, or it may be due to a feeling of immunity from any such tragic situation. Third, intervention in a particular situation is hampered by the fact that it is a drug-affected mind that is making the judgment regarding driving while intoxicated. The roadblocks to effective intervention thus appear fairly well-established.

DEFINING THE PROBLEM

How do we know whether or not there is a problem with drunk driving? First, it is imperative that an understanding of what is meant by "problem" be reached. Then, a clear definition of this specific problem must be made, as that helps to point toward solutions.

It is contended that a problem exists if an undue amount of unnecessary suffering and economic hardship is placed upon individuals, or upon society as a whole, as a result of specific activities (in this case, driving while intoxicated). What determines whether a particular level is "undue"

is certainly a judgment about which individuals will disagree, and over which negotiations and influencing discussions will occur. In a political setting, the assessment of an issue will result in competition with other issues also searching for attention and funding.

How is the particular issue of drunk driving to be defined? It can be looked upon in terms of the number of deaths and the extent of injuries which are a result of intoxicated automobile drivers. A related approach is to define it in terms of the dollar value of this loss. From a moral perspective, one can argue that drunk driving crashes cause much pain and suffering and that they should be eliminated to the extent possible. From a more rationalist standpoint, one can observe that the situation of drunk driving crashes is not unavoidable, and that attempts can be made which will reduce them. Consistent with this approach is the avoidance of the term "accident" when discussing alcohol-related crashes.

Acknowledging that interpretations of information and individual prioritization will occur regarding this issue, a common basis of facts is essential. Alcohol's involvement in highway crashes has been noted for many years as a significant factor. An oft-cited study printed in the Quarterly Journal of Inebriety in 1904 showed that a large proportion

of the drivers of "automobile wagons" had been drinking prior to their accidents. The author stated that "inebriates and moderate drinkers are the most incapable of all persons to drive motor wagons. The general palsy and diminished power of control of both the reason and the senses are certain to invite disaster in every attempt to guide such wagons" (quoted in U.S. Department of Transportation, 1978, p. 3). A General Accounting Office report (1979) cited research done in 1924 which showed that one-fourth to one-third of all automobile accidents resulted from drivers using alcohol. Holcomb did a study in 1938 which examined drivers involved in crashes and found that whereas 25 percent of the drivers who had crashed were drunk, only two percent of those not involved in crashes were drunk.

Current research shows that a high proportion of automobile accidents involve drivers who have been consuming alcohol. In a 1971 Forum on Alcohol Countermeasures, then-Secretary of Transportation John Volpe stated that "it is a fact that alcohol is involved in 50 to 60 percent of highway fatalities, causing as many as 30,000 deaths and 800,000 injuries every year" (p. 2). Volpe added that "it is a fact that problem drinkers, not social drinkers, cause at least two-thirds of these deaths" (p. 2). He added that "the 7 percent of drivers who cause 50 percent of the deaths can be

identified, can be apprehended, can be controlled" (p. 2). The Fourth Special Report to the U.S. Congress on Alcohol and Health (1981) concludes that traffic accidents are the major cause of violent death. Between 35 and 64 percent of the drivers in fatal accidents had been drinking prior to the accident, and between 40 and 55 percent of fatally injured drivers who had their blood alcohol concentration (B.A.C.) tested revealed a B.A.C. of at least 0.10. An average B.A.C. of 0.20 (more than double the legal level of intoxication for most states) was found for fatally injured drivers who were tested (National Highway Traffic Safety Administration, 1978). The alcohol related-highway crash "typically involves a single driver in a single vehicle striking a fixed object on or off the roadway. It occurs late at night or early in the morning on weekend nights . . . at a fairly low speed" (May and Baker, 1975, p. 144). Further, May and Maker observe that between 45 and 60 percent of all fatal crashes involving a young driver (under 20 years old) are alcohol-related.

A 1967 Task Force on Drunkenness showed that "there is probably no other area in the field of drug research and related dangerous behavior where the role of a drug as a precipitating factor in dangerous behavior is so clear . . . this is one of the prime areas where remedial action is dictated" (p. 39).

Alcohol is not only shown to be associated with driving accidents, but it has been clearly demonstrated to impair sensory, perceptual, psychomotor, and mental functions to a significant degree. The Task Force on Drunkenness cited above showed that impairment is visible even at very low concentrations of alcohol in the blood. . . . Laboratory tests and actual operation of motor vehicles on experimental field courses show that deterioration of performance occurs in many persons at blood levels previously considered minimal: i.e., 0.03 to 0.04 percent. Impairment becomes increasingly severe with increasing amounts of alcohol in the blood. At 0.10 percent, significant effects reportedly occur with all drivers (President's Commission on Law Enforcement and Administration of Justice, 1967, p. 37).

In addition to the humanitarian need to deal with this issue, the societal cost associated with these alcohol-related crashes is also an important factor. The U.S. Department of Transportation has noted the long-term losses in societal welfare. Consideration was given to the individual (pain, suffering, and consumption loss) and to society (property damages, medical costs, legal and insurance fees, and loss of productivity). To each fatal injury has been attributed a cost of \$287,000, resulting in a total annual cost of 6.5 billion dollars (U.S. Department of Transportation, 1978, p. 17).

In short, alcohol-related automobile crashes can be considered a problem which deserves attention - how much attention remains as a point for discussion. Let us now turn to three questions that arise from recognition of this problem. First, what is being done to deal with this issue? Second, how do prevention activities fit into these efforts? Third, with the efforts that are occurring, how effective are they? Once a better understanding of these concepts is gained, some concrete plans for a specific research problem can be identified.

ATTEMPTS TO DEAL WITH THE DRINKING DRIVER PROBLEM

Traditional efforts to deal with the drinking driver problem have relied upon the apprehension efforts of law enforcement personnel. Individuals found guilty of driving while intoxicated² (D.W.I.) received a fine, a jail sentence, and/or a license revocation. To assist these enforcement efforts, chemical tests were developed to determine the amount of alcohol in an individual's body. A variety of laws - "per se," presumptive evidence, implied consent, and preliminary breath screening - have been enacted to aid in effective enforcement efforts.

² In Virginia, the offense is labeled Driving Under the Influence (D.U.I.).

Other types of efforts have been developed to supplement these traditional approaches. The health approach focuses upon underlying motivations for drinking and includes rehabilitation programs and therapies. Public information and education approaches are aimed at heightening the awareness of the public about the nature of drinking and driving problems. Technological advances comprise a further development, and include a breathtester, drunk driver warning and alcohol safety interlock systems for automobiles, monitoring devices, and sobering pills.

Passage of the British Road Safety Act in 1967 increased attention on the drinking driver in that country. This Act lowered the blood-alcohol concentration threshold at which an arrest for driving while intoxicated could occur. It also incorporated pre-arrest, roadside breath tests for drivers involved in accidents or moving violations. The notable success of this Act, coupled with the publicized success of Scandinavian efforts at controlling drinking and driving offenses during the 1960's, focused further attention in the United States upon the growing unacceptability of existing methods used to deal with similar offenses. Specifically, major concern arose regarding the continually increasing number of alcohol-related automobile deaths on the nation's highways.

In this country, the Federal Highway Safety Act, passed in 1966, focused attention upon the issue of highway safety and, as part of this, the problem of the drinking driver. A 1968 report to the Congress by the Secretary of Transportation identified alcohol's role in highway crashes. The Secretary of Transportation indicated in 1969 that "he would initiate a comprehensive countermeasure program to reduce alcohol-related death and injury" (U.S. National Highway Safety Bureau, 1970, I-i).

Strong impetus for such a comprehensive and somewhat coordinated effort emanated from an examination of the status of activities then dealing with this problem. In the hearings regarding the Highway Safety Act, President Johnson is quoted as stating

Our knowledge of causes (of traffic accidents) is grossly inadequate. Expert opinion is frequently contradictory and confusing. Existing safety programs are widely dispersed. Government and private efforts proceed separately without effective coordination. There is no clear assignment of responsibility at the Federal level. The allocation of our resources to highway safety is inadequate (p. 1).

To attempt to rectify this situation and to deal effectively with the drinking driver within the societal context, the National Highway Traffic Safety Administration initiated plans for a major national alcohol emphasis program to deal with the drinking driver problem. With this, the Alcohol Safety Action Program was born.

THE ALCOHOL SAFETY ACTION PROGRAM

The approach agreed upon was called a "systems approach." It was described as following this approach because it combined enforcement, judicial, rehabilitative, educational, and informational methods. This approach, embodied in the Alcohol Safety Action Program (A.S.A.P.), encouraged communities to include those countermeasures which they deemed to be desirable and effective in their specific locality. The plan was for the Federal Government, through the National Highway Safety Bureau, to provide advice, assistance, and financial support to states and communities attempting to implement effective countermeasures.

Thirty-five jurisdictions received seed funding to get A.S.A.P. programs initiated during the initial years of this systems approach. Since that time, countless other communities have established A.S.A.P. programs or similar programs under a variety of titles. Every state has an effort of some type for dealing with individuals convicted of driving under the influence.

Several assumptions are found to be underlying this program, and are cited in the initial description of the A.S.A.P. effort (1970). First, it is assumed that it is possible to achieve significant reductions in alcohol related traffic injuries through a "well-designed and properly

implemented program." Second, it is assumed that leadership must be provided by the Federal government so that a new approach can be implemented. That there must be a distinction between the social drinker and the problem drinker is the third assumption. Fourth, it is assumed that countermeasures directed at the problem drinker will also have a deterrent effect on the heavy social drinker. Finally, it is seen as necessary to have inter-agency coordination to treat known alcoholic drivers.

Three essential elements were identified as central to the A.S.A.P. effort. First, there needed to be thorough and accurate identification of the problem drinker so that appropriate countermeasures could be implemented both prior to and following an arrest. The second major element underlying A.S.A.P. included decisions by the courts and licensing authorities regarding the most appropriate ways of dealing with a convicted drunken driver. The final element was action to minimize driving after drinking and to assure that the individual's decision to not drink and drive was actually carried out.

Planners of the A.S.A.P. program envisioned four major steps that needed to occur concurrently. First, research and development regarding the specific role of excessive drinking in highway safety was an essential foundation

point. Field demonstrations of specific countermeasure activities were desirable for gathering this knowledge. Second, public education and manpower development were necessary. The public deserved education regarding the true nature of the drinking driver problem and the nature of the law enforcement efforts that would be implemented. Also important was the training of law enforcement, court, and other personnel so that they would be more effective in their countermeasure activities. The third step involved the development of a comprehensive A.S.A.P. program at the local level. Finally, State-level program assistance was vital so that the leadership and seed-funding for community efforts could be provided.

The project description also identified seven specific objectives to meet the overall purposes of reducing the role of alcohol as a causal factor in highway fatalities and injuries. One objective was to demonstrate program feasibility and methodology. A second objective was to generate major impact and visibility across the country, thereby gaining public support and pressure for further action. Third, states and communities were to be stimulated to develop programs more widely in a comprehensive manner. Another objective was to save lives and reduce injuries in the involved communities. Fifth, an objective was to study

the impact of "intensive multifaceted" countermeasures programs. A sixth objective was to evaluate cost effectiveness of specific countermeasures and groups of countermeasures. Finally, an objective was to document the legal, administrative, and political problems associated with implementation of the countermeasures.

Thus, we have the establishment of a concrete, multi-faceted approach designed to combat the problem of drunk driving. This approach is subsumed under the global approach of "prevention," a topic to which attention is now directed.

A PREVENTION MODE

Although many of the elements of the A.S.A.P. approach, as well as those found with traditional efforts, appear to be simply punitive in nature, there is also a substantial element of prevention incorporated. In fact, "detering future misconduct is probably the principal aim of criminal sanctions" (Zimring and Hawkins, p. xi). The idea of deterrence - of preventing individuals from activities which would likely lead to a problematic situation involving them and possibly others - is central to this countermeasure activity with drunk driving. The attempt is to deal effectively with both the potential drinking driver and the actual drinking driver, and to do so within the context of our society.

With the potential drinking driver, the desire is to modify behavior so that the behavior of drinking while intoxicated does not take place. This behavioral approach may emphasize drinking limitations or alternative transportation arrangements. For the actual drinking driver, prevention of a problem includes attempts at identification and removal from the highways, arrest, jail, fines, operator's license suspension, and rehabilitation so that such problematic behavior does not recur.

The prevention efforts are not expected to be completely effective. The attempt is to minimize, to the extent possible, the occurrence of drinking and driving behavior. Even in Scandanavia, where laws are very stringent and the social norms are strong against driving while intoxicated, a notable percentage of drivers do, in fact, drive under the influence of alcohol.

As just observed, any approach for dealing with the drinking driver problem must focus upon more than the individual - it is very important that the individual be considered within the overall societal framework. This context includes such elements as enforcement officials, judicial agents, and rehabilitation processes. Further, it includes an acknowledgment that society's values call for more than simply dealing with the drinking driver (potential or actu-

al): the desire is to deal with this individual fairly. In a society based on individual rights, there are limits on strictly utilitarian decision-making. Similarly, there are legal and prudential constraints on questions that can be asked and information that can be gathered. For example, if, as discovered by Perrine (1974), potential high-risk drivers can be identified at the time that a driver's license is issued, is it appropriate and desirable to impose additional constraints upon the individual prior to the issuing of the license?

Another theme underlying deterrence efforts is the distinction between prescriptive and proscriptive elements. Prescriptive approaches are those which provide norms and guidance. Proscriptive deterrence uses prohibitions and associated sanctions. Frankel and Whitehead (1979) observe that "societies characterized by social norms that have definite prescriptive and proscriptive components governing drinking behavior are likely to have low rates of damage" (p. 15). It is the combination of the two elements which is important, as the existence of either one singly seems not to be as effective.

There is a similar dichotomy for viewing the prevention of the problematic drinking driver behavior. From one perspective, what are those factors which tend to inhibit this

problematic behavior? Items included here may be the risk of being detected, the criminal record, the public embarrassment, the potential of having an accident, the financial burden, and the violation of a law. Alternatively, what are those factors which tend to encourage responsible behavior? Social approval, personal safety, well-being of others, and a concern for the public well-being can be included. Traditional deterrence efforts focused upon the former method; the A.S.A.P. approach marked the recognition that additional methods should be attempted.

This broadening of the deterrent strategy was an acknowledgment that criminal sanctions alone are not sufficient to deal with the problem of drunken driving. Individuals caught driving while intoxicated need to be dealt with effectively, within their own personal social context. Recognition came that legal sanctions often do not effectively deal with problematic behavior. Attempts need to be directed at the offending individual and focused upon the reasons for the drunk driving behavior. Specifically, rehabilitation efforts were viewed as a critical component of any meaningful effort.

Thus, prevention efforts focused upon two distinct populations - the general public (the potential drinking drivers) and those actually involved in drinking and driving be-

havior. Zimring and Hawkins observe that "drunk driving is a crime which has not traditionally commanded much public attention or police enforcement priority" (p. 345). When combining this observation with the noted emphasis upon "inhibiting" factors, much of the American population can be considered as potential offenders. The approaches utilized with those apprehended for driving while intoxicated have included punishment and, more recently, rehabilitation. These approaches have as their aim a deterrent effect with both populations - the general public and those involved in drunk driving.

A LOOK AT EFFECTIVENESS

Narrowing more specifically upon the rehabilitation approach of the A.S.A.P. program, how effective are these efforts? And why is it important to examine this program's effectiveness? There is currently much emphasis upon this rehabilitation approach to help rectify the problematic drunk driving situation. Significant amounts of funding are used to implement this program. Further, much effort is directed to training individuals to rehabilitate convicted drunk drivers. If the program is, indeed, not effective in dealing with the problem (or is not as effective as it could be), then both money and effort are being wasted.

More important than these factors is the reliance by the American public upon this program. Drunk driving does cause tragic loss of life, personal injury, and property damage. Individuals at all levels, from legislators and administrators to the citizen and even the drinking driver, do wish to have this problem reduced. As individuals and as a society, we desire to implement approaches which are effective in dealing with the problem. If our society truly does not wish to have drinking drivers on the highways, it is vitally important the the mechanisms chosen to deal with these individuals be carefully and fairly assessed to determine whether or not they are doing the job which they purport to do.

Thus, an examination of effectiveness is essential for the continued operation of a vital social program. We need to know whether to continue such efforts in their present form, or whether modifications should be made which will be helpful in better meeting the established goal of reducing drunk driving tragedies.

Before proceeding further, it is important to understand several issues which underlie the development and implementation of this "rehabilitation" portion of the Alcohol Safety Action Project. A primary assumption is that individuals who have been convicted of drunk driving can, indeed, be rehabilitated. The belief in an educational approach is very

strong. Concurrently, one may argue that the educational approach is a "soft" or not very stringent manner of dealing with the drinking driver. One hears calls for jail sentences and mandatory loss of license for the drunk driver. Whatever stand one takes, the important issue is one of dealing effectively with the drinking driver.

Under A.S.A.P., individuals convicted of driving while intoxicated are often provided a rehabilitation opportunity. This would consist of attendance at series of educational sessions designed to minimize their later involvement in drinking and driving behavior. Depending on the assessed severity of the individual's drinking problem, assignment is made to Level I (which is currently non-existent in Virginia, its components having been incorporated into Level II), Level II (for individuals classified as social drinkers), or Level III (for those classified as alcoholics or with extensive drinking problems). The Level II sessions are in a small-group format and typically include information, discussions, individual awareness, and group processing; the Level III sessions typically supplement the aforementioned elements with individual counseling.

With this background, we can now shift our attention to the effectiveness of these rehabilitation approaches. Two obstacles appear which relate to a more complete understand-

ing. First, only a few evaluative efforts have been undertaken in attempts to provide insight on this topic. Second, those evaluative efforts have failed to demonstrate conclusively how and why rehabilitation programs impact upon participants as they do.

Globetti (1975) commented upon a review of drug education programs in general, observing that only six of the one hundred examined had any type of evaluative effort. He observes that the situation was even worse in the field of alcohol (as contrasted with drug) education. He concludes that a primary reason for this dearth of evaluation is the methodological difficulty inherent in trying to detect significant changes in attitudes and behavior. A related reason is the difficulty in having an equivalent control group for meaningful comparisons. This latter difficulty results from issues of fairness and comparable treatment of individuals. Gibbons, Lebowitz, and Blake (1976) observe that we are not yet at a point where controlled experiments can be used, and thus we rely upon relatively "weak" methods of evaluative research. They note further that, until recently, "'people changing' endeavors in the area of corrections have proceeded by trial and error and by intuition," resulting in a tendency "to operate in blissful ignorance of program impact" or to leap "to naive conclusions from crude statistics" (p. 309).

Due to these methodological constraints, research evidence is found which points in several directions. Evaluative studies can be found which demonstrate a significant difference in individual attitudes for a period of time from six months to three years. Some studies even show that participants in a rehabilitation program actually exhibit less "rehabilitation" or "progress" than non-participants. Although the research data tend to favor the constructive impact of rehabilitation efforts, the evidence, as discussed in Chapter II, does not point unequivocally to this conclusion.

What, then, do we know? One important finding is that there needs to be a differentiation between social drinkers and problem drinkers. The reason for separate treatment approaches is based upon the different needs of these individuals. Waller's often-cited research of 1967 shows a difference in the general pattern of stress and deviancy in the backgrounds of many of those convicted for driving while intoxicated. Whereas some individuals may drive while intoxicated only occasionally, others may do so on a more regular basis. This difference between the social drinker and the problem drinker has been identified as important in the A.S.A.P. approach as one recalls the differentiation between Level II and Level III treatments. Some individuals will

hypothetically benefit from an approach of simple information-sharing, whereas others need personal counseling to deal effectively with the factors underlying their drinking and/or drinking and driving behavior.

To proceed in gaining insight regarding the effectiveness of rehabilitation efforts, rational analysis of the topic is essential. Appropriate problem definition is the first essential element. Included also is the need to identify what assumptions are being made. Of additional importance is a clear statement about what rehabilitation efforts are intended to do (i.e., reduce recidivism, reduce driving while intoxicated offenses, reduce alcohol-related crashes). As Robertson, Rich, and Ross observed in 1973, "if we are not judicious in careful analysis of assumptions and the evidence on which they are based, we shall continue to mount campaigns which are costly in money, time, and effort and which preclude development and application of effective ones" (p. 67).

LOOKING AHEAD

How does a research effort measure effectiveness? Within the existing framework, is it even possible to consider meaningful evaluation efforts? How does one avoid mounting "campaigns which are costly in money, time and effort"? How

can one implement a rehabilitation program so that it will have the optimal impact upon the optimal number of people, utilize the resources in the most cost effective way possible, and do so in a manner which is consistent with established societal values?

One approach recommended by Brown, Zelhart, and Schurr (1974) is to change the overall evaluative approach used. They observe that the evaluative model typically employed in reeducation programs for alcohol-impaired drivers has been the "Prove It Model." Consistent with objections already noted, evaluations are observed to have been ad hoc and without adequate experimental controls. They suggest that a more appropriate question for evaluative efforts is "how can we improve the program so that its major objectives and sub-objectives are more effectively realized" (p. 751)? This might be called an "Improve It Model." This approach emphasizes continuous improvement of existing programs and a full appreciation of the complexity of elements involved in any rehabilitation process, in contrast to the measurement of a single criterion.

This approach fits well with the concerns noted above regarding relatively weak methods of evaluative research raised by Gibbons et al. (1976). These writers suggested that "a consistent set of observations on program impact,

growing out of several kinds of 'weak' research techniques, provides a better basis for confident conclusions than would the result from one method alone" (p. 319).

To attempt to reduce much of the uncertainty surrounding the effectiveness of drunk driver rehabilitation programs, a multidimensional evaluative approach is proposed. Acknowledging both the methodological problems inherent in any single approach and the need to gather more conclusive evidence regarding the effectiveness of a program which is relied upon by many, a research design which combines quantitative and qualitative elements will be utilized for this dissertation. This blend of approaches will add to existing knowledge of the effectiveness of the rehabilitation effort by introducing insights by those intimately involved with the program. Further, the nature of the quantitative analyses utilized will enhance our understanding of the factors relevant, and not relevant, for increased effectiveness of the program. This analysis yields, as we shall see, a series of insights and recommendations for a rehabilitation program which should make an enhanced impact upon the participants, thereby reducing a large portion of the drinking driver problem for not only them, but also other citizens.

Chapter II

REVIEW OF THE LITERATURE

To understand how to assess more appropriately the attempts utilized to deal with the drinking driver problem, an analysis of the variety of facets surrounding this issue is needed. Acknowledging that it is the human factor, in contrast to environmental conditions, roadway elements, and automotive malfunctions, which is the primary cause of accidents, one needs to learn how best to make adjustments in human behavior in order to minimize tragic results. But it is not the human factor standing alone which is of significant concern. Since the human errors of "lack of comprehension, misjudgment, improper driving and speeding" are "generally brought on by the effects of alcohol" (May and Baker, 1975, p. 144), focused attention to this human error is vital.

A variety of elements in human behavior are appropriate for gaining this understanding. First, a brief look at typical intoxicated drivers, and how alcohol is shown to affect them, is desirable. Alcohol's role as a depressant, thereby impairing an individual's ability to drive, will be substantiated with research results. Also to be examined are the "typical" types of individuals found in alcohol-related automobile crashes. In addition to traditional demographic

characteristics, one's overall drinking characteristics will be shown to be of significant import.

The second aspect of this chapter will include some introductory comments regarding a prevention philosophy. Deterrence efforts of a general and a specific nature will be highlighted, as well as situational policies and individualistic policies. The need for a more broadly-based deterrence approach is called for, as traditional general prevention approaches are noted as insufficient to address the problem. A broader focus which includes the decision-making environment, and not just the drinking situation, is recommended. This section provides further attention to the types of conditions which tend to result in problematic drinking behavior.

Following this, it is essential to learn what efforts have been attempted to deal with the drinking driver problem, and how effective these attempts have been. First to be examined will be the legalistic approach. Included in this are traditional, primarily punitive sanctions. Deterrence, a central element of the philosophy underlying the legalistic approach, has several components of its own which will be observed. The effectiveness of enforcement efforts, with an examination in the United States and abroad, will be highlighted.

This examination will also include the the Alcohol Safety Action Program and other general rehabilitation efforts. The background of this comprehensive intervention program, including its goals, objectives, and general approach, are included in this section. Cited will be research studies which both support and criticize the effectiveness of this approach. Other rehabilitation efforts similar to the A.S.A.P. approach are cited, with attention again being provided to observations regarding their effectiveness. Worthy of note with these research examinations is the fact that a variety of different criteria is utilized for determining effectiveness. Innovative approaches are also cited in this section.

Then, a brief look at what can be learned from drug and alcohol education programs will be made. The experiences of educators and programmers with regard to group size and general format are cited. Attention is also given to the effectiveness of these approaches. Further, some brief comments based on learning theory are made.

The program evaluation literature should also be briefly reviewed to provide some foundation for the development of an appropriate research methodology. This will be done at the beginning of Chapter III to serve as an introduction to the methodology designed for this dissertation.

SOME PRELIMINARY UNDERSTANDINGS

How is it that alcohol affects performance, and who is typically involved in alcohol-related crashes? As just indicated, crashes generally occur due to some human error - there is usually an imperfection of some type which results in property and often human loss. One needs to understand better these elements if there is to be some adjustment to minimize these losses.

Alcohol is known to be a depressant. As such, it slows the body's physical and mental functions. Attwood, Williams, and Madill (1980) summarize generally accepted findings regarding alcohol by observing that it "impairs the abilities necessary for good driving" (p. 623). The reason for this impairment is that "driving is not a simple task that can be described by one variable. Instead, it is composed of a number of interwoven, highly related behaviors" (p. 624). In an earlier study, Larrell (1977) observes that four types of research have been done regarding the impairing effects of alcohol on driving performance: examining accident rates and comparing intoxication levels, laboratory testing with an assumed relation to traffic safety, performing tasks which resemble driving (e.g., using a simulator), and driving on closed courses. He reaches a similar conclusion as Attwood et al., commenting that all four kinds of

research conclude that "alcohol does impair driver performance" (p. 191). Specifically, alcohol affects perceptual functions as well as coordination and reaction times.

Jones and Joscelyn (1978) are a bit less conclusive, observing that "the exact nature and extent of the impairment and its frequency of occurrence among different individuals at given B.A.C.s³ cannot be stated" (p. 25). They continue by stating that "without an explicit relationship, it cannot be said precisely how an observed impairment affects the probability of having an automobile accident" (p. 25).

Equipped with the basic knowledge that alcohol serves to impair driving even if exact linkages are not known, it is helpful to understand what types of individuals typically drink and drive. First, a differentiation often made between types of individuals is needed. "Social drinkers" are individuals for whom alcohol is an accepted aspect of interaction, and for whom alcohol does not cause any interference. "Problem drinkers" are individuals for whom alcohol is a factor in problems found in human interaction, daily living, or specific events. It should be noted that an individual may be a social drinker on one occasion, yet be a

³ The measure of Blood-Alcohol Concentration (B.A.C.) is based on the weight (in grams) of the amount of alcohol in a given volume (per 100 milliliters) of blood. Thus, if an individual had .01 grams of alcohol in a sample of blood with a volume of 100 milliliters, the B.A.C. would be recorded as 0.10% w/v.

problem drinker at another time. Individuals classified as "alcoholics" have a physiological addiction to the drug alcohol, and there is typically significant interference with daily functioning.

May and Baker (1975) find that the individual involved in an alcohol-related crash is typically "male, young, unmarried, and a manual worker" (p. 144). Fifty percent of the individuals studied by these researchers had been driving less than ten minutes, and they were typically driving from a friend's home to their own home. "The accident typically involves a single driver in a single vehicle striking a fixed object on or off the roadway. It occurs late at night or early in the morning on weekend nights. The accident occurs at fairly low speeds" (p. 144). Jones and Joscelyn (1978) find that sex is one of the best differentiators of individuals involved in alcohol-related crashes - males are predominant. Jones and Joscelyn caution against any hasty judgments, however, observing that "this is due more to the fact that the men drive more than women (especially after drinking) than to any inherent difference between sexes in tolerance to alcohol" (p. 31).

Focusing on the age variable, Jones and Joscelyn (1978) observe that persons age 20 or less are less likely than other individuals to be among drinking drivers. Persons

over 60 also tend to be less represented. The research of May and Baker concludes that young drivers (defined as 24 or less) are disproportionately represented in alcohol-related crashes. The youngest and the oldest individuals are found less often than others among drinking drivers. Their research defines "youngest" as age 20 or less, where the cited research of May and Baker defines "young" as 24 or less.

Looking at other variables, Jones and Joscelyn (1978) again find that "no research provides any convincing evidence that occupation level, race, income, or education has any significant relationship to alcohol-crash risk" (p. 33). They also note that, although married individuals also comprise a higher percentage of those involved in alcohol-related crashes, these individuals comprise a higher percentage of those using the highways. Further, research has not differentiated between marital status and age as the primary influential factor.

An unusual finding is made by Brewer and Sandow (1980), who observe that crash-involved drivers who had a blood-alcohol concentration greater than 0.05 were more likely to have been involved in some secondary activity than the non-intoxicated drivers. Specifically, these individuals had been eating, lighting a cigarette, or turning to talk with a passenger at the time of the accident. Also of interest is

a finding by Waller (1974) that there is an over-representation of smokers in crashes of all levels of severity.

One major causal factor in alcohol-related crashes is the type of drinker - social drinker, problem drinker, or alcoholic. Problem drinkers and alcoholics, commonly believed to comprise 10% of the United States population, account for a disproportionate number of alcohol-related crashes. The President's Commission on Law Enforcement and Administration and Justice observed in 1967 that perhaps forty percent of the drivers responsible for fatal automobile crashes can be diagnosed as alcoholics. This observation is confirmed by Sandler, Palmer, Holman, and Wynkoop (1974). Zylman (1976) cautions that the role of alcoholics in crashes has been exaggerated, and that other stress factors often interact with a driver's alcoholism to result in behavior which leads to crashes.

Nonetheless, it is apparent that there is a disproportionate number of alcoholics and problem drinkers involved in highway crashes. It is also worthy to note that there is a greater tendency for crash-involved individuals to have a prior arrest for driving while intoxicated than is found in the overall driving population. Waller (1967) notes a general pattern of stress, deviancy, and multiple convictions with a significant proportion of those involved in alcohol-

related crashes or arrested for driving while intoxicated. He concludes that an approach which is strictly punitive in nature will not be effective in deterring future behavior of driving while intoxicated. The implication of this is that, when dealing with problem drinkers or alcoholics, an approach different from that used with social drinkers would be appropriate.

This observation is further supported by an experiment done by Pocock and Landauer (1980). These researchers questioned whether there would be any difference in the assessment of the severity of punishment for driving while intoxicated between individuals who had and who had not been previously convicted for this offense. Their results are insightful for the development of programs designed to minimize recidivism. They found that "in place of feeling shame and guilt the offender tends to regard his transgression as relatively trivial" (p. 111). Further, "punishment, instead of preventing the recurrence of the offence, causes the very opposite to happen" (p. 111). This group of drinking drivers may be undeterred by legal sanctions, and thus may require a significantly different approach for treatment.

A PREVENTION MODE

With this brief introduction into the nature of drivers involved in alcohol-related crashes and the impact that alcohol does have upon driver performance levels, attention is now focused upon the ways of preventing these crashes. By way of historical perspective, it is worth observing that the breadth of alcohol-related problems was noted in 1872 when the Commonwealth of Virginia established its Board of Health. One of the Board's five major requirements was the following:

It shall be the duty of the Board . . . to examine into and report what is the effect of the use of intoxicating liquor as a beverage, upon the industry, happiness, health and lives of the citizens of the state, and also what legislation, if any is necessary in the premises (reported in Chafetz and Demone, 1962, p. 110).

Two general types of prevention activities can be found - those directed toward the general public and those dealing with individuals convicted of driving while intoxicated. The former type of activities, commonly labeled general deterrence, emphasize the discouragement of citizens from driving after drinking. Specific deterrence approaches emphasize the reduction of recidivism rates for D.W.I. offenders. The importance of considering the general deterrence activities is that there is undoubtedly some carryover from the general public to the individual offenders. Further,

some insights into the specific deterrence approach will be gained. Some in-depth treatment of specific deterrence approaches will be made in the chapter with an examination of the A.S.A.P. approach and other types of rehabilitation efforts.

In an overall sense, general prevention efforts have for many years been of two types (Gusfield, 1976). Situational policies have focused upon the physical facilities, environmental conditions, and conditions surrounding the sale of alcoholic beverages. Included in this are pricing structures, taxation, regulations for bars, advertising standards, and retail sales policies. Individualistic policies typically focus upon the individual directly, as the attempt is made to influence personal decisions regarding drinking. Found within this are legal aspects (drinking age, driving while intoxicated laws, drunkenness standards) and educational elements (advertising, informational materials).

Several problems are found with this general prevention approach, resulting in numerous calls for a more broadly-based prevention model. Whereas this traditional approach is held by many to be desirable for preventing alcohol-related problems, it is viewed as insufficient to meet effectively the challenges posed by alcohol in the American society. One problem cited with these general prevention

efforts is that there is the underlying assumption of perfection. Baker (1971) finds it "surprising to find plans that are based upon the premise that humans are infallible," and observes that there is an implicit "assumption that the driver can be educated, legislated or forced to perform 'perfectly'" (p. 39). He continues by stating that "because there will always be inadequacies with the vehicle, with the highways, and with the driver, and because law enforcement and medical services will always be imperfect, crusades and well-intentioned individuals will have no problem in identifying weaknesses" (p. 164).

Grasmick and Green (1980) carry this thinking somewhat further, suggesting that much research regarding illegal behavior assumes that all individuals will view a particular penalty equally severe. They suggest that attention must be addressed not only to those factors which are seen to inhibit illegal behavior (such as the threat of legal punishment, the threat of social approval and a moral commitment to the law), but also to motivating factors (such as anomie, conformity to deviant subcultural norms, and blocked opportunities). When attention is directed later in this chapter to the effectiveness of A.S.A.P. and other rehabilitation programs, it will be noted that individuals respond in differential manners to these approaches.

Another limitation with traditional general prevention approaches is found with the image portrayed of the D.W.I. offender. The drinking driver, observes Gusfield (1981), is typically portrayed as "drunk." Gusfield states that "embedded in the DUIA⁴ legislation is the image of the 'killer-drunk' and the hostile, antisocial menace" (p. 129). The emphasis is upon the drunken driver, rather than upon the behavior of driving after having been drinking. Further, the drunken driver is generally characterized as an alcoholic or problem drinker. While it has been shown that there are disproportionate numbers of such individuals involved in alcohol-related crashes, this should not, notes Gusfield, remove all attention from the social drinker. With this traditional focus, "the social drinker was taken off the hook" (p. 80).

An additional problem found with the traditional prevention approach is the underlying belief that once a policy or program is agreed upon, the results will easily follow. Baker (1971) states unequivocally that "it is not possible to legislate safety" (p. 123). The limitation centers around the implementation of the policy or program. More specifically, since there are over 33,000 governmental agencies having some jurisdiction over some part of the highway

⁴ DUIA is another label for D.W.I., as it stands for Driving while Under the Influence of Alcohol.

system (Baker), and since there are numerous others involved in various types of educational and rehabilitation efforts, progress may not be readily forthcoming unless there is the funding, capability, and commitment to carry out the program.

This view is further supported by Keller (1976), who suggests that prevention goals espoused by the Center of Alcohol Studies have not been pursued actively, but rather have been given "lip service." He suggests that "we haven't made more progress because we haven't learned how to prevent" (p. 25).

Adelstein (1976) moves this line of thinking further, observing that both voluntary agencies and official agencies "are susceptible to the empire-building proclivities of both their staff and board members" and can "become more interested in self-perpetuation than in whether or not the purpose for which they came into existence any longer exists" (p. 187).

Where, then, does this examination of common assumptions and identified problems leave us? Is there any approach currently being espoused which attempts to move beyond some of these limitations?

The manner in which the "problem" is framed affects the selection of "solutions." Gusfield (1976) contends that "a

common mode of conceptualizing the relation between drinking and driving problems . . . has unwisely curtailed the development of new approaches and restricted the reemergence of useful past approaches" (p. 268). He further observes that "methods of prevention . . . have depended chiefly upon the character of the problem as it has been perceived by those devising the policies" (p. 268). He concludes that "the way in which drinking problems have been conceptualized in the United States has unprofitably limited the range of potential prevention policies" (p. 270), and calls for the development of a creative climate for the careful assessment and implementation of new and old approaches for dealing with the problem.

One broadly-based prevention approach is referred to extensively in the literature on alcohol and drinking problems. This has as its core an emphasis upon the whole person and the development of appropriate life skills. Central to this "lifestyle approach" is an examination of why individuals have alcohol-related problems. Traditionally, the focus has been upon the drinking situation rather than upon the overall problem situation. Stated in another way, the drinking behavior may actually be symptomatic of underlying problems. The Task Force on Responsible Decisions About Alcohol (1977) concludes that the focus ought to be on daily

events like family and career activities, as these often underlie the problems that may result in the misuse of alcohol.

Miller and Mastria (1977) identify five categories of factors which may set the stage for alcohol consumption problems. First, social factors include boredom, social isolation, interpersonal conflict, stress, modeling, and group pressure. The second type of influential factors are emotional in nature, including stress and its context, and personality characteristics. Third, negative self-thoughts, retaliatory thinking, and guilt-related ideas comprise cognitive factors. Situational factors such as time, seeing others drinking, and common cues (e.g., advertisements) serve as another basis for problems. Finally, physiological factors - consumption to lessen pain, reduce physical discomfort, or alleviate withdrawal symptoms - may be a catalyst to alcohol problems.

Similarly, Straus (1976) cites the "quest for tranquility in an untranquil, fast-changing world" (p. 43) as the basis for increased problems with alcohol use. To him, alcohol abuse can be traced to lessened personal security due to increased mobility, rapidly accelerating change, altered roles and status of women, shifting sexual mores, alienation of youth, the threat of nuclear destruction, and concerns with

occupational obsolescence and meaninglessness. Options for dealing with this "quest for tranquility" have been, for many people, "so meager and unfulfilling that alcohol oblivion has emerged as the major state of existence on evenings, weekends, or vacations, or during all nonworking periods" (p. 45).

As Chafetz and Demone observed in 1962, "alcohol should not be singled out for special significance and defined as a magical substance to meet all needs and all problems" (p. 233). In a related observation, Mosher and Wallack (1979) comment that although the specific effects of advertising alcohol are unclear, it does appear that the alcohol product advertised is being promoted as being capable of satisfying the needs or desires of the consumer.

What is needed is a prevention approach which focuses upon responsible decisions about life events as well as about alcohol use. Responsible decision-making about life events includes an emphasis upon general decision-making, communications, values clarification, coping with stress, problem-solving, interpersonal relationships, and leisure activities (Task Force on Responsible Decisions About Alcohol, 1977). Miller and Mastria (1977) suggest teaching individuals alternative ways of coping with people, places, situations and feelings. They argue that if individuals

learn alternative ways of coping with potentially troublesome social-emotional situations, there will be no need for excessive drinking. Grant (1972) calls for an emphasis upon providing youth with a more self-actualizing, self-esteem building environment. With the creation of a healthy environment and self-attitude, there will be less of a tendency for an individual to engage in destructive behavior.

Moving from the general life skills approach to responsible decision-making regarding alcohol, Gusfield (1976) proposes a new strategy aimed to create a public atmosphere "that accepts moderate, safe, and responsible drinking and, by so doing, to diminish the cultural significance of heavy drinking as the major pattern of drinking and nonconforming behavior" (p. 278). He asserts that a focus upon responsible drinking behaviors is important so that drinking does not become an overwhelming focus of attention for a group. Consistent with this theme is the encouragement of "responsible drinking habits if one makes the choice to drink" (Globetti, 1975, p. 101). Responsibility for this emphasis rests as a community responsibility, as "no single agency is adequate for the task" (Globetti, 1975, p. 99).

The focus advocated in this prevention effort is thus upon the development of a healthy, adjusted, responsible individual rather than simply upon a responsible drinker.

Further, the emphasis goes beyond attacking alcohol problems and striving for ways of reducing them - the approach is one of searching out the ultimate causes which tend to underlie alcohol use and abusive drinking behaviors.

In spite of the overwhelming amount of literature touting the emphasis upon "responsibility," some notes of caution are found. Bacon (1976) observes that evidence is lacking with regard to whether educational programs designed to prevent alcohol problems have met their desired results. One possible reason for this, he observes, is that their purposes are generally identified in terms of the long range effect, whereas evaluations are typically done within a limited time period. Whitehead (1979) also notes that little evidence is found that efforts to promote "responsible drinking" produced marked changes in attitudes. More significant, he notes, is that demonstrated attitudinal change does not necessarily indicate behavioral change.

Several additional remarks directed toward general prevention approaches are relevant. As noted, many call for action focusing upon a lifestyle approach. Yet such an approach must involve commitment and action at all levels (federal government, state and local agencies, schools, churches, and families). The Tripartite Conference on Prevention (1977) concludes that, in the United States, "or-

chestrated behavior modification runs against the grain of current political rhetoric" (p. 38), as the government is seen as growing too oppressive. "Matters of personal health and well-being have traditionally resisted definition as public problems unless they implicate widely shared moral concerns" (p. 39). To help move toward such a public sharing in the drinking arena, there needs to be a clarification "in the public mind concerning ambiguities in boundaries between normal and deviant drinking behavior" (Milner, 1972, p. 103). The development of social norms with both prescriptive and proscriptive elements may be of further help in this effort. As Frankel and Whitehead (1979) observe, "societies characterized by social norms that have definite prescriptive and proscriptive components governing drinking behavior are likely to have low rates of damage" (p. 15). Clearly, a concise solution does not readily emerge; however, attention is beginning to be directed in a manner which differs from those traditionally found.

LEGALISTIC APPROACHES

An interesting supposition regarding the drinking driver problem revolves around what state of affairs would be obtained if the prevention approach worked - completely! Theoretically, if the prevention model were one hundred per-

cent effective, there would be no instances of behavior of driving while intoxicated. Although there may continue to be automobile crashes, none of these would be alcohol-related. With such a world, there would be no need to arrest, prosecute, sanction, or rehailitate D.W.I. offenders. Indeed, with no offenders, there would probably be no need for any laws surrounding this issue.

Clearly, such a state of affairs does not or will not exist. Indeed, this country seems to be a significant distance away from this trouble-free world (at least as far as the drinking and driving issue is concerned). We need to affect social action by laws and their enforcement.

What is our stance with regard to the approaches typically referred to as "legal?" While these approaches are not to be contrasted with "illegal" ones, their focus is quite narrow and is based upon the content, enforcement, and interpretation of the law. Throughout the legal approach is interwoven the concept of deterrence.

By way of overview of the legal approach, it is helpful to understand the three primary effects incorporated with this. First, there is a general deterrent effect. Individuals may choose not to participate in illegal behaviors due to their moral commitment to living within the framework of the law, or because of their perception that they may be ap-

prehended for violation of the law. Further, they may perceive the inherent "goodness" of the law, and avoid the behavior (which they believe to be undesirable in its own right, such as driving while intoxicated) prohibited by the law. A second major effect of the legal approach complements the general deterrent effect - this is the specific deterrent effect. Just as observed in the treatment of the prevention model, the specific deterrent consideration emphasizes attempts to deal with the individual convicted of a driving while intoxicated offense. The focus here is one of reducing recidivism. The final element of the legal approach consists of the strictly punitive portion - there is a strong "get tough" approach for handling individuals convicted of violating the law. Zimring and Hawkins (1973) view punishment as pain or deprivation inflicted on an offender for the offense committed.

With respect to the deterrent aspects of the legal approach, what is it that helps this to be effective? What attributes must be incorporated in a legal approach for it to serve as an effective deterrent? How, then, does the deterrence approach take into account the variety of different individuals who are to be affected by its influence?

As indicated in the previous section of this chapter, Grasmick and Green (1980) differentiate between those fac-

tors which tend to inhibit illegal behavior and those which motivate one toward such behavior. Different approaches appear to work for different people. While the vast majority of the public may be deterred effectively through prevention efforts, others may need some general deterrence activities. Beyond this, some individuals will still not be affected, and specific deterrent approaches and/or punishment will be used. Addressing this issue, Meier and Johnson (1977) ask under what conditions the threat of a legal sanction actually deters a potential violator from engaging in illegal behavior.

Geerken and Gove (1975) carry this thought several steps further. They begin with the observation cited above that the same risk of punishment does not have an equivalent effect on each individual. Further, it is the perceived (not the actual) risk and severity of punishment upon which an individual makes the decision to behave in a particular manner. They suggest that deterrence be viewed as more than a sanctioning system; specifically, it should be seen as a means whereby information is transmitted. This "communication mechanism" should inform a potential offender that:

(1) If he commits a criminal act, there is a high probability of detection by the authorities (2) Once detected, there is a high probability of being caught, conviction, and punishment (3) The severity of punishment is great enough to affect any gain achieved through the criminal act (p. 499).

Summers and Harris (1979) build on the communications model by suggesting that increased legal approaches (such as enforcement) are not sufficient for a change in D.W.I. behavior. They observe that the greatest potential for reducing such offenses is the widespread dissemination of information which emerges from consistent and effective enforcement and adjudication behavior. With respect to the deterrent aspects of the legal approach, what is it that helps this to be effective? What attributes must be incorporated in a legal approach for it to serve as an effective deterrent?

Vingilis and Salutin (1980) provide some initial insight into this question. They observe that two conditions must be met for deterrence to be effective. First, the penalties must be significant and important. Second, the individual must perceive the probability of detection of the violation of the law. They make a revealing comment on this second point, noting that although most individuals arrested for a D.W.I. offense are first-time arrestees for that offense, this does not necessarily mean that they are first-time offenders. The reason for this is that the risk of actual apprehension for this offense is low. Jones and Joscelyn (1978), after examining numerous studies, conclude that "a driver in the U.S. would have to commit some 200 to 2,000 D.W.I. violations to be caught" (p. 56).

Meier and Johnson (1977) add a third element to those of severity of punishment and probability of detection. They observe that celerity is also an important issue. Geerken and Gove (1975) agree that deterrence is more effective when punishment is quick. They also suggest that effectiveness is increased when punishment is certain. This differs from the probability of detection noted above as it presumes the apprehension of an individual.

At this point, some specific legal approaches currently applied in the United States need to be examined with particular focus upon their efficacy. Enforcement of existing laws is the foundation upon which much of the legal approach is based. Laws - known as per se laws - were passed prohibiting the operation of an automobile while "under the influence" of alcohol. Further, the existence of a blood-alcohol concentration at a specific level was defined as illegal for drivers. To assist further these law enforcement efforts, chemical tests were introduced. Presumptive evidence laws state that one is presumed to be "under the influence" if the B.A.C. is at the established limit. The principle of implied consent means that, upon receipt of the privilege to drive, one consents to submit to chemical tests to determine the B.A.C.. Preliminary breath screening laws allow the police to administer a pre-arrest breath test in

order to determine the probable cause for a "driving while intoxicated" arrest. These laws serve as the basic repertoire among which states may make choices regarding passage and implementation.

How effective are enforcement efforts? Havard (1978) observes that increasing the level of enforcement on a selective basis is the most effective approach for reducing D.W.I. offenses. Muller (1979) calls for intensifying police patrols, and determining their efficacy by cost-benefit analyses. Schultz (1980) calls for increased police enforcement, and also a clear formulation of the existing driving while intoxicated laws. Vingilis, Salutin, and Chan (1979) call for increased random spot-checks and roadside breath-testing so that an individual's subjective and objective probabilities of apprehension are increased. However, their research data shows no conclusive evidence supporting a reduction in alcohol-related crashes or in blood-alcohol levels of drivers with these techniques. Another challenge to the call for increased enforcement activity comes from Waller (1973). He points out that a limited number of arrests is actually made due to limitations faced by the police officer in the ability to make D.W.I. arrests (such as difficulty of identification of impaired drivers and degree of support received from other essential personnel in the arrest and adjudication process).

Not only is the enforcement by a police officer an issue, but also of concern is the amount of discretion which appears at all levels of the criminal justice system. Ruschmann (1978), in examining a locality in 1972, found that of the 579 drivers that could have been charged with felonies, 187 were. Further, only a minority of the felony charges resulted in convictions for the offense for which an individual was originally charged. Gusfield (1981) observes that it is the negotiation between defendants, attorneys, judges and police personnel which determines what will occur:

What appears on a record as a matter of fact has not been a result of unambiguous actions and clear legal direction. The plea bargaining process is itself a form of political negotiation in which such matters as possibility of proof, inconvenience and expense of trial, degree of intoxication..., the character, family status, and past legal record of the defendant all operate along with the policy of judges toward DUIA (p. 138).

In some evaluative research designed to determine whether the legal processes are achieving the intended purposes, Ross and Blumenthal (1975) find that judges feel strong pressures to use fines in dealing with individuals charged with a D.W.I. offense. The researchers' experimental conditions were to have variation with the type of sanction used (fines, probation, or educational programs). However, these conditions could not be met due to the constant pressure on the authorities from those with strong ties to them.

Many of the calls for increased police enforcement are based upon the belief that this approach will be effective. After all, it is commonly perceived that similar attempts in Great Britain and in Scandinavia resulted in a reduction in incidents of driving while intoxicated. Specifically, the Road Safety Act of 1967 in Great Britain resulted in a sharp drop in highway casualties, and this reduction has generally been attributed to the more stringent legislation. Time-series analysis performed by Ross (1975) confirms that the law did, in fact, reduce both fatalities and injuries. Ross believes that the key to success of the British law was the "Government's success in convincing British drivers in 1967 that there was a significant risk of apprehension by the police" (p. 676). Yet he concludes by stating that "the risk of apprehension for a drinking driver in Britain is realistically quite minute, and this fact is gradually being learned by the public, who are adjusting their behavior in consequence" (p. 677).

A similar result is found in Scandinavia where laws are strict. The "Scandinavian myth," as Ross refers to it, is based again on time-series analysis. Although his evidence does not disprove the deterrence hypothesis, at the same time it does not confirm its effectiveness. He concludes that "the international faith in the efficacy of the Scandi-

navian laws on drinking and driving is without firm foundation" (p. 675).

In a 1981 study, Ross summarizes his findings from similar experiences in Norway, Sweden, Great Britain, New Zealand, the Netherlands, France, Canada, and the Australian State of Victoria with these words:

Evidence was found that adoption and enforcement of Scandinavian-type laws has nearly always produced a deterrent effect on drinking and driving in the short run, as measured by statistics on crashes and especially on serious casualties during main drinking hours. However, it was found that the deterrent effects are consistent with an explanation in terms of an increase in perceived threat due to publicity and newsworthiness accompanying the legal change or campaign, followed by learning through experience that the probability of apprehension remains low" (p. i).

Thus, there are actually two variables which need to be examined with regard to their deterrent effect - publicity and actual enforcement. Because fear of getting caught is involved, it may actually be the publicity rather than the enforcement itself which is responsible for reduced incidents of driving while intoxicated. And when the actual enforcement does not coincide with the publicized level of enforcement, citizen drinking and driving behavior may return to its pre-publicity level.

How about the effectiveness of sanctions implemented once an individual is apprehended for and convicted of driving while intoxicated? The sanction most widely cited in the

literature is revocation of the operator's license. Schultz (1980) observes that the public considers license revocation as harsh, especially when it affects an individual's ability to earn a living. Muller (1979) suggests revoking the operator's license for increasing periods of time with each subsequent driving while intoxicated offense, and that a permanent revocation should occur after the third offense. Research by Middendorff (1982) reveals that a six to twelve month revocation is the most effective deterrent for social drinkers. Hagen's (1978) examination concludes that this sanction is most effective for drivers over 30 years old.

The evidence is not completely in favor of this type of sanction, however. Schlotheim (1973) calls for an individual judgment to be made in each case, particularly when the potential exists for revocation of the operator's license. Individual rights need to be weighed, he argues, against collective rights. Menken (1979) observes that license revocation has little if any deterrent effect on D.W.I. repeaters. The California Department of Motor Vehicles notes that most drivers who have their licenses suspended or revoked continue to drive (U.S. Department of Transportation, 1970). Kunkel (1979), however, concludes that although drivers with suspended licenses did continue to drive, they drove less often and were more careful than usual.

How does the operator's license revocation compare with other legalistic sanctions? Hagen (1977) finds that this type of restriction, in addition to fines and/or jail sentences, is more effective with multiple D.W.I. offenders than is the use of only fines and/or jail sentences. Hagen, McConnell, and Williams (1980) observe that first offenders who had no licensing action taken were more likely to receive a subsequent D.W.I. conviction during the first of four years examined. On the other hand, Robertson, Rich and Ross (1973) examine the effect on traffic fatalities, D.W.I. arrests, and D.W.I. convictions in Chicago of a highly publicized seven-day jail sentence and one year suspension of the operator's license. During the six-month crackdown, they find only a chance variation from the pre-crackdown rate, indicating that the punitive threat does not deter.

Lovegrove (1979) suggests an innovative alternative for D.W.I. offenders. He argues that the individual's license plates should be impounded, and distinctive license plates for the vehicle should be issued.

What is to be concluded from this examination of the legalistic approaches? Ross (1975) identifies three types of difficulty with this general approach - there are problems of identification, judgment, and sympathy. Identification problems are faced by the police who often have difficulty

in ascertaining who is intoxicated. Judgment problems are based upon the imprecision of concepts such as "intoxication" and "driving under the influence." Sympathy is a problem encountered due to the bias held by the decision-maker against the law or in favor of the defendant (at each step, from arrest to judicial sanction).

Zimring and Hawkins (1973) remind us that the focus of legalistic efforts ought to be upon "marginal deterrence." By this, they mean to raise the question of whether a more severe penalty would deter better. They observe that this discussion is "limited to that which is politically possible and morally acceptable in the Western context" (p. 11).

Lay (1978) and Meier and Johnson (1977) remind us that stricter laws alone are not sufficient to help solve the drinking-driver problem. Legal threats and actual enforcement are but one mechanism which can and should be utilized to attempt to produce conformity to the standard of not driving while intoxicated. Other approaches, therefore, must be carefully and critically examined to determine their potential for effective impact.

Before proceeding to these alternatives, it is helpful to summarize what the literature just reviewed tells us. First, it is clear that alcohol is intimately involved in

automobile crashes, as it is a depressant which drastically affects one's performance ability. Regarding those who are more likely to be involved in alcohol-related crashes, sex and age tend to emerge as prior characteristics. Also important is the over-representation in crashes of individuals identified as problem drinkers. These results suggest that there ought to be a variety of approaches available for dealing with these individuals with different characteristics. Traditional approaches for dealing with the drinking driver problem have been shown to be insufficient to meet the scope of the problem. Perhaps this is due to the fact that such efforts have not proceeded at a level which is deep enough to attack the relevant underlying issues. Also, it may be that global approaches do not meet the differential needs of the problematic population. Legalistic approaches have been cited as a primary means of approaching this problem. Emphasizing the notion of deterrence, these efforts have incorporated a variety of ways of inhibiting irresponsible drinking and driving behavior. The belief in their effectiveness is challenged by much of the research, and the overall conclusion is that although these legalistic approaches are necessary for dealing with the problem, they are certainly not sufficient. A broad-based approach which emphasizes an individual's overall lifestyle, and which is

implemented by a variety of social agencies and institutions (including the family), is necessary for addressing the drinking driver problem.

THE ALCOHOL SAFETY ACTION PROGRAM

With the acknowledgment that current law enforcement efforts alone were not sufficient to reduce sufficiently the deaths and injuries resulting from alcohol-related crashes, legislation was enacted in 1969 to develop a more comprehensive approach to this problem. The Alcohol Safety Action Program was designed "to catalyze and stimulate comprehensive action to reduce the role of alcohol as a causal factor in highway fatalities and injuries" (U.S. Department of Transportation, 1970, p. IV-1). The proposed program involved intensive countermeasure activities centered upon the problem drinker who drives, thereby moving beyond the British program of increased enforcement which was then perceived as highly effective. "With this program it should be possible to achieve not only the kind of reduction produced in Britain by their more intensive enforcement on the highway, but in the long run a more sizable reduction as a result of keeping problem drinkers off the road" (U.S. Department of Transportation, 1970, p. II-8). Not only was increased enforcement an essential element of the A.S.A.P. approach, but also in-

volved was a "special handling" of problem drinkers once they were apprehended and convicted.

Numerous deficiencies were noted with then-current efforts to deal with the drinking driver problem. A major problem was with the inadequate level of detection of problem drinkers. Another concern was with the limited availability of chemical tests, in addition to limited equipment and trained personnel. Third, there were restrictions regarding the use of chemical tests, as there were few provisions for utilizing this test until after an individual was arrested. With strict penalties for a driving while intoxicated offense, there was a reluctance to arrest, prosecute, and convict individuals for this offense. For individuals convicted of D.W.I., fines and jail sentences were often viewed as ineffective, particularly for those considered to be problem drinkers or alcoholics. Also treatment programs for these problem drinkers and alcoholics were considered inadequate. Finally, the use of license revocation as a penalty - the most commonly-used punishment - was viewed as ineffective, and these individuals tended to drive anyway. The Department of Transportation cited a California study which "indicated that two-thirds of all drivers with revoked permits were arrested (some as many as ten times or more) during periods when their driving privilege was revoked" (1970, II-7).

To deal effectively with the general issue of driving while intoxicated and with the specific identified concerns, the comprehensive A.S.A.P. approach was initiated. It was hoped that this multi-faceted approach would be able to reduce the problems quickly. It is interesting to note Waller's observation in this regard: "A.S.A.P. in the American jargon also means 'as soon as possible'; and in the political tradition of federal programs, that philosophy seems to have prevailed among most - but not all - who gave the program direction" (1974, p. 6).

Three broad categories for program implementation were selected: (1) Identification, (2) Decision; and (3) Action. Within the Identification category, emphasis was upon thorough and accurate identification of the problem drinker. Targeted locations included the highways (with special enforcement and alcohol screening procedures), court records (by using previous records and coordinating with the licensing agency), and treatment agencies (health and social organizations, driver improvement courses). The Decision component focused attention on the extent of an individual's drinking problem and specification of appropriate action. Decision-making needed to be done both by the courts and the licensing agency. The third category, Action, tries to minimize driving after drinking. Action-oriented efforts

were identified as being of two types - limitations on driving (which was the standard penalty imposed) and limitations on drinking (which involved the use of a protective drug such as Antabuse).

To implement these three overall themes, numerous countermeasures were specified in the program design. Identification of problem drinkers who were unfit to drive would be a primary approach. Evaluation by licensing agencies regarding the revocation of licenses, or of limits on when and where one may drive, was another component. The development of special counseling courses for problem drinkers who drive, and the treatment of convicted alcoholic drivers, were selected as more effective alternatives to the standard legalistic sanctions then being utilized. Another countermeasure was increased efforts to apprehend, prosecute, and convict individuals who violated the "driving while intoxicated" law. Finally, attention was directed to the development of community efforts to assist a problem drinker who drives and who needs to have alternate means of transportation.

The efforts of the A.S.A.P. approach were to be concentrated primarily at the local level. The design was for the Federal government to provide technical assistance and some initial funding so that these programs could be implemented

quickly. The philosophy was that the specific activities and countermeasures implemented in a particular locality would be based upon the needs of that locality. However, with reference to the three categories of identification, decision and action, it was concluded that "it is only by coordinated activities in all three areas that an effective program can be developed" (U.S. Department of Transportation, 1970, p. III-5).

As a concluding note regarding the A.S.A.P. effort, it is helpful to observe the three steps identified for implementation. First, a community alcohol safety organization was needed. This would be helpful in assessing the needs and interests in the community. Second, a survey of highway accident experience and community capabilities was important. This included an understanding of the abilities of local law enforcement and treatment agencies, current laws, record-keeping systems, licensing requirements, accident statistics, usage of roadways, and court practices. Finally, a project proposal needed to be prepared. This document would demonstrate community support and capabilities, local initiative, planning, and preparation for program evaluation.

When conceptualized, it was acknowledged that the program was comprehensive, but also that it was necessary to have such a multi-faceted approach if any significant difference

was to be made with the alcohol problem on the highways. Further, in hearings regarding this integrated approach, it was observed that "such a comprehensive, integrated program has not been tried either in this country or abroad" (House of Representatives Subcommittee on Roads of the Committee on Public Works, 1970, p. 1069).

What has been the result of this massive undertaking? Has it been demonstrated to be effective, and to what degree? What types of measures have been utilized to examine carefully the investment of personnel and financial resources in the project?

A 1979 Summary of Alcohol Safety Action Projects throughout the nation was prepared by the U.S. Department of Transportation. In this examination of 35 programs, the conclusion was that they were successful in meeting a variety of immediate goals. The summary indicates success in the enforcement process, as indicated by increased D.W.I. arrests. The processing and referral systems are noted as more efficient. Further, public education programs and evaluation efforts have been developed. Lacking in this report, however, is any assessment of the results of these efforts. While there is noted success in the development of these countermeasure activities, did they, in fact, result in any impact upon drinking and driving behavior?

Jones and Joscelyn (1978) observe that "A.S.A.P. has provided some indication that problem-drinking drivers can be successfully identified and processed, but does not offer a sufficient basis for concluding that the resulting treatments (including D.W.I. schools) will have a significant positive impact on the alcohol-crash problem" (p. 77). They continue by stating that

The systems approach may have a greater long-term impact on the alcohol-crash problem than the A.S.A.P.'s substantive actions will have. Results reported to date indicate that, on the whole, the systems approach as practiced by A.S.A.P. brought a higher degree of coordination and consistent objectivity into the field of alcohol countermeasures than had previously existed. A.S.A.P.'s failure, thus far, to provide convincing evidence that it has had a significant impact on highway safety may be due more to the present primitive state of the technologies of drinking-driver behavior modification and alcoholism treatment than to the process by which that technology is applied (p. 77).

Thus, they conclude that, due to inadequate evaluation, a definitive statement cannot be made regarding the effectiveness of approaches utilized by A.S.A.P. in ameliorating the alcohol-crash problem.

This should not, however, be viewed as the consensus among researchers regarding this comprehensive approach. While evaluative approaches may not be as helpful as they could be, there are numerous attempts to define the research question more narrowly, and thereby to produce some indications of the program's effectiveness.

Perhaps the most widely examined measure of the effectiveness of the A.S.A.P. approach has been an examination of highway crash statistics. In an early examination of the impact of A.S.A.P. on subsequent crash involvement, Ellingstad and Sprionger (1976) review twelve research studies. Of these, they find only three which are methodologically adequate; of these, one shows positive results and two provide no evidence of effect. A 1979 study by the Department of Transportation examines the total number of nighttime fatal crashes using data from each of the 35 A.S.A.P. projects, and find a documented crash reduction over time. The reductions observed are attributed to increased general deterrence through enforcement activities rather than to any rehabilitation efforts. A review of these A.S.A.P. sites by Voas (1981) shows a reduction in nighttime fatal crashes in 12 locations. Again, the observed reduction is seen to be a result of the increased general deterrence to drunk driving.

Two 1976 studies of New Hampshire's A.S.A.P. efforts reveal similar findings. Levy and Klein (1976) find a reduction in night fatal crashes, and conclude that the A.S.A.P. program had a significant impact in reducing these crashes. Muir (1976) uses a different design by comparing fatal and injury-producing crashes during the A.S.A.P. period (1972 - 1975) with similar data for ten years prior to the initia-

tion of the project. He finds reduced crash levels during the A.S.A.P. years, revealing a significant departure from the trend that existed prior to A.S.A.P.'s implementation.

Different results are obtained in studies performed by two researchers. Haddon (1978) matched A.S.A.P. program communities with similar communities without the program, and finds no effect on fatalities by the A.S.A.P. programs. Zador (1976) uses a similar approach, and finds no evidence of program effectiveness. Specifically, his approach involves an analysis of trends in nighttime fatalities for A.S.A.P. locations and control areas, and the results show a comparable decrease in both locations. Zador's research design is faulted for methodological weaknesses by Johnson, Levy and Voas (1976). These researchers find Zador's conclusions against A.S.A.P. inappropriate based on the analysis he presents.

In a separate article, Voas (1975) observes limitations in basing conclusions upon the criteria of total crashes, since an A.S.A.P. program is directed toward only a segment of the crash problem (i.e., alcohol-related crashes). He proposes the measurement of the B.A.C.s of drivers in crashes as the best means of assessing A.S.A.P.'s program effectiveness, yet points out that it is often difficult to obtain this information. As an alternative, he suggests

gathering helpful information from the "roadside survey" where the B.A.C.s of drivers using the highway is obtained.

In an attempt to gather this information, the U.S. Department of Transportation (1979) conducted roadside breath test surveys in nineteen A.S.A.P. locations. Prior to the start of the A.S.A.P. activities, there was a mean level of 52 drivers per thousand with a B.A.C. of at least 0.10. During the five years of A.S.A.P. activities, this level reduced to 45 drivers per thousand.

Another area worthy of careful examination is with recidivism. Specifically, what is the drinking and driving behavior for those individuals who have been "treated" by the rehabilitation portion of the A.S.A.P. program? Ellingstad and Springer (1976) examine 35 analyses of treatment effectiveness, and find ten which are methodologically adequate. Four of these studies find that the "treatment" group has lower rearrest rates than control groups, whereas six find no differences which would support a conclusion of treatment effectiveness. They conclude that "the individual analytic studies submitted in 1973 and 1974 provided no overwhelming evidence of program effectiveness as measured by . . . arrest recidivism" (p. 51).

These researchers further examine the difference between three types of drinkers - problem drinkers, non-problem

drinkers, and unidentified drinkers - and compare their recidivism rates with control groups. With the problem drinkers, conflicting results are found, resulting in "little basis for asserting the effectiveness of overall rehabilitation exposure on the recidivism experience for problem drinkers" (p. 58). For the non-problem drinkers, fewer D.W.I. arrests than the control group (although not statistically significant) suggests "the possibility that the A.S.A.P. treatment intervention may have influenced those non-problem drinkers referred to rehabilitation programs" (p. 60). For the unidentified drinkers, there are no significant differences in recidivism rates between the treatment and control groups. The authors note that interpretation of the results must be done with caution, since it is not known whether the treated and non-treated (control) groups were equivalent.

Beshai (1976) assesses three "mini-A.S.A.P." programs, including court school programs, Alcoholics Anonymous, and Disulfiram. Observations of significant reductions in recidivism are noted after the participants had been in treatment for 18 months, but not after 30 months.

Shifting now to a less rigorous examination of A.S.A.P.'s program effectiveness, several writers focus on the general prevention mode incorporated with this comprehensive ap-

proach. Holser (1978) believes that, despite some operational problems, the A.S.A.P. approach to reducing drunk driving marks the development of an early intervention treatment model with a coercive component. Rosenbert, Patterson, Promisel, and Towie (1976) agree, based on their examination of behavior and self-esteem of participants in a rehabilitation program for problem drinking drivers. Finding a decrease in the consumption of alcohol and in behavioral impairment and an improvement in self-esteem, they support the A.S.A.P. program due to the large number of individuals for whom early intervention with their alcohol problem is helpful.

Examining the A.S.A.P. role in preventing alcohol-related problems, Bunn (1979) discusses what he sees as the most successful, large-scale occupational alcoholism prevention program. Central to this program's success are attitude change through behavior modification, positive role modeling, and a comprehensive program design. Lyn (1977) conducts two types of survey research on the effectiveness of public information and education countermeasures implemented by A.S.A.P. in Virginia, and finds little evidence supporting increased public awareness, increased knowledge, or improved attitudes. Another Virginia study performed by Saunders (1979) emphasizes the necessity of strategies focused

upon youth to deal effectively with the problem of alcohol and driving.

Another aspect of the A.S.A.P. program effectiveness centers around the handling of D.W.I. cases. Scrimgeour (1979) notes initial problems between A.S.A.P. offices and the courts were resolved once an understanding of the complex legal and procedural problems was gained by the A.S.A.P. personnel. This resulted in the design of improved court procedures for handling these cases. Glauz (1977) finds that young people convicted of D.W.I. are less represented in A.S.A.P. rehabilitation programs, and that individuals with above-average income are slightly underrepresented in all aspects of A.S.A.P..

Finally, some attention is provided in the literature to the importance of appropriately identifying individuals who will be most helped by which type of sanction. A Colorado report (1976) stresses that individuals not be underdiagnosed when making referrals to rehabilitation programs. Appraisal instruments such as the Alcohol Use Inventory (Wanberg, Horn and Foster, 1977), the Alcohol Use Predictor Scale (Khavari, Farber, and Douglas, 1979) and the Alcohol History Form (Holland, Datta, Izadi, and Evenson, 1979) have been developed to assist in this process. Mushill and Struckman-Johnson (1977) find, however, that an individual's

prior D.W.I. arrest record is the most accurate predictor of future rearrest for driving while intoxicated.

In review, we find a variety of evaluative methods utilized to examine whether or not the A.S.A.P. program is effective in dealing with the drinking driver problem. The results gathered are conflicting regarding specific aspects as well as overall impact. Small (1982) observes that the A.S.A.P. program has not yet been proven to be effective as a traffic casualty countermeasure. Jones and Joscelyn (1978) conclude that "past experience has provided little evidence that any feasible treatment program will have a significant impact on the alcohol-crash problem" (p. 78). They further note that "proposed methods for dealing with the alcohol-crash problem should be regarded as hypotheses until they are adequately tested and evaluated, and . . . such tests and evaluations should most prudently be conducted on the smallest practicable scale" (p. 78).

A LOOK AT REHABILITATION PROGRAMS

The A.S.A.P. experience is not all that can be examined regarding the rehabilitation or retraining of individuals with problems of mixing alcohol and driving. A variety of other programs and efforts exists for "treatment" of the convicted D.W.I. offender. There are several insights which can be

gleaned from these efforts which will be helpful for understanding how best to deal with the repeat offender.

The majority of rehabilitation programs (not including the A.S.A.P. programs) cited in the literature indicate effectiveness with the participants. In fact, Doan and Brandt (1979) polled judges both working with and not working with A.S.A.P. cases, and find that they rate such countermeasures as more effective than adjudication countermeasures (such as streamlined case disposition).

Of the favorable assessments, the majority focus upon re-arrest information, or recidivism, as the criterion for success. An evaluation of a 15-hour education and rehabilitation program in New York (1979) shows a dramatic decrease in highway incidents and convictions among those who participated in the Drinking Driver Program. Chatham (1979) concludes that the treatment of D.W.I. drivers is profitable, based on a reversal of drinking-related impairment following involvement with Problem Drinking Driver Programs. Comparing D.W.I. offenders who are randomly assigned to probation, didactic D.W.I. classes, or group counseling sessions, Swanson and Ring (1979) find a trend in favor of the D.W.I. classes over straight probation when examining rearrest or re-conviction for a subsequent D.W.I. offense. Comparing participants in a three-day program entitled "Don't Drink

and Drive" with non-participants who received a probation or fine sanction, McGuire (1978) observes significantly greater alcohol-related violations, moving violations, license suspensions, and accidents among the latter group.

Tigges (1978) obtains some interesting findings, noting that the recidivism rate for participants is lowered for two years as a result of participation in the education-based drinking drivers course. However, after two years, inconclusive results are found when comparing this group with non-participants. Thus, she concludes that no evidence is provided that the course has any lasting effect on the recidivism rate. She also compares those who had a prior conviction with those who had no prior conviction, and finds a significant difference between these two groups.

In a comprehensive examination of education programs for first offenders, Reis (1982) compares treatment effectiveness of individuals randomly assigned to a home study program an in-class education program, to a no-treatment control group. He measures effectiveness by examining subsequent D.W.I. offenses, accident involvement, and client life changes. He finds significant differences when comparing the educational programs with the control group with respect to D.W.I. recidivism. Compared with the control group baseline, the treatment groups demonstrated a 74% reduction

in recidivism the first year, 13% the second year, and 11% the third year. However, he finds that there is no significant difference between the home study program and the in-class education approaches. Further, he notes that the home study program was not appropriate for all clients, but that for the majority of individuals the two educational approaches were equally effective.

Horwitz, Lasowski and Cline (1981) assess recidivism rates by comparing social drinkers with problem drinkers and find significantly lower rates for the former group. They find a favorable change in attitude and in behavior among the social drinkers, and attribute this to higher levels of experienced cognitive dissonance.⁵ Zildjian and Mueller (1976) obtain different findings, as they discover that those who were the heaviest drinkers made the most progress. They also observe that clients over 40 years of age were more successful than the younger participants. Similarly, Holser (1979) observes that some socially aloof participants failed to respond to the defense-reducing strategies used in the year-long program. Voas and Nichols (1978) also differentiate between social drinkers and problem drinkers, noting

⁵ Cognitive dissonance is when an individual has items of information about the environment or himself which are inconsistent. When this occurs, a state of tension, called dissonance, occurs. The individual typically attempts to reduce or eliminate the tension due to its "negative drive properties."

that the social drinkers demonstrated significant differences after having received almost any form of treatment or education when compared to those receiving an imposition of fines. Few positive results, however, are found for the treatment of those identified as problem drinkers.

Some slightly different approaches were employed to demonstrate rehabilitation program effectiveness. Giguere (1981), after examining the Responsible Driving Program used in California, concludes that programs which require total abstinence, education, counseling, and frequent contact result in lower recidivism for participants. Holser (1980) agrees with the finding regarding the length of program participation. Individuals who volunteer for program participation tend to exhibit a higher drop-out rate. Those participants involved due to a mandated court sentence were faced with confrontation and continued problem intervention. Mead-Messinger (1980) finds that those who dropped out of an assigned treatment program had significantly more rearrests than program graduates. The conclusion drawn, inappropriately, is that the treatment resulted in the differential recidivism rates. The failure to continue participation in the program may actually not be the determining factor in the posttreatment drinking and driving behavior; there may have been other predisposing factors which caused both the non-completion of the program and the higher recidivism.

Turning now to evaluations of drinking driver rehabilitation programs which fail to support the effectiveness of these rehabilitation programs, Ellingstad and Struckman-Johnson (1978) examine recidivism and find no consistent evidence of treatment effect for any of the treatments examined. Michelson (1979) agrees, finding no significant difference in subsequent violations, D.W.I. convictions, points accumulated, or accidents when comparing program participants and controls. In fact, it is found that those who participated in the safe driving program had higher rates than did the controls. A surprising finding here is that recidivists tend to be of a higher occupational status than those who did not have subsequent offenses.

Nichols, Ellingstad, and Struckman-Johnson (1979) assess the Short Term Rehabilitation Study and fail to find encouraging results regarding the program's effectiveness with participant behavior. Similarly, Reis and Davis (1980) fail to find sufficient evidence regarding the effect of education programs on participants' subsequent driving behavior. Even the Department of Transportation (1980) concludes that none of the educational treatment programs aimed at problem drinkers is shown to demonstrate effectiveness in reducing drinking and driving behavior.

Hagen, Williams, McConnell, and Fleming (1978) also find that the benefits derived from a twelve-month alcohol abuse treatment program are not sufficient to justify continuation of these programs in their present form. They observe that this strategy "is not as effective as the simple use of mandatory licensing actions" (p. 281). They also state that "it is possible that a superior strategy, which includes alcohol abuse treatment as a component, might be developed" (p. 281). Insight is offered into this finding, as participation in the program averted any licensing action for participants. If this was the primary motivation for participation, they understand why program participation without commitment is ineffective.

Commenting upon the nature of educational approaches, Buckalew (1979) observes that only minimal increases of knowledge are associated with education. Along a similar line of thinking, Rosellini (1982) contends that programs would be more effective if they involved enforced sobriety and strong confrontation, as one is dealing with a strong denial system. In a related study from Australia, Connor (1978) obtains views of high school and college students regarding how to deal effectively with D.W.I. offenders. Suggested approaches include tougher legislation, jail sentences, and license revocation; however, none suggested a rehabilitation program for these individuals.

As revealed by several studies cited (Michelson, 1979; Voas and Nichols, 1978; Horwitz et al., 1981), differential treatment results are found based on the assessed level of problem drinking. This observation is further substantiated by Garrett (1981), who finds that a purely educational program for a problem drinker is not effective and may even be countereffective. Nichols (1977) finds fewer subsequent alcohol-related arrests for problem drinkers who are exposed to interactive (as contrasted to lecture) programs and for those participating in personable yet intensive therapy activities. Mulligan, Steer, and Fine (1978) question the efficacy of educational strategies with problem drinkers, as they observe a significant number of these individuals with evidence of some psychopathology. Not only does a problem drinker's alcohol dependency need to be resolved, but treatment programs must also be directed to underlying psychiatric concerns. They find that 59% of the problem drinkers convicted of D.W.I. had either psychotic or neurotic pathology in addition to their alcohol dependency. Thus, the judicial system and treatment programs must provide, they argue, accommodations for this unusual population.

Meck and Baither (1980) inquire into upon the variables of age and sex among D.W.I. offenders, and note higher levels of perceived maladjustment and emotional upset among

those aged 19 to 25 when compared with those 26 and older. Further, they observe that male offenders are more defensive, and female offenders are more introverted.

Some fairly innovative approaches are also found in the literature. Yanos (1980) examines a pretrial diversion program for individuals charged with a D.W.I. offense. Results show that no participant was charged with an alcohol-related traffic violation during the nine-month followup period. Winter (1979) observes that the intake interview process is a critical step for effectiveness of any rehabilitation program, since that is the point at which the confidence of the client is obtained and the intervention strategies are established. Weekend treatment programs have been introduced (Siegal, 1982) as an alternative means of actively confronting a participant's denial system.

An Australian program (1978) uses the technique of videotaping program participants' behavior following alcohol consumption, and examining of these tapes with participants and their families. An alternative work program (Hornaday, 1978) involves participants in educational sessions, counseling, and civic project work. The research finds encouragement with the recidivism rate of participants in this program.

Not only is the nature of the program an influential variable for consideration, but also worth examination is the time spent in the program. As can be seen from the program interventions cited, there are enormous variations in the length of participation. Programs have been seen to range from one weekend to a year of weekly sessions in duration. Holser (1980) suggests that the fact that court-mandated participants remain in the program longer than do volunteers makes a difference with subsequent success. However, the motivation level or other predisposing characteristics may be the actual cause of differential treatment gains. Argeriou and Mahohar (1977) find that at least six months of involvement in treatment is essential for optimal client contact. Incorporating the distinction with problem drinkers, they argue that even this length of treatment may not be sufficient for this clientele. They suggest that time in treatment and not the type of treatment is the crucial variable in modifying drinking behavior. Similar results are observed by Fine, Steer and Scoles (1979), who compare treatment and control groups with regard to alcohol consumption and psychopathology. After six months of treatment, there were comparable decreases for both groups, suggesting that the passage of time may be the determining variable for this outcome.

Having examined now a variety of research efforts focusing upon the rehabilitation aspect of D.W.I. offenders, some concluding comments regarding future evaluative attempts are appropriate. Kern, Schmelter, and Paul (1977) observe that those who need an educational program the most (the young and those with high B.A.C.s when they were arrested) are most likely to drop out of the program. Thus, examination of those who do drop out of a rehabilitation program is essential to provide insight into program effectiveness and improvement. Another element for examination is the demographic characteristics of those who do enter the program. Although the research was based in West Germany, Kunkel and Menke (1978) find an overrepresentation of blue-collar workers among the convicted drivers, and question whether there may be a class bias in the prosecution for a D.W.I. offense. Landrum and Windham (1981) observe significant differences with the number of prior arrests when comparing those who were and were not involved in D.W.I. offenses subsequent to involvement in a rehabilitation program.

Lebel (1980) observes that the findings with regard to such rehabilitation programs are often contradictory and inconclusive due to the variety of changing circumstances surrounding the alcohol and traffic safety control system. He

concludes that educational countermeasures are realistically only one part of a complex network designed to confront the alcohol and driving problem. As noted previously, Brown, Zelhart and Schurr (1975) introduce an "Improve It Model" to replace currently employed "Prove It Models." Their proposed model focuses upon a continuous improvement of the existing programs rather than unidimensional comparisons between techniques or groups. Supporting Lebel's observation that rehabilitation efforts are but one aspect of the effort to ameliorate the drunk driving problem, they conclude that

evaluation models must be used which make explicit and monitor the multiple objectives and activities of the functional units of these complex programs. Evaluation of such programs in terms of a single terminal criterion, regardless of its apparent appropriateness, is not going to give a full assessment of the impact of reeducation countermeasures (p. 753).

What, then, is the appropriate context for consideration of these rehabilitation countermeasures? Is involvement in a rehabilitation program a necessary condition for effectively reducing an individual's chances for recidivism behavior? Alternatively, is such participation a sufficient condition? Seib (1980) argues that such programs should not be overemphasized, but that they should be a required condition for license reinstatement. In addition, participation in such programs should not be a substitute for punishment.

Prior to reaching any definitive conclusions, it will be helpful to examine what can be learned from general types of approaches used with alcohol and drug education.

A LOOK AT GENERAL EDUCATIONAL EFFORTS

In addressing the issue of attitudes toward alcohol and drugs, "Education . . . is the most likely way in which this problem can be dealt with intelligently" (Hagerty and Zimmering, 1972, p. 65). Numerous writers have observations regarding the value and nature of this educational approach as the most appropriate means of preventing subsequent alcohol and drug problems. Attention to significant elements of this prevention approach is helpful in gaining greater insight toward rehabilitation efforts used with individuals convicted of a D.W.I. offense.

What is the appropriate focus for such educational attempts in the schools? Globetti (1975) comments that "teaching about alcohol has failed in the main because it has focused on what the older generation thinks younger people should be told rather than finding out what young people themselves feel about alcohol and its use" (p. 98). Similarly, Robinson (1968) observes that

members of the older generations tend to assume that their concepts and ideals are the only acceptable and absolutely right ones. Instead of trying to force these on younger people, we should encourage their criticism of our beliefs and be-

havior and of our laws and the way we seek to enforce them; and we should challenge young people to think through better ways for people of all ages to live safely in a world where alcohol is easily available and widely used (p. 21).

Finn (1979) suggests that alcohol education should be integrated into a number of subject areas and taught by several instructors. This will allow for different ways of reinforcing student learning. Also proposed by Finn is a discussion of the broader implications and the social context of drinking. Todd (1964) observes that there are numerous subject areas where alcohol education can be integrated appropriately: health education, physical education, science, driver education, industrial arts, social studies, guidance and counseling, homemaking, and literature. The approach should be based upon "the development of desirable attitudes, based upon information, not misinformation, that may help prevent the personal and social consequences of the unwise use of alcohol" (p. 22).

While it is important that accurate information be communicated to students, information alone is not sufficient for effectively addressing this issue. Confusion about the facts surrounding alcohol needs to be addressed with factual, not emotion-laden, information. Plaut (1976) observes that "the practices involved are so deeply ingrained and interlocked with other cultural patterns that additional meth-

ods must be used to bring about the desired attitude change" (p. 195).

This suggests a focus upon the reasons motivating drug use, and the provision of information at the students' own level of understanding. If the educator is not careful, a credibility gap may emerge due to differences between what the educator is communicating and the students' personal experiences (Stickgold and Brovar, 1978). Kunkle-Miller and Blane (1977) propose an atmosphere of free interchange so that students can explore their own feelings, facts, and myths surrounding alcohol. Globetti (1975) proposes an informal discussion group with a nonthreatening environment so that students can explore, examine, and discuss their own values, attitudes and behavior. Since alcohol use is a sensitive topic, the emphasis should be understanding rather than judgmental.

This emphasis upon discussion groups is further supported by Piorkowski (1973), who argues that it is necessary to have the ego-involvement of the participants. She states that people need to "learn the value of being real, honest, of facing emotional problems squarely without running away" (p. 37). Educators can, she believes, encourage creativity and imagination with students, and aid them to recognize their feelings as an important aspect of life. Seabright

(1973) notes that "communication in smaller groups is generally more effective than in larger groups" (p. 137). The role of an opportunity for participation is clearly enhanced in the small group setting. Kunkle-Miller and Blane (1977) observe that role-playing is very helpful, as it aids students in the expression of feelings and assists them in becoming involved in experiences in a nonthreatening manner. Rozelle (1978) compares the relative effectiveness of experiential and cognitive small group approaches regarding attitudes, knowledge, and negative consequences experienced from drinking. It is found that both approaches show significantly higher levels of responsible attitudes and fewer negative consequences than is observed in the control group.

Jackson and Calsyn (1977), Davies and Stacey (1972), and Dembo (1979) further support the use of small group, interaction approaches so that the participation level of the students is high. Robertson and Heather (1982) conclude that the most promising way to achieve desired prevention goals is with didactic, behaviorally based programs which incorporate both small group discussion methods and self-help manuals. Floyd and Lotsof (1978) are more aggressive with this approach, proposing that such educational efforts should emphasize that drug-taking behavior is an attempt to satisfy some human psychological need, and that less self-destructive behavioral alternatives ought to be used.

How effective are these educational approaches? Hewitt and Nutter (1979) note the dearth of systematic evidence supporting the effectiveness of drug education programs, and comment further on the methodological inadequacies associated with existing evaluative efforts. Seabright (1973) states that "since there has been no systematic evaluation of the effectiveness of different approaches, there is no way of knowing with certainty which approach would be most effective" (p. 136). Randall and Wong (1976) state that "an extensive review of over 200 published accounts of drug education programs revealed 23 reporting any systematic evaluation" (p. 2). Further, research by Williams, DiCicco, and Unterberger (1968) shows increased favorability toward the temperate use of alcohol one month after participation in an alcohol discussion group; however, one year after participation this effect was not noted. In a more recent study, Sargent (1979) examined numerous evaluation studies of others and observes:

Drug education often results in an immediate increase in knowledge and drugs but after three months this positive effect has nearly disappeared; there is also a quantitative increase in incorrect information; attitudes about drugs hardly change at all as a result of drug education...; actual drug use is not apparently affected either in the present or in the future; it neither increases or decreases (p. 157).

Swanson (1978) moderates the highly critical assessments such as those just cited, noting that there is major confusion on the goals of prevention and treatment, thereby resulting in a definition of a program such that one cannot reasonably expect success. Not only are the goals unrealistic, but also inappropriate are the evaluation models. He observes that educational efforts are "expected" to completely alter the behavior of nearly all people. Drug abuse is seen as "something society believes it can ignore and turn over to the school for 'corrective action'" (p. 125). Educational attempts must be founded on reality-based planning, an approach which takes into account what is currently occurring in the society and in the homes with respect to alcohol and drug use.

AN OVERVIEW OF LEARNING THEORIES

Also helpful in understanding the dynamics of rehabilitation approaches are the theories which underlie an individual's learning. The first observation regarding learning theories is that there is no one agreed-upon understanding of how individuals learn. There are numerous theories of learning, and many of these fall into two major categories: stimulus-response theories and cognitive theories.

The stimulus-response theory emphasizes instrumental or classical learning. With instrumental learning, there are rewards and punishments which are contingent upon behavior. Classical learning focuses upon a conditioned response. An individual learns new skills by practicing them. Relating these to the issue of drinking and driving, one finds that there are negative consequences associated with such behavior. For one convicted of drinking and driving, fines, license revocation, jail sentences, and rehabilitation programs are all potential consequences. Within the rehabilitation program itself, scant attention appears to be provided to this information. Current insights about the program reveal little specific emphasis placed upon this approach.

Recalling A.S.A.P., the approach used in its rehabilitation portion appears to be based upon the cognitive learning theory. It is intended that new skills be gained by individuals as a result of being exposed to factual information. The cognitive theorist tends to look at the contemporary structure of a problem, rather than at the past history of the learner, for insight about solving a problem. The focus is upon insights (understanding the essential relationships involved in a situation) rather than upon trial and error approaches found with the stimulus-response theory. Focus-

ing again upon A.S.A.P.'s rehabilitation portion, it is apparent that this cognitive theory approach is relevant. The methods used in the A.S.A.P. approach are based upon the principle of accurate information, relevant insights, and current and future behavior.

CONCLUDING COMMENTS

In this chapter, an extensive amount of literature related to the problem of driving while intoxicated has been examined. Beginning with an understanding of the way in which alcohol impairs driving performance, the emphasis then shifted to some insights regarding typical characteristics associated with drivers involved in alcohol-related crashes.

Attention was then directed to prevention approaches, including general deterrence and specific deterrence efforts. Traditional prevention activities were found to be insufficient to meet adequately the demands of this problem situation. Prevention efforts directed toward the overall problem situation, with concern about the development of general life skills, was noted.

Comments regarding the typical legalistic approaches used to combat the drinking driver problem were then noted. Differences between strict laws, publicity, and actual enforcement were suggested.

Specific emphasis was then provided to the Alcohol Safety Action Program, with comments provided regarding the inconclusiveness of evaluation efforts about this program. Other similar rehabilitation efforts were also examined to glean insights about effective approaches. In a similar approach, drug and alcohol education programs were examined. Finally, some brief comments about learning theory were provided.

With this foundation, it can be concluded that there is no simple answer to the question of "what works" for reducing alcohol-related crashes. Numerous approaches have been attempted, and a variety of evaluative efforts have been implemented. Clearly, additional insights should help move us toward a more clear understanding of A.S.A.P.'s role in ameliorating the drinking driver problem.

Chapter III

RESEARCH METHODOLOGY

From the theoretical background and literature review provided, it is clear that only a limited amount of careful attention has been undertaken to assess the A.S.A.P. rehabilitation efforts. Although an assessment of the effectiveness of A.S.A.P. was defined as an essential area for attention when the program was established, evaluation studies have focused primarily upon crash statistics. Due to methodological constraints, inconclusive results were found regarding the impact of the rehabilitation aspect of A.S.A.P.'s efforts. With the current reliance upon these rehabilitation programs to reduce the incidents of driving while intoxicated, it is essential that evidence be gathered so that sound decisions may be made to support, modify, or eliminate such programs.

With the research constraints found in performing an ongoing intervention effort, how can an appropriate evaluation be designed? How can we address the central question of effectiveness without compromising either individual concerns of fairness or evaluative standards? To address these issues in a scholarly and sensitive manner is an art, being based upon a clear statement of research objectives. Atten-

tion must then be focused upon hypotheses for investigation. The research design must be carefully formulated and executed within existing constraints. With such a foundation, meaningful and helpful insights will hopefully be gleaned regarding A.S.A.P.'s rehabilitation efforts.

PREPARING FOR EVALUATIVE RESEARCH

The lack of definitive answers regarding the drinking driver problem is clear. What works, for whom, and under what conditions remain as underlying questions demanding clearer resolution if we are to attain greater success in effectively combatting the drinking driver problem. What assistance can be gleaned from the evaluation research literature?

In examining evaluation efforts, it is vital to acknowledge that political processes underlie several dimensions of the drinking driver problem. The issue of funding and policy support is, quite realistically, a political one. Baker (1971) observes that "a life saved is a life saved - regardless of whether the savings come through cancer research, infant mortality studies, improved health and law enforcement, improved conditions in centers of poverty, or more effective military weapons" (p. viii). The Congress is concerned with the total national program and use of resources, thereby relying upon political decision-making to

determine policies. Thus, argues Baker, rational analysis rather than emotional reaction is necessary to attain effective courses of action. "On both ethical and political grounds, standards must demonstrate that a positive benefit will result" (p. 108).

How can one obtain such a "demonstration" of effects? After all, as observed by Globetti (1975), the determination of effects have usually been impressionistic or anecdotal in nature. He observes the difficulty of performing evaluation studies of drug education programs as being due to two factors. First, there is the difficulty in achieving agreement regarding the ultimate aims of the intervention efforts. Second, there are methodological problems in detecting changes in behavior and attitudes.

Another problem with evaluative research is that most studies performed in the drinking driver field have focused upon short-range effects. The ultimate goal is quite clear - reducing the injuries and deaths resulting from drinking and driving. Various programs have been cited which demonstrate program effectiveness after several months or years. In terms of an individual participant's life span, this is fairly short-term. Is this the best that can be done?

This brings attention to another political consideration. Evaluative research efforts are needed to demonstrate the

need for continued funding of programs, and this often entails a restriction upon the nature of the study. "There may not be time" to await long-term results, as assessments are needed immediately due to the impending allocation of scarce resources.

Evaluation should not be perceived as an end in itself, nor should it be done simply to justify the continued existence of a program. If the A.S.A.P. program is worth having, the results of the evaluation should speak for themselves. The goal of evaluation should be one of improving both the efficacy and the efficiency of the program (the "Improve It" Model already cited). The evaluative effort should point out problems and difficulties in the intervention utilized, and further suggest ways of resolving these.

Can one define the effectiveness of a program seeking to reduce the problem of drinking drivers? Etzioni (1964) sees effectiveness as the degree to which a social system achieves its goals. As we define goals, it is important that they be reasonable, clear, and measurable. To establish a program such that one cannot reasonably expect success is foolish. Still, a goal of eliminating the drinking driver problem is unrealistic. More reasonably, one may have a program goal of reducing the problem to the extent possible given limited resources. The research goal then

becomes one of examining which approaches are most effective, and the conditions under which these approaches meet their goal. Within the global goal of reducing this problem, some short-term objectives should be established. These then become the standards against which effectiveness measures are addressed.

How, then, do we measure the effectiveness of the specified short-term objectives? At the outset, one must acknowledge that no sacred design of evaluation exists. A variety of different approaches can and should be used. Tripodi (1978) cites three basic types of evaluation strategies. The Monitoring Strategy provides a direct review of the program's operations. This includes social accounting (an appraisal of procedures), administrative audit, and time-and-motion studies. This strategy will be helpful in examining the ongoing activities of the intervention. Social Research, including experiments, quasi-experimental designs, surveys, and case studies, is used to develop, modify, and expand knowledge. Causal relationship patterns and explanatory descriptions can result from such research attempts. Finally, Cost-Analytic Strategies are helpful in appraising the relative value of the program in relation to its costs. General accounting, cost accounting, cost-benefit analysis, and cost-effectiveness approaches are of assistance in cost

considerations. In essence, one finds these approaches helpful in addressing the general evaluative considerations of effort, effectiveness, and efficiency. The information provided should reduce uncertainty, a desirable goal for any organization's efforts (Thompson, 1967).

Two global ways of evaluating on-going programs are suggested by Wholey, Scanlon, Duffy, Fukumoto, and Vogt (1976). Field experiments rely upon the careful specification of treatment and control groups, while experimental demonstrations emphasize control over the input and process variables without the use of control groups.

The issue of control, noted earlier as significantly lacking in D.W.I. offender research, thus looms as central to the evaluative research process. How can a researcher control such extraneous elements as staff biases, preexisting factors, and experimenter values and expectations? Further, within the use of D.W.I. rehabilitation programs, how can a control group be established when the concepts of "fairness" and "equal treatment" remain central to the criminal justice system? These ethical concerns related to the withholding of treatment to certain individuals.

Gibbons, Lebowitz and Blake (1976) provide a partial answer to this answer, observing that we are not yet at a point where controlled experiments can be used. We are

dealing with human "subjects" in situations of major significance for their own lives, and thus have limitations in manipulating variables. Gibbons et al. concede that, at this point, it is necessary to use relatively "weak" methods of research to gain answers to our research questions. They conclude that "a consistent set of observations on program impact, growing out of several kinds of 'weak' research techniques, provides a better basis for confident conclusions than would the result from one method alone (p. 319)." How one researcher combines these approaches into a meaningful evaluative design becomes an "art."

In overview, the "art" of developing a meaningful evaluative research design must be based upon an adequate understanding of the overall program goals and the specific objectives. A thorough understanding of existing literature on the topic is essential. The questions to be addressed by the research endeavor should be specific, yet limited. Appropriate controls, to the extent politically, ethically, and financially feasible, must be maintained. The objectives of the research itself should be clear and reasonable. Finally, a creative mixing of approaches will assist in developing meaningful and more conclusive research results. The methodology designed to evaluate A.S.A.P. to be offered in the following pages attempts to meet these standards.

RESEARCH OBJECTIVES

With the ultimate goal of gathering evidence regarding the effectiveness of the rehabilitation portion of the Alcohol Safety Action Project, it is essential that the research objectives be clearly defined. With this in mind, five objectives were established for examination:

1. To determine whether A.S.A.P. is effective in reducing the recidivism rate among individuals who participate in the program. The fundamental question is whether involvement in the rehabilitation portion of the A.S.A.P. program actually makes a difference. The focus is not upon the entire A.S.A.P. approach, as this includes public education, interaction with judges, and training of local police officers in addition to intervention efforts with drivers convicted of driving while intoxicated. The question is whether individuals who participate in the rehabilitation program are more likely or less likely to be rearrested for driving while intoxicated than they would have been had they received a traditional sanction (e.g., fine, loss of license, jail sentence).
2. To determine, specifically, which elements of the A.S.A.P. rehabilitation program seem associated with its success or failure. What components assist and

what elements deter the program in meeting its stated goals of reducing the drinking driver problem? For example, how important is the factor of the time which elapses between one's court sentencing and the beginning of the A.S.A.P. program? Current research efforts do not adequately identify distinct elements as potential influential factors in recidivism.

3. To provide in-depth insight into the program. Adequate attention needs to be paid to subjective as well as objective factors that operate with the individuals who are drinking drivers and who interact with the courts and the A.S.A.P. program. Subjective factors include attitudes and insights personally held by program participants. Objective factors are recidivism data and their correlation to such variables as age, sex, and residential status. Whereas other factors such as education, income, and race may be of interest, this information is currently not available for both A.S.A.P. and non-A.S.A.P. individuals.
4. To provide a quantitative, qualitative, and interactive assessment of the effectiveness of the program. Traditional efforts focus upon quantitative aspects of program effectiveness. It is argued that an exa-

mination of both quantitative (objective) and qualitative (subjective) elements, and how these interface with one another, will provide fresh and insightful perspectives of attempts to ameliorate the drinking driver problem. In particular, insights gained from a qualitative approach should be helpful in understanding A.S.A.P.'s impact and effectiveness.

5. To examine a variety of independent variables to determine how they may be differentially important with respect to the effectiveness of the intervention program found with A.S.A.P.. It may be found, for example, that specific treatments may be more effective under certain conditions or with certain individuals. The group-support factor incorporated in the A.S.A.P. effort may have greater impact upon some participants, whereas the cognitive information provided may be more meaningful to others. Also of interest are other significant personal or professional changes (e.g., divorce, marriage, employment, unemployment) operating at the time of the A.S.A.P. program.

With these research objectives in mind, an increased understanding of "what works, and why or why not" will be sought. Evidence will be gathered to improve attempts to deal with the drinking driver problem, and ultimately to reduce the problem found on our nation's highways.

RESEARCH HYPOTHESES

Emerging from these objectives and the review of the literature is a hypothesis. The central hypothesis to be tested in this research project is that the recidivism rate for those individuals who participated in the A.S.A.P. program was less than that for those who did not participate in the program. This hypothesis is proposed because of belief that the educational process, particularly when incorporating a small group approach, would be effective in altering attitudes and behaviors.

Underlying this central hypothesis, several sub-hypotheses were proposed. First, it is hypothesized that the longer that an individual had to wait to begin the program (the "treatment") from the time of conviction of driving while intoxicated, the higher would be the chances of being a recidivist. This emerged from classical reinforcement theory. Specifically, a reward or punishment was expected to more effectively associated with the appropriate behavior if it followed that behavior closely in time.

A second sub-hypothesis is that those with a previous record would have a higher recidivism rate than those without a previous record. This was offered because it appeared, based on the fact that an individual exhibited recidivist behavior, that there was an underlying predisposition toward

drinking and driving behavior, and that this was not dealt with effectively by the previous approach.

Three additional sub-hypotheses are offered for examination. The directions of these sub-hypotheses are offered primarily for argumentative purposes and are based more upon intuitive speculation than theoretical grounding. It is hypothesized that the younger participants would have a lower recidivism rate than the older participants, because it is believed that the younger individuals would be more open to new learning and behavioral patterns. It is hypothesized that female participants would have a lower recidivism rate than male participants, as it is believed that females would be more receptive to such new learning. It was believed to be more difficult to alter the drinking and driving behavior which may often be viewed as "macho" behavior for the males. Finally, it is hypothesized that permanent residents would have a lower recidivism rate than transient residents, due to the belief that they would feel greater loyalty and obligation to their community.

RESEARCH DESIGN

The research design to be employed to assess the effectiveness of the A.S.A.P. rehabilitation efforts employs a loose triangulation approach (Jick, 1979). Denzin (1978) defines triangulation as "the combination of methodologies in the study of the same phenomenon" (p. 291). The decision to utilize observations from more than one kind of source is based upon an attempt to overcome the methodological constraints encountered by previous research efforts. As noted by Gibbons et al. (1976) and cited in the previous chapter, "a consistent set of observations on program impact, growing out of several kinds of 'weak' research techniques, provides a better basis for confident conclusions than would the result from one method alone" (p. 319). In this research, the general concept associated with triangulation, multiple methods to study the same problem, will be used. Triangulation in its strictest interpretation, multiple verification of the same point, will not be employed.

Several distinct elements were identified for independent examination. Each of these components, when considered separately, should yield information regarding the research hypotheses. When integrated and compared, additional insight should be provided.

Two global approaches were employed. A quantitative methodology, typical of previous research efforts, was incorporated to gather evidence regarding recidivism patterns. This approach was an evaluation of effectiveness. Qualitative attempts, a process evaluation technique, were used to gain insights into the experiences of individuals intimately involved with the rehabilitation process.

Prior to examining these two approaches further, it is important to identify clearly the independent and dependent variables.

The independent variables for consideration can be seen in two distinct manners. First, a fundamental distinction exists between those who enter the A.S.A.P. program and those who do not enter the A.S.A.P. program. A.S.A.P. officials observe that approximately 30% of those individuals convicted of driving while intoxicated do not participate in the A.S.A.P. program. Hence, they were faced with a fine, loss of the driver's license, and/or a jail sentence. This was the primary distinction which is compared in this analysis.

The second set of independent variables were "subvariables." They are important, yet of secondary importance to the major distinction noted. These subvariables can be seen classified into two groupings: demographic variables and

intervening variables. Demographic variables include the sex of the offender, the offender's age, the blood-alcohol concentration at the time of the arrest, the offender's income, the marital status of the offender, and the educational attainment of the offender. Only the first two of these variables (sex and age) were available for the non-A.S.A.P. participants. Intervening variables available for all participants include court delay, number of prior D.W.I. offenses, number of prior reckless driving offenses, and number of prior improper driving offenses. Intervening variables available only for A.S.A.P. participants were the elapsed time between arrest and the start of the A.S.A.P. program, and the elapsed time to the completion of the course. Intervening variables available only for non-A.S.A.P. participants were the jail term served, the fine imposed, and the length of the operator's license suspension.

It should be noted that the subvariables were based not only upon research interest, but also upon information availability. Specifically, variables to be examined for A.S.A.P. participants were also of interest for non-A.S.A.P. participants, yet were known to be unavailable.

The dependent variable for consideration was recidivism. An individual was defined as a recidivist if a conviction of

driving while intoxicated was received after completion of the imposed sanction. Specific consideration was given to the time factor involved - a recidivist within one year after completion of the sanction or a recidivist within two years after completion. Recidivism also is defined in terms of other related offenses such as reckless driving and improper driving. For each individual, identification as a recidivist or a non-recidivist was also made. Also considered was the pattern of recidivism (i.e., the number of post-rehabilitation offenses occurring during the identified time periods).

The research thus compared the recidivism rate (within one year and within two years) for two specific groups. First, the participants in the A.S.A.P. program who participated in Level II of the program were examined. Level III participants are not identified for examination due to the fact that they were diagnosed as problem drinkers and thus required more indepth treatment. Second, non-A.S.A.P. participants are assessed.

A second source of information regarding A.S.A.P. effectiveness was gained from personal interviews with program participants. They were interviewed before and after the rehabilitation experience. Through use of these two-time participant interviews, perceptions regarding what was ex-

perienced by A.S.A.P. participants was gained. Discussions focused on their feelings about their conviction, why they chose to participate in the A.S.A.P. program, how they viewed the overall program, what aspects of the program they found to be effective and ineffective, how they viewed the process of the program, what they believed makes a difference regarding their drinking and driving behavior, what they thought would be effective with other individuals, and other relevant components. Appendix A provides the questions used with these participants during these two interview sessions.

The third source of insight was individuals who participated in the A.S.A.P. program in the past. I asked for their reflections regarding their involvement in the program, what helped their drinking and driving behavior, what was not effective for them, and other overall matters. See Appendix B for the questions addressed to these participants.

Fourth, assessment of the program effectiveness was gathered from those individuals hired to teach in the A.S.A.P. program. Their attitudes, evaluation of the program's effectiveness, and assessment of what is influential with program participants was gathered. Overall insights regarding what they view as the appropriate manner of dealing with in-

dividuals convicted of drinking and driving was also gained. Appendix C served as the outline of questions for these group leaders.

Finally, for comparative information, interviews with D.W.I. offenders who did not participate in the A.S.A.P. program were seen as helpful. The primary intent of these sessions was to assess the reasons held by these individuals for their non-participation in the rehabilitation program. Major insights to be gained included their assessment of the effectiveness of their sanctions and their impressions of the A.S.A.P. program. Appendix D provides the questions identified to be asked of these individuals.

For each of the interviews involving current and past program participants, as well as non-participants, names were randomly selected until the relevant factors of age and sex were represented. For the current participants, six individuals from each of the two target locations were selected, although only four were called for. The additional two individuals were included so that a minimum of four individuals would remain in the event that there were withdrawals from the interviews scheduled. For both the pre- and post-program and one-time interviews, identified individuals were contacted to determine if they were willing to be interviewed. Assistance was asked of the A.S.A.P. Program Direc-

tors in facilitating the scheduling of these interviews; specifically, letters requesting the assistance of program participants were sent from the Program Directors (see Appendices E and F for samples of these letters).

To gain the necessary information regarding the effectiveness of the program, quantitative (recidivism data) and qualitative (individual interview) information was gathered from two A.S.A.P. programs found in the Commonwealth of Virginia. To examine only one program would be helpful, yet limited in applicability. On the other hand, to examine all of the programs within one state, or in all of the thirty-five states where the program has been implemented, was not feasible. Targeted for assessment were programs in the New River Valley in southwest Virginia and in Arlington County in northern Virginia. These two programs were chosen because they represent different populations served. The New River Valley program has a mixture of rural and collegiate individuals. The Arlington County program serves an urban population. These two locations, then, become an additional independent variable for consideration.

This research design adds to the existing literature which evaluates the A.S.A.P. approach in several significant ways. First, in-depth perspective regarding the program is gained through use of the participant interviews. Specific

insights, heretofore not systematically gathered, are provided from the interviews with current participants, past participants, non-participants, and group instructors. Second, unique information has been gathered from an approach which emphasizes the interaction between the quantitative and qualitative approaches. Traditional research efforts have had a single focus and have emphasized a quantitative assessment. Third, this research directs attention to the effect upon recidivist behavior of several independent variables. Past research approaches have suggested some factors of relevance, primarily previous driving while intoxicated offenses. Particularly innovative is the giving of attention to the variables of elapsed time between sentencing in court and the beginning of the rehabilitation effort and what critical events may have occurred during the implementation of the A.S.A.P. program. Finally, the comprehensive nature of the overall approach provides a holistic perspective of overall effectiveness, as well as the individual contributory components, of this rehabilitation effort.

RESEARCH IMPLEMENTATION

Data for the quantitative component of the project were gathered by comparing A.S.A.P. participants and non-participants. As mentioned, the dependent variable is recidivism. Case records maintained in the A.S.A.P. offices and court records were examined for necessary information. Procedures established by State officials were followed in gathering and utilizing this information.

To obtain a research population of sufficient size, records of individuals for a three-year time period were examined. Considered were participants who completed the mandated sanction in the time period from September, 1977 to August, 1980. This allowed for a two-year followup of recidivism with these individuals.

Selection of A.S.A.P. participants was based on several factors. First, they needed to have participated in the Level II program. Second, their completion date must have occurred during the identified time period. Third, they needed to have a Virginia operator's license, since followup recidivism data were not available for out-of-state program participants. All individuals who met the identified criteria in the New River Valley were considered. This resulted in 474 individuals. In Arlington County, the available population was larger. To maintain sample populations of an approximately equivalent size, about 30% of the available

Arlington files were systematically eliminated by examining two of every three file drawers. The result was a sample size of 533.

A similar approach was utilized with the non-participants. In the New River Valley, no records of these individuals were maintained in the A.S.A.P. office. Thus, the names of individuals who did not participate in the A.S.A.P. program were gathered in the six court districts served by the A.S.A.P. program. All traffic court dockets for the specified time period were examined, and names of non-participants were recorded. A final sample size of 226 was obtained. In Arlington County, non-participant information was available in the A.S.A.P. office. Since these files were maintained by offense date and interfiled with the A.S.A.P. participants, names of non-participants in the relevant time period were selected from A.S.A.P. records. A total of 129 individuals were identified for the final analysis.

For all of the A.S.A.P. participants, the information necessary for obtaining recidivism data was available in the individual files. To obtain this, an individual's operator's license number was necessary, plus, preferably, date of birth. The required information was not fully available for the non-participants, particularly in the New River Val-

ley. The court dockets contained only an individual's name as identifying information. An individual's operator's license number was usually recorded on the summons prepared by the police office at the time of arrest. In some localities, it was not general practice to include this until mid-1978. Another problem was with missing traffic summons - records were missing or had insufficient identifying data for obtaining followup information for a total of 153 individuals. Thus, although the final non-participant sample size in the New River Valley for whom identifying information was available was 226, a total of 379 individuals had actually been identified as non-participants.

To obtain the recidivism data, as well as each individual's prior driving record, information was obtained from the State Department of Motor Vehicles. Complete driving records were requested for all individuals for whom the appropriate identifying information was available. For 3.1% of those individuals for whom records were requested, information was not available. It should be noted that whenever a notice of "Information Not Available" was received, another request was made to verify that errors had not been made. From those requested, driving records were obtained for 97.3% of the A.S.A.P. participants in the New River Valley and 98.5% of the participants in Arlington County. For

non-participants, records were obtained for 91.0% of those in the New River Valley and 98.5% of the individuals in Arlington County. The resultant sample size for examination is 1362; had information been available for all individuals identified as D.W.I. offenders and convicted of the appropriate charge,⁶ the sample size would have been 1407.

Another item worthy of note is that the driving records obtained from the Department of Motor Vehicles utilized no standard way of indicating the fact that an individual participated in the A.S.A.P. program. For most of the individuals, participation in A.S.A.P. was clearly indicated. Among these individuals, a question appeared with regard to the completion of the A.S.A.P. program for 21.6% of them. Specifically, many of these participants failed to have recorded an A.S.A.P. program completion date. For others, a conviction of Reckless Driving was noted with no A.S.A.P. reference although the offense date matched the D.W.I. offense date. Further, no indication of any offense which matched the offense date was found on numerous driving records. For all of these cases where there was any question, the A.S.A.P. files were re-examined to verify completion of the A.S.A.P. program.

⁶ Prior to July 1, 1982, individuals charged with Driving While Intoxicated who successfully completed the A.S.A.P. program were typically actually found guilty of a lesser offense such as reckless driving or improper driving.

For the qualitative aspect of the research, interviews were arranged in accordance with the design summarized in Figure 1. As already noted, current participants were randomly identified for contact. In the New River Valley, a total of fourteen individuals were contacted by letter, and seven participated in both interviews. In Arlington County, ten individuals received letters from the A.S.A.P. Director, and five participated in the interviews.

Interviews with individuals who participated in the A.S.A.P. program at least two years prior to research implementation were contacted using a similar procedure. Names were randomly selected from the program files, and letters from the A.S.A.P. Director were sent. In the New River Valley, eight individuals were contacted. Of these, four agreed to be interviewed. In Arlington County, ten individuals were contacted by letter, and four were interviewed.

Individuals interviewed were provided with a form entitled "Statement of Understanding" (see Appendices G and H). This outlined the expectations, the researcher's obligations, the guarantee of anonymity, and the general procedures to be used.

Interviews also occurred with those individuals hired to serve as instructors of the Level II program. In the New River Valley, one individual currently serves in this capac-

Nature of Interviews	Non-A.S.A.P.	A.S.A.P. Current Participant	A.S.A.P. Past Participant	Instructor
Number of Interviews for Each Participant	1	2	1	1
Participant Variables	Age and Sex	Age and Sex	Age and Sex	Not Applicable
Number of Individuals Per Location	4	6	4	All
Total Interviews Per Locality	4	12	4	Varies
Total Interviews	8	24	8	Varies

FIGURE 1 : SUMMARY OF INTERVIEWS

ity, and he was interviewed. An interview was also conducted with an individual who previously served as an instructor. The Arlington County program employs four individuals to instruct the Level II program, and each of these professionals was interviewed.

The final series of interviews identified for research, with non-A.S.A.P. offenders, posed problems. Individuals who rejected or were denied the A.S.A.P. program were easily identified, but it was difficult to make contact with them. Specifically, it was necessary to identify and make contact with these individuals by utilizing public records only. Public records include the court dockets and telephone directories. The names of individuals who did not participate in the A.S.A.P. program during the time period of September, 1977 to August, 1980 were compared with those listed in current telephone directories. When there was a match of names (and when there were not multiple listings in the telephone directory), a letter (see Appendix I) was sent to request their assistance in the project. In the New River Valley, nine individuals met the research criteria and were sent letters. Of these, only one could be interviewed (the others actually had participated in A.S.A.P., were not interested, no longer were at that number, or were deceased). In Arlington County, fifteen individuals met the criteria and

were mailed letters. Identical results were obtained, except that none of the individuals actually contacted was interested in participation. Thus, this component of the research design was not successful beyond a single New River Valley interview.

CONCLUSION

The methodology developed and implemented is thus a combination of a quantitative and a qualitative approach. Each of these elements is seen to provide information helpful in better understanding the effectiveness of A.S.A.P.'s rehabilitation efforts. Of additional significance is the insight gained from the integration of the two distinct types of approaches. With such a multidimensional approach, meaningful and significant results are anticipated.

Chapter IV

RESULTS OF QUANTITATIVE ASSESSMENTS

As we turn to an examination of the research results, it is helpful to recall the basic research questions to be examined. The central hypothesis to be tested, as stated in Chapter III, is that "the recidivism rate for those individuals who participate in the A.S.A.P. program is less than that for those who do not participate in the program." Also of interest is an identification of those factors which may result in a lower recidivism rate among participants in the A.S.A.P. program and among those who do not participate in this program. The research design calls for an assessment of the program using both quantitative data and information of a qualitative nature.

In this chapter, I will examine the A.S.A.P. program from a quantitative perspective. This assessment produces some understanding of this program, as we learn what factors are correlated with, and can ultimately predict, success, where "success" is defined as being a non-recidivist. The next chapter examines the A.S.A.P. program from a qualitative perspective, incorporating the feelings and experiences of group instructors and program participants. Interactive insight will also be gleaned in Chapter V as these two basic approaches are briefly integrated.

The current examination is undertaken in five parts. First, the overall research design is summarized. Second, basic descriptive information is provided. The third component examines the differential recidivism rates for the A.S.A.P. and the non-A.S.A.P. programs. Fourth, the question of what items are correlated with recidivism for both program participants and non-participants is addressed. Finally, we direct attention to those items which are most helpful in making accurate predictions regarding "success." For all of the items examined, we examine the combined sample of 1362 individuals from both the New River Valley and Arlington County locations. There are times, however, when the findings obtained differ by location; these are observed when applicable.

RESEARCH FOUNDATIONS

With the fundamental research question being based on the differential recidivism rates between the participants and the non-participants in the A.S.A.P. program, the type of program emerges as the basic distinction found in the independent variables. For ease of understanding, this breakdown is summarized in Figure 2. Variables are of two general types: Demographic variables and Intervening variables. The demographic variables include the offender's sex, age,

A.S.A.P.

NON-A.S.A.P.

INDEPENDENT VARIABLE : WHETHER A.S.A.P. OR NON-A.S.A.P.	
A.S.A.P.	Demographic Variables:
	1. Sex of Offender
	2. Age of Offender (years)
	3. Occupation of Offender
	4. Blood-Alcohol Concentration of Offender at Arrest (%)
	5. Income of Offender (\$)
	6. Marital Status of Offender
	7. Educational Attainment of Offender (years)
	Intervening Variables:
	1. Court Delay (days)
	2. No. of Prior D.W.I. Offenses
	3. No. of Prior Reckless Driving Offenses
	4. No. of Prior Improper Driving Offenses
	5. Start Delay (days)
	6. Finish Delay (days)
	7. Location
NON-A.S.A.P.	Demographic Variables:
	1. Sex of Offender
	2. Age of Offender (years)
	Intervening Variables:
	1. Court Delay (days)
	2. No. of Prior D.W.I. Offenses
	3. No. of Prior Reckless Driving Offenses
	4. No. of Prior Improper Driving Offenses
	5. Jail Term Served (months)
	6. Length of Opr. License Suspension (months)
	7. Fine Imposed (\$)
	8. Location

DEPENDENT VARIABLE : RECIDIVISM	
	Operationalized By:
	1. No. of D.W.I. Offenses First Year Following Program
	2. No. of D.W.I. Offenses Second Year Following Program
	3. Total Number of D.W.I. Offenses Following Program
	4. Whether D.W.I. Recidivist First Year Following Program
	5. Whether D.W.I. Recidivist Second Year Following Program
	6. Whether D.W.I. Recidivist Either Year Following Program
	7. No. of Reckless Driving Offenses First Year Following Program
	8. No. of Reckless Driving Offenses Second Year Following Program
	9. No. of Improper Driving Offenses First Year Following Program
	10. No. of Improper Driving Offenses Second Year Following Program

FIGURE 2 : SUMMARY OF INDEPENDENT AND DEPENDENT VARIABLES

occupation, blood-alcohol concentration, income, marital status, and educational attainment. Intervening variables include court delay, prior D.W.I. offenses, prior reckless driving offenses, prior improper driving offenses, start delay, finish delay, jail term served, fine imposed, and length of operator's license suspension.

Several factors are available from the information gathered for all individuals: sex, age, elapsed time from the date of offense to the court date (hereafter called court delay), location (New River Valley or Arlington County), number of prior driving-while-intoxicated convictions, number of prior reckless driving convictions, and number of prior improper driving convictions. The remaining variables were available only for individuals in one of the two programs.

The dependent variable for examination is recidivism. As seen in Figure 2, several different operationalizations were available. The primary element of interest is an individual's driving-while-intoxicated conviction record following completion of the program.⁷ The type of program - A.S.A.P. or non-A.S.A.P. - is seen as the basic independent variable.

⁷ When the label "program" is used, the emphasis is upon the sanction imposed upon an individual. It is not limited to the A.S.A.P. program participants.

In operationalizing the dependent variable, several features need clarification. We wish to distinguish between the number of D.W.I. offenses occurring the first year and the number occurring the second year following program completion (reflected in the measures Post D.W.I.-First Year and Post D.W.I.-Second Year). The rationale for this is that we suspect that there may be different recidivism rates for each of these two years. We might anticipate, for example, that the potential impact of an educational program (or even of a fine) would decrease with the passage of time.

A subtle distinction is important for understanding these determinations of recidivism. When discussing offenses and convictions, reference is to an offense which occurs during the specified time period (one or two years following completion of the program) and for which a conviction is subsequently received. The combination of these two variables is Post D.W.I.-Total, which is simply an addition of Post D.W.I.-First Year and Post D.W.I.-Second Year.

Also of interest is the number of individuals convicted of D.W.I. (as contrasted with the number of D.W.I. offenses during these time periods). An individual is thus identified as a recidivist for the first year (Recidivist-First Year), for the second year (Recidivist-Second Year), or overall (Recidivist-Total) if one or more D.W.I. convictions are obtained during the specified time period.

Similarly, information is gathered for reckless driving and improper driving convictions. Post Reckless-First Year and Post Reckless-Second Year reflect reckless driving offenses occurring during the first or second year following program completion. Post Improper-First Year and Post Improper-Second Year reflect improper driving offenses occurring during the identified year after completion of the program. The rationale for including both the reckless driving and the improper driving offenses is that we suspect that there may be a more generalized impact of whatever sanction is employed. Specifically, one's involvement in an A.S.A.P. program may also have an effect upon other types of driving behavior. Since this information was readily available, it was deemed worthwhile to examine whether, in fact, there was such a "carryover" effect.

Through the subsequent data analyses and interpretations, all of the dependent variables identified are of some interest. The primary items for examination, however, are those emphasizing the D.W.I. offenses, since this is the behavior about which primary attention is being addressed throughout this dissertation.

Turning now to the independent variables, some explanation is required for the grouping of the data. For most of the statistical analyses used, all of the gathered data is

used in an uncategorized fashion. Some analyses, however, required some logical groupings. To determine the specific groupings, the distribution of the data was examined and categories derived by a combination of easily identified groups (e.g., months) and convenient proportions. The purpose of doing the groups was to have a limited number of groups with which to work. For example, with the variable of elapsed time from offense date to court date (court delay), the first category of a delay up to 17 days was chosen because it includes approximately one-third (34%) of the sample population; the second category (18-37 days) was chosen because it includes another one-third (32%) of the sample; the third category (38-60 days), which contains 16%, was chosen because it had a logical ending point of two months; and the other two categories are based on an identified division point of ninety days (61 to 90 days, and more than 90 days). Another example helpful to illustrate how the categories were selected is with blood-alcohol concentration levels: the first category (up to 0.14) contains 36% of the population, the second group (0.15 - 0.17) has 30%, and the remaining division point was selected as 0.20.

The first annual income category of less than \$8,000 was determined since 35% of the population were at this level. The second group, from \$8,000 to \$13,000, represents 31% of

the population. The grouping of \$13,000 to \$20,000 contains 20% of the population, and the final grouping with 14% contains those individuals with an annual income greater than \$20,000.

The categories used with the marital status precisely parallel those which are used in the A.S.A.P. program files. These include single, married, divorced, separated, or widowed. For the age categories, thirteen percent of the offenders were 20 years old or younger. Twenty-four percent were between 20 and 24, 17% between 24 and 29, 26% between 29 and 39, 18% between 39 and 59, and only 2% older than 59 years old.

The education categories were based upon interest in certain demographic groups. Those with less than a high school education comprised 21% of the offenders, those with a high school diploma were 33%, those with between 13 and 16 years of education were 38% of the group, and those with more than a college education made up 8% of the total offenders.

The start delay and finish delay categories used only the elapsed time factor, measured in days, to determine the groupings. As for start delay, 32% of the sample waited less than 60 days, 33% between 60 and 120 days, 19% between 120 and 180 days, and 16% with more than 180 days. The finish delay categories have division points at 90 days, 180

days, and 270 days. The population percentages in each of the four categories are 26%, 25%, 31% and 18%.

The independent variable of occupation requires some special attention, as its categories were developed in a different manner. The information kept in the A.S.A.P. case records includes the actual occupation of individuals. The categories used for ordering this information were taken from the Dictionary of Occupational Titles, although some of the D.O.T. categories are collapsed into one group for present purposes. The categories employed are: (1) Professional, Technical, Managerial (hereafter called Professional); (2) Clerical and Sales; (3) Service; (4) Agricultural; (5) Processing, Machine Trades, Benchwork, Structural Work (hereafter called Manufacturing); (6) Miscellaneous; (7) Student; and (8) Unemployed.

The last three variable groupings to be discussed are found with the non-A.S.A.P. individuals. Regarding size of fine, categories were determined by convenient dollar amounts imposed - less than \$200 (10% of the population), between \$200 and \$250 (71%), and more than \$250 (19%). The operator's license suspension categories were based only on the imposed time - six months or less (62% of the individuals), between six and twelve months (34%), and more than 12 months (4%). The categories for the jail term served were

three - no jail term (92%), up to one month (5%), and more than one month (3%).

DESCRIPTIVE ANALYSIS

In this section, attention is given to the independent and dependent variables and to how they are correlated. As noted in Table 1, we find that 73.8% of the population sample participated in the A.S.A.P. program, whereas 26.2% did not. Table 1 also shows that 51.3% of the individuals were in the New River Valley while the Arlington County program accounts for 48.7%.

Table 2 provides selected descriptive data regarding the individuals studied, segregated by whether or not they experienced the A.S.A.P. program. As for sex, men and women are differentially represented in the two programs: 88% of the A.S.A.P. participants are men, whereas 95% of the non-participants are men. The average age of all individuals in the population sample is 30.8, although it is two and one-half years higher for non-participants when compared with A.S.A.P. participants (32.9 compared with 30.1). This age difference may suggest that the non-participants may be more "hardened" in their attitudes regarding drinking and driving - they may have had the opportunity to participate in the A.S.A.P. program at an earlier time, yet this was not effec-

TABLE 1

NUMBERS (AND PERCENT) OF INDIVIDUALS STUDIED BY LOCATION AND
WHETHER EXPERIENCED A.S.A.P. PROGRAM

	A.S.A.P.	Non-A.S.A.P.	Total
New River Valley	471 (34.6%)	227 (16.7%)	698 (51.3%)
Arlington County	535 (39.2%)	129 (9.5%)	664 (48.7%)
Combined Locations	1006 (73.8%)	356 (26.2%)	1352 (100.0%)

TABLE 2

CHARACTERISTICS OF OFFENDERS, BY TYPE OF PROGRAM

	A.S.A.P.	Non-A.S.A.P.	Overall
Sex (% male)	88.0	94.8	89.6
Age (years)	30.1	32.9	30.8
Court Delay (days)	31.1	77.7	42.1
Prior D.W.I. Offenses (no. per person)	0.04	0.65	0.18
Prior Reckless Driving Offenses (no. per person)	0.11	0.43	0.19
Prior Improper Driving Offenses (no. per person)	0.02	0.03	0.02

tive with them (as evidenced by their current offender status). This factor is not true for all of this non-A.S.A.P. population, however, as 57% of this group had no a prior D.W.I. offense record.

Another variable to be examined is the average length of time it took to get to court. As can be seen in Table 2, this court delay averages 42.1 days. For A.S.A.P. participants, it took an average of 31.1 days to get to court, whereas for non-participants, the average court delay was more than double this (77.7 days). What accounts for the difference in time here? Is there a cause-effect relationship between the court delay and the type of program in which an offender becomes involved? That is, does an individual who is pre-disposed toward being determined as a non-A.S.A.P. participant behave in a different manner (i.e., work in a more lengthy manner with a lawyer) than those who have a greater likelihood of being assigned to the A.S.A.P. program? Alternatively, does the fact that, for whatever reason, it takes an individual longer to appear in court result in the judge's determination that a non-A.S.A.P. approach would be most appropriate for this offender? Although we do not precisely know what are the causal factors here, it is certainly worth noting that this difference does exist.

Prior offense records also demonstrate some notable differences. Individuals who did not participate in the A.S.A.P. program demonstrate an average prior D.W.I. offense rate of 0.65 per person, and the A.S.A.P. participants had an average of 0.04 offenses per person. Reckless driving offenses also differed, with non-participants having 0.43 offenses per person and A.S.A.P. participants having 0.11 prior offenses per person. Prior improper driving offenses were at a rate of 0.03 offenses per person for non-participants and 0.02 offenses per person for participants. These differentials are quite logical - those with worse prior records were not participating in the A.S.A.P. program.

Table 3 provides demographic data summaries for the A.S.A.P. participants alone, broken down by location for all participants. We find an average blood-alcohol concentration of 0.16, an average income of \$13,105, and an average educational level of 12.9 years. Generally speaking, therefore, these individuals are fairly well educated with a modest income level. The elapsed time variables reveal some interesting findings, as the mean start delay is 113 days after the offense and the mean finish delay is 184 days after the offense. This means that an individual does not begin any formalized "treatment" until nearly four months following the offense. It also means that nearly three months

TABLE 3

CHARACTERISTICS OF A.S.A.P. PARTICIPANTS, BY LOCATION

	Overall	New River Valley	Arlington County
Age (years)	30.1	27.7	32.3
Blood Alcohol Concentration (%)	0.161	0.167	0.155
Income (\$)	\$13,105	\$8,967	\$16,636
Education (years)	12.9	12.0	13.8
Court Delay (days)	31.12	19.9	43.7
Start Delay (days)	113.2	161.6	70.1
Finish Delay (days)	183.6	261.2	113.4
Occupation			
Managerial	24.6	11.6	34.9
Clerical	11.6	4.5	17.5
Service	13.8	9.9	16.8
Agricultural	0.3	0.6	0.0
Manufacturing	23.7	36.4	15.2
Miscellaneous	5.2	7.5	3.1
Student	15.4	20.9	9.8
Unemployed	5.4	8.6	2.7
Marital Status			
Single	52.3	52.4	51.8
Married	29.3	31.6	27.6
Divorced	10.9	8.5	12.8
Separated	6.5	6.4	6.7
Widowed	1.0	1.1	1.1

(an average of 82 days) elapses from the court hearing until this A.S.A.P. treatment actually begins.

Occupations among the A.S.A.P. participants are most heavily weighted with two groups (Professional and Manufacturing). As for marital status, a majority are single (52.3%). The over-representation of unmarried persons as D.W.I. offenders may indicate a relatively heavy need by single individuals to socialize in situations where driving is necessary. One may also suggest that those individuals who have never been married have a somewhat less responsible outlook toward life, thus resulting in drinking and driving behavior which culminated in their offense arrest.

How these variables are different for the two locations is also interesting to observe. The participants' average age in the New River Valley is nearly five years lower than that found in Arlington County, reflective of the university student population found in this area. The blood-alcohol concentration levels and marital status were the only items which were essentially the same in the two locations. The income level in Arlington County was nearly double that found in the New River Valley, reflecting the higher socioeconomic status found in this Washington, D.C. suburb. The educational level in Arlington was nearly two years higher, a fact that parallels the higher income level.

The delay factors reveal several interesting findings. It took much less time to get to court in the New River Valley (19.9 days as compared with 43.7 days). However, the A.S.A.P. course start delay was many times longer in the New River Valley: 162 days compared with 70 days. From the court date, it took nearly five months for individuals in the New River Valley to begin their A.S.A.P. course, while it took less than one month for this to occur in Arlington County. One explanation for this difference, and the particularly lengthy time period in the New River Valley, may be that there are fewer individuals to be served in this location. This means that it may take longer for a class session to become filled, thus delaying its starting time.

Differences by location are also found within the occupational groupings. As noted already, there is a difference with the student populations, as we find that nearly 21% of the A.S.A.P. participants in the New River Valley are students, while this is less than 10% in Arlington County. A significant portion (34.9%) of Managerial individuals obtains in Arlington County, contrasted with 11.6% in the New River Valley. In this latter location, the Manufacturing category of individuals is dominant (36.4%). Overall there are more blue collar individuals involved in the A.S.A.P. program in the New River Valley than are found in Arlington

County. This is reflective of the differential occupational and socio-economic composition of these areas.

Table 4 illustrates how the three independent variables associated solely with the non-participants are distributed. The average fine is found to be \$235, and it is slightly higher in the New River Valley (where the average income is also probably lower, since it is lower for the A.S.A.P. participants). This higher fine for individuals with a lower financial income may mean that it affects them more harshly. The operator's license is suspended for an average of 8.17 months; again, this is more stringent (by nearly two and one-half months) in the New River Valley. The jail term continues to reflect the harsher sanctions in the New River Valley jurisdiction: the mean jail term for all non-A.S.A.P. participants is 0.20 months, resulting from an average sentence of 0.32 months for those in the New River Valley. The fact that the average Arlington County jail term is 0.01 months is noteworthy, as it suggests that very rarely is this sanction employed in this particular location. Why this is the case is beyond the scope of this research, yet deserves future attention.

Attention is now directed to some additional areas of interest. One question often raised by A.S.A.P. program implementors is whether individuals' blood-alcohol concentrations are related to their sex. Table 5 shows that women

TABLE 4

CHARACTERISTICS OF NON-A.S.A.P. PARTICIPANTS, BY LOCATION

	Overall	New River Valley	Arlington County
Age (years)	32.9	34.1	31.3
Court Delay (days)	77.7	97.2	50.0
Fine Imposed (\$)	\$235.00	\$240.90	\$225.60
Length of Operator's License Suspension (months)	8.17	9.11	6.70
Jail Term Served (months)	0.20	0.32	0.01

TABLE 5

PERCENTAGES OF MEN AND WOMEN A.S.A.P. PARTICIPANTS FALLING
INTO SPECIFIED BLOOD-ALCOHOL CONCENTRATION CATEGORIES

	Blood-Alcohol Concentration Categories (parts per hundred)				
	0.06- 0.14	0.14- 0.17	0.17- 0.20	0.20- 0.32	All Categories
Men	56.9	20.2	13.8	9.1	100.0
Women	44.9	26.1	19.6	9.4	100.0

proportionately exceed men in the middle two categories by approximately six percentage points. Why this is the case is speculation at this point. It may be due to the fact that women at the lower B.A.C. levels, although still legally intoxicated, are better able to operate their automobiles. Alternatively, there may be a bias implemented by the police officer encountering drinking drivers such that women with lower B.A.C. levels are less likely to get arrested for a D.W.I. offense than men with a similar B.A.C. level. Another reason for higher mid-range proportions for the women may be that simply due to their less frequent involvement at the lower B.A.C. levels; this means that they become proportionately more involved in the middle ranges. Sex does not appear to be correlated with other factors, as insignificant correlations with prior offenses are found.

Aside from the noted correlations between prior record and program, the largest correlations among independent variables are found between prior D.W.I. offenses and: (a) court delay (0.21); (b) prior reckless driving offenses (0.17); and (c) age (0.13). Each of these correlation values was determined utilizing the Pearson Correlation method ($p < 0.0001$). The correlation between prior D.W.I. offenses and the court delay may suggest that individuals who have a significant prior record (which is the case with one who has

prior D.W.I. offenses) need more time to prepare an appropriate defense. The correlation between the two types of offenses - D.W.I. and reckless driving - suggests that there may be an underlying predisposition toward negligent behavior as an automobile driver. These individuals may have become generally "hardened" to the legal system. Finally, the correlation between prior D.W.I. offenses and age can be explained by the simple passage of time - as one gets older, there is a greater likelihood of becoming increasingly "hardened," as well as getting caught for D.W.I. offenses.

RECIDIVISM RATES

The primary emphasis of this dissertation is upon whether and for whom the A.S.A.P. program is effective, with effectiveness being measured by rates of recidivism. Let us now turn our attention to recidivism to learn more about the impact of one's participation in the A.S.A.P. program. Unless otherwise specified, all results are reported at a level of significance of $p < 0.05$.

Table 6 shows a substantial difference in D.W.I. rearrest rates between those who participated in the A.S.A.P. program and those who did not participate in the program ($p < 0.0001$). In each of the Post D.W.I. categories, there is approximately a three-to-one difference between recidivism rates for these two sets of individuals. For the A.S.A.P.

TABLE 6

NUMBER OF POST-PROGRAM OFFENSES AND OFFENDERS,
BY TYPE OF PROGRAM

	A.S.A.P.	Non-A.S.A.P.
Number of D.W.I. Offenses Per Person First Year	0.03	0.11
Number of D.W.I. Offenses Per Person Second Year	0.03	0.08
Total Number of D.W.I. Offenses Per Person Following Program	0.06	0.19
Number of D.W.I. Offenders First Year (per one hundred)	2.6	9.6
Number of D.W.I. Offenders Second Year (per one hundred)	3.3	7.0
Total Number of D.W.I. Offenders (per one hundred)	5.9	15.5
Number of Reckless Driving Offenses Per Person First Year	0.04	0.04
Number of Reckless Driving Offenses Per Person Second Year	0.03	0.03
Number of Improper Driving Offenses Per Person First Year	0.02	0.01
Number of Improper Driving Offenses Per Person Second Year	0.02	0.01

participants, there was an average of 0.06 offenses per individual during the two-year followup period; for non-participants, the average was 0.19 offenses per individual.

Similar differentials are found with recidivism ratings which measure the number of individuals with recidivist behavior. Table 6 demonstrates that 5.9 of every 100 A.S.A.P. participants show recidivist behavior during the followup period, while 15.5 of every 100 non-participants demonstrate such behavior.

It is interesting to note the differences between the first and second years. For the A.S.A.P. participants, there is a noticeable increase in the offense rate with the passage of time; for the non-participants, there is a more substantial decrease in offenses. Note for A.S.A.P. participants an average of 2.6 offenders per 100 A.S.A.P. participants during the first year after completion of the program, with 3.3 offenders per 100 persons during the second year. For the non-A.S.A.P. participants, there were 9.6 offenders per 100 persons during the first year, but only 7.0 offenders per 100 persons during the second. The possible meaning of these changes will be examined in Chapter VI.

The important point with all of this discussion is that the D.W.I. offense rate for all cases involving A.S.A.P. program participants is less than it is for those who did not participate in the A.S.A.P. program.

Turning to offenses which were not of a D.W.I. nature and which occurred following completion of the program, virtually no differences are observed. As Table 6 shows, during the first year after program completion, both A.S.A.P. and non-A.S.A.P. participants had an average of 0.04 reckless driving offenses per person. In the second year, both types of program participants had an average of 0.03 offenses per person. For improper driving offenses, A.S.A.P. participants had 0.02 offenses per person both the first and second years, while non-A.S.A.P. had 0.01. This suggests that the nature of the program in which an individual is involved has virtually no effect upon subsequent reckless driving and improper driving convictions.

With regard to location differences on these statistics, Table 7 shows several sharp distinctions. For the New River Valley participants, an approximately four-to-one difference in post-program D.W.I. offense rates prevails, whereas with the Arlington County participants, the difference is approximately two-to-one. Examining the recidivism categories in the New River Valley, 5.9% of the A.S.A.P. participants were recidivists, whereas 19.9% of the non-participants were. The corresponding figures in Arlington County are 5.8% and 7.7%.^a Thus, although we find that the A.S.A.P. programs had

^a It should be noted that the total number of D.W.I. offenders is not a simple addition of the number of D.W.I. of-

TABLE 7

NUMBER OF POST-PROGRAM OFFENSES AND OFFENDERS, BY TYPE OF
PROGRAM AND LOCATION

	<u>NEW RIVER VALLEY</u>		<u>ARLINGTON COUNTY</u>	
	<u>A.S.A.P.</u>	<u>Non- A.S.A.P.</u>	<u>A.S.A.P.</u>	<u>Non- A.S.A.P.</u>
Number of D.W.I. Offenses Per Person First Year	0.03	0.12	0.03	0.08
Number of D.W.I. Offenses Per Person Second Year	0.04	0.11	0.03	0.02
Total Number of D.W.I. Offenses Per Person Following Program	0.06	0.24	0.06	0.10
Number of D.W.I. Offenders First Year (per one hundred)	2.3	11.5	2.8	6.2
Number of D.W.I. Offenders Second Year (per one hundred)	3.6	9.7	3.0	2.3
Total Number of D.W.I. Offenders (per one hundred)	5.9	19.9	5.8	7.7

virtually identical recidivism patterns (5.9% and 5.8%), the location showed differences when comparing A.S.A.P. participants with non-A.S.A.P. participants.

Other points arise from comparison between the two locations. In the Arlington County setting, there is virtually no difference between those who did and those who did not participate in the A.S.A.P. program when examining the number of D.W.I. offenses per person the second year following the program. This may suggest that the impact of the "treatment" used with the non-A.S.A.P. individuals may have a delayed effect. Another observation is that the non-A.S.A.P. participants' recidivism pattern displayed wide variations, with Arlington County rates lower than the New River Valley. Does this suggest that the program to which an offender is assigned really does not make much of a difference in Arlington County? Definitely not, as a careful examination of the information presented in Table 7 shows that the low Recidivist-Total rate is due to multiple offenses being done. Specifically, the number of D.W.I. offenses incurred is at a rate of 0.10 for non-A.S.A.P. participants, while it is at a rate of 0.06 for A.S.A.P.

fenders the first year plus the number of D.W.I. offenders the second year. The reason for this is that there is some overlap with these individuals. An individual counted as a recidivist offender for each of the two years is counted only once in the category "Total Number of D.W.I. Offenders."

participants (in Arlington County). When the number of individuals is considered, the rate of 10 in 100 (0.10) for non-A.S.A.P. participants drops sharply to 7.7 in 100, whereas the 6 in 100 (0.06) rate for A.S.A.P. participants drops only to 5.8 in 100. This suggests that, for the non-A.S.A.P. individuals, multiple offenses account for approximately one-fourth of the total D.W.I offenses.

How do the other independent variables relate to an individual's recidivist behavior? Table 8 shows several noteworthy items. Every individual who had multiple post-program offenses was male. With the age consideration, there is a much higher age (37.6 years) for individuals with three offenses. This further supports the validity of the notion of a "hardened" D.W.I. offender - an individual who, regardless of the nature of treatment of sanction imposed - has a high likelihood of continuing to commit the same D.W.I. offense.

There is also an increasing length of time which elapsed between the initial offense and the court date as the number of post-program offenses increases. Non-recidivists had an average court delay of 40.5 days, whereas those with three post-program D.W.I. offenses averaged 82.3 days. As cited earlier, it is unclear what is the causal factor with this relationship.

TABLE 8

COMPARISON OF RECIDIVIST OFFENDER STATUS BY SEX, AGE, COURT
DELAY, PRIOR OFFENSES, AND YEAR OF D.W.I. OFFENSE

	<u>Non- Recidivists</u>	<u>One-Time Recidivists</u>	<u>Multiple Recidivists</u>	
	Zero Offenses	One Offense	Two Offenses	Three Offenses
Sex (% male)	89.1	94.8	100.0	100.0
Age (mean age in years)	30.8	30.4	28.6	37.6
Court Delay (days)	40.5	58.7	61.4	82.3
Number of Prior D.W.I. Offenses	0.17	0.32	0.40	0.00
Number of Prior Reckless Driving Offenses	0.17	0.39	0.50	0.33
Number of Prior Improper Driving Offenses	0.02	0.03	0.10	0.67
Number of Post- Program D.W.I. Offenses Occur- ring First Year	0.00	0.49	1.60	1.00
Number of Post- Program D.W.I. Offenses Occur- ring Second Year	0.00	0.51	0.40	2.00

Post-program offenses increase with the increase in prior D.W.I. offenses, with the noted exception of three-post program offenses. Those with one or two offenses following the program had a prior D.W.I. offense rate approximately double that of those who exhibited no recidivist behavior (who had an average of 0.17 prior offenses per person).

Table 8 also shows how the post-program offenses are spread over the two-year period. Reckless and improper driving offenses increase with recidivism, except for diminished occurrence of reckless driving charges on the part of three-time recidivists. Those with only one D.W.I. offense are evenly distributed between the two years. That is, if an individual exhibited any recidivist behavior of a D.W.I. nature, there was equal likelihood that this would occur during either of the years. However, if multiple offenses occurred, a different pattern emerged. Examining those individuals who had two post-program offenses, we find that eighty percent of these offenses occurred during the first of the two years. For three post-program offenses, one-third were committed during the first year. Why this reversal in recidivist patterns occurs for the multiple offenders is unknown; it remains as an interesting observation calling for further research.

Let us now direct our attention to the A.S.A.P./non-A.S.A.P. program differences based on location, as presented in Tables 9 and 10. Table 9 introduces the characteristics of participants in the A.S.A.P. programs, comparing those who were recidivists with those were not recidivist, and examining these characteristics by the program's location. In the New River Valley, we find that all of the recidivists were male. These men were approximately two years younger than the non-recidivists, and appeared in court an average of six days earlier. Their prior D.W.I. offense record was slightly lower than that of the non-recidivists, although their prior reckless driving record was much higher. This record was 0.43 prior reckless driving offenses per recidivist, meaning that almost one of every two individuals who exhibited recidivist behavior following completion of the A.S.A.P. program had a prior reckless driving offense record. This suggests again that there may be some individuals for whom treatment of any kind known will not work.

In Arlington County, the recidivists were 90% male and non-recidivists 83%. The age and court delay characteristics showed no difference. Prior D.W.I. offenses were virtually non-existent for non-recidivists (0.01 offenses per person), and minimal (0.03 offenses per person) for the re-

TABLE 9

CHARACTERISTICS OF RECIDIVIST AND NON-RECIDIVIST A.S.A.P.
PARTICIPANTS, BY LOCATION

	<u>NEW RIVER VALLEY</u>		<u>ARLINGTON COUNTY</u>	
	<u>Non- Recidivist</u>	<u>Recidivist</u>	<u>Non- Recidivist</u>	<u>Recidivist</u>
Sex (% male)	92.4	100.0	83.3	90.3
Age (years)	27.8	25.5	32.3	32.4
Court Delay (days)	44.1	38.0	19.9	20.3
Prior D.W.I. Offenses(no.)	0.07	0.04	0.01	0.03
Prior Reckless Driving Offenses (no.)	0.14	0.43	0.07	0.19
Prior Improper Driving Offenses (no.)	0.03	0.07	0.01	0.00

cidivists. The reckless driving prior record was similar as that found in the New River Valley - recidivists had an average of 0.19 prior reckless driving offenses, whereas the non-recidivists had an average of 0.07 offenses per person.

Shifting our attention now to those who did not participate in the A.S.A.P. program, we examine the summaries provided in Table 10. Focusing first upon the New River Valley, this table demonstrates that there is basic equivalence between recidivists and non-recidivists with regard to sex (95.0% and 96.4% male) and age (33.2 and 34.3). The recidivists took longer to get to court, as they had a court delay of 110.4 days compared to a court delay of 93.5 days for the non-recidivists. Prior D.W.I. offenses for recidivists were at a rate of 0.60 per person, and 0.94 per person for the non-recidivists. Prior reckless driving offenses were 0.55 for recidivists, and 0.40 for non-recidivists. Prior improper driving offenses were 0.10 offenses per person for the recidivists, and 0.03 for the non-recidivists. These variations all correspond to directions of difference found for A.S.A.P. participants, except for lower D.W.I. rates for recidivists.

Arlington County characteristics were, once again, quite unlike those found in the New River Valley. In this location, all of the recidivists were male. The recidivists

TABLE 10

CHARACTERISTICS OF RECIDIVIST AND NON-RECIDIVIST
NON-A.S.A.P. PARTICIPANTS, BY LOCATION

	<u>NEW RIVER VALLEY</u>		<u>ARLINGTON COUNTY</u>	
	<u>Non- Recidivist</u>	<u>Recidivist</u>	<u>Non- Recidivist</u>	<u>Recidivist</u>
Sex (% male)	96.4	95.0	92.4	100.0
Age (years)	34.3	33.2	31.7	26.7
Court Delay (days)	93.5	110.4	51.0	38.7
Prior D.W.I. Offenses (no.)	0.94	0.60	0.30	0.90
Prior Reckless Driving Offenses (no.)	0.40	0.55	0.43	0.40
Prior Improper Driving Offenses (no.)	0.03	0.10	0.01	0.00

were younger than in the New River Valley, but the court delay was less for the recidivists, not more (38.7 compared with 51 days). Prior D.W.I. offenses for the recidivists was triple that found with the non-recidivists (0.90 prior offenses per person compared with 0.30 offenses), unlike the reverse patterns in the New River Valley. A similar reversal is found for reckless driving offenses, while improper driving offenses were virtually non-existent for both recidivists and non-recidivists.

With the interesting difference noted between the two locations, we raise questions as to why this is the case. The lower age for Arlington County recidivists may suggest that a "hardening" occurs at an earlier age for those in an urban location. This "hardened" personality is further supported by the fact that Arlington County recidivists had an average of nearly one (0.90) prior D.W.I. offense. Precisely why these differences are present is unknown, and poses some questions for further attention.

Thus far, we have provided attention to a variety of independent variables of interest. We now need to turn to an examination of how significant these relationships are. Specifically, what items are significantly related (at a 0.05 level) to the subsequent D.W.I. behavior? The answer is that, when using the multivariate analysis of variance

procedure, total offenses for all individuals (A.S.A.P. and non-A.S.A.P. participants) are significantly related ($p < 0.05$) only to one's prior reckless driving behavior.

Table 11 summarizes the variables commonly held by both A.S.A.P. participants and non-A.S.A.P. participants, and further distinguishes between the offense rate (in average number of offenses for individuals in each of the specified categories) and the recidivist individual rate (identifying the percentage of individuals who exhibit subsequent recidivist behavior). While many of the categories do show differences in the recidivism rates for the separate categories, it was only the prior reckless driving offense record which was significantly related, as determined by the multivariate analysis of variance procedure, to the post-program D.W.I. offense behavior. This significant relationship occurred for each of the recidivist standards used (the offense rate and the recidivist individual rate).

Although not reported in this table, it is interesting to note some of the other results obtained from this multivariate analysis of variance procedure for each of the separate years. Again giving our attention to all individuals (A.S.A.P. and non-A.S.A.P. participants combined), the only variable significantly related to the dependent measure of Post D.W.I.-Total (total D.W.I. offenses) during the first

TABLE 11

POST-PROGRAM OFFENSES BY SEX, AGE, COURT DELAY, AND PRIOR
OFFENSE RECORD

		Number of D.W.I. Offenses Per Person	Number of D.W.I. Offenders Per One Hundred
Sex	Male	.10	8.8
	Female	.04	3.6
Age (years)	1 - 20	.15	12.8
	21 - 24	.07	6.8
	25 - 29	.08	7.0
	30 - 39	.08	7.8
	40 - 59	.12	9.6
	above 60	.03	2.9
Court Delay (days)	less than 17	.08	7.3
	18 - 37	.08	7.5
	38 - 60	.10	7.9
	61 - 90	.10	8.3
	above 90	.21	16.8
Number of Prior D.W.I. Offenses	0	.08	7.2
	1	.20	17.8
	2	.17	15.0
	3	.00	0.0
	4	.17	16.7
	5	.00	0.0
Number of Prior Reckless Driving Offenses	0	.08	7.1
	1	.15	11.4
	2	.29	26.5
	3	.43	42.9
	4	.00	0.0

year is the court delay. Specifically, the longer that it took to get to court, the greater the recidivism rate that is found (the recidivism rate for the longest court delay - greater than 90 days - is 0.21 offenses per person). In the first year, the only factor of significance is an individual's prior reckless driving behavior. Shifting attention to the overall recidivist individual rate, we find that court delay, prior reckless driving behavior, and prior D.W.I. behavior are all significant for the first year. The second year, only the prior reckless driving behavior are significantly related. It is worth emphasizing the fact that the significant variable for the second year is the same as that when considering D.W.I.-Total. Specifically, an offender's prior reckless driving record is what has the lasting relationship (at least for the two-year followup period) upon one's subsequent D.W.I. offenses.

There have been several times when reference has been made to a "hardened" individual. With this thought in mind, it is helpful to examine how the two programs differ on recidivism rates when we consider only those individuals who had no prior D.W.I. offense record. With these prior D.W.I. offenders totally removed from our consideration, we retain 975 A.S.A.P. participants, and 201 non-A.S.A.P. individuals, (This compares to 1006 and 356, respectively, when

all individuals are considered). Table 12 shows the comparative recidivism rates for these individuals. Note there are still differences between those who participated in the A.S.A.P. program and those who did not. By all measures, the former have better subsequent records than the latter. Thus, these differences cannot be explained by the individual's prior D.W.I. offense record. It is also worthy of note that the recidivism rates are roughly equivalent to those found when examining the entire population, regardless of prior D.W.I. offense record. Clearly, there are program differences not easily explained by the extent to which an individual becomes "hardened."

WITHIN-PROGRAM RELATIONSHIPS

Having examined recidivist behavior from an overall perspective, it is important now to examine how specific independent variables within each of the two programs correlate with the dependent measure of recidivism. Table 13 presents recidivist offense rates for each of the categories of demographic information available for the A.S.A.P. program participants. This table also provides insight regarding the differences in recidivism between the two years. Women, for example, exhibit no recidivist behavior during the first year following completion of the A.S.A.P. program. The in-

TABLE 12

POST-PROGRAM OFFENSES FOR THOSE WITH NO PRIOR D.W.I. RECORD,
BY PROGRAM

	<u>TYPE OF PROGRAM</u>	
	<u>A.S.A.P.</u>	<u>Non-A.S.A.P.</u>
Number of D.W.I. Offenses Per Person First Year	0.03	0.09
Number of D.W.I. Offenses Per Person Second Year	0.03	0.10
Total Number of D.W.I. Offenses Per Person Following Program	0.06	0.19
Number of D.W.I. Offenders First Year (per one hundred)	2.5	8.0
Number of D.W.I. Offenders Second Year (per one hundred)	3.4	8.0
Total Number of D.W.I. Offenders (per one hundred)	5.8	14.4

TABLE 13

NUMBER OF RECIDIVIST OFFENSES FOR A.S.A.P. PARTICIPANTS, BY
SEX, OCCUPATION, MARITAL, INCOME, AGE, AND EDUCATION

		Post D.W.I. 1st Year	Post D.W.I. 2nd Year	Post D.W.I. Total
Sex	Male	.025	.031	.056
	Female	.000	.013	.013
Occupation	Professional	.016	.037	.053
	Clerical, Sales	.036	.012	.048
	Service	.056	.056	.112
	Agricultural	.000	.000	.000
	Manufacturing	.013	.020	.031
	Miscellaneous	.000	.040	.040
	Student	.000	.000	.000
	Unemployed	.000	.000	.000
Marital Status	Single	.018	.032	.050
	Married	.040	.030	.070
	Divorced	.000	.015	.015
	Separated	.000	.000	.000
	Widowed	.000	.125	.125
Income (\$)	8,000 or less	.016	.032	.048
	8,001 - 13,000	.026	.031	.057
	13,001 - 20,000	.023	.008	.031
	above 20,000	.024	.048	.072
Age (years)	1 - 20	.020	.082	.102
	21 - 24	.031	.016	.047
	25 - 29	.018	.018	.036
	30 - 39	.023	.023	.046
	40 - 59	.016	.033	.049
	above 60	.000	.077	.077
Education (years)	less than 12	.018	.056	.074
	12 years	.030	.030	.060
	12 - 16	.021	.021	.042
	above 16	.000	.000	.000

dividuals with a "professional" occupational category have higher recidivism during the second year following program completion, and students exhibit absolutely no recidivist behavior. Those at the higher and lower extremes of the income groupings exhibit greater recidivism during the second year following program completion.

With regard to the age classification, the very young (under 20) and the very old (above 60) A.S.A.P. participants exhibited much higher recidivism rates than did the rest of the individuals.

With regard to the educational grouping, higher educational attainment resulted in consistently lower recidivism rates, with the sample of college graduates demonstrating no recidivist behavior.

Table 14 displays information similar to that found in Table 13, except that it concerns intervening variables. An individual's blood-alcohol concentration level was related to recidivism, with those at the higher B.A.C. level exhibiting greater recidivism. The starting date of the program appears to have made a difference, as those who had a start delay of over six months (180 days) had a recidivism rate three times greater than did those with a start delay of less than two months.

TABLE 14

NUMBER OF RECIDIVIST OFFENSES FOR A.S.A.P. PARTICIPANTS, BY B.A.C.,
AND COURT, START, AND FINISH DELAYS

		Post D.W.I. 1st Year	Post D.W.I. 2nd Year	Post D.W.I. Total
B.A.C. (%)	0.06 - 0.14	.014	.034	.048
	0.14 - 0.17	.016	.027	.043
	0.17 - 0.20	.038	.015	.053
	0.20 - 0.32	.028	.042	.070
Court Delay (days)	less than 17 days	.020	.024	.044
	18 - 37 days	.018	.036	.054
	38 - 60 days	.029	.014	.043
	61 - 90 days	.054	.054	.108
	above 90 days	.000	.000	.000
Start Delay (days)	less than 60 days	.009	.028	.037
	60 - 120 days	.025	.020	.045
	121 - 180 days	.028	.028	.056
	above 180 days	.041	.055	.096
Finish Delay (days)	less than 90 days	.005	.026	.031
	91 - 180 days	.032	.026	.058
	181 - 270 days	.017	.028	.045
	above 270 days	.054	.041	.095

While these differences are interesting to observe and serve as a basis for making speculations, we must also learn what is of statistical significance. Again using the multivariate analysis of variance procedure, and focusing only upon the A.S.A.P. program grouping, one's prior reckless driving behavior again emerges as significant for a recidivist classification for both the first and second years. During the second year, one's educational level emerges as a significant item. Overall, both the prior reckless driving involvement and occupation are significant.

Changing the focus of our attention now to the non-A.S.A.P. individuals, We observe in Table 15 that sex makes some difference with recidivism, as females have an average of 0.13 offenses per person, whereas males have 0.17 offenses. The age category suggests findings similar to those found with the A.S.A.P. program participants; we find those in the youngest and oldest groups (with the exception of the very oldest group) with the higher recidivism rates. Jail time served provides interesting results, as those with a month or more of jail have a rate much higher than that found with those who experienced no jail time - the rate for those with a longer jail term is 0.43, meaning that nearly one of every two individuals experiencing this jail term will have recidivist behavior. This may not be due to the

TABLE 15

NUMBER OF RECIDIVIST OFFENSES FOR NON-A.S.A.P. OFFENDERS, BY
SEX, AGE, JAIL TERM, LICENSE SUSPENSION, AND FINE

		Post D.W.I. First Year	Post D.W.I. Second Year	Post D.W.I. Total
Sex	Male	.104	.069	.173
	Female	.067	.067	.134
Age (years)	1 - 20	.115	.115	.230
	21 - 24	.078	.039	.117
	25 - 29	.061	.040	.101
	30 - 39	.149	.015	.164
	40 - 59	.114	.157	.271
	above 60	.000	.000	.000
Jail Term Served (months)	0	.152	.055	.157
	0.01 to 1.00	.167	.167	.334
	above 1.00	.000	.429	.429
Operator	0 - 6	.094	.022	.116
License	6 - 12	.115	.172	.287
Suspension (months)	above 12	.125	.000	.125
Fine Imposed (\$)	less than \$200	.185	.000	.185
	\$200 - \$250	.079	.054	.133
	above \$250	.152	.174	.326
Court Delay (days)	less than 17 days	.053	.070	.123
	18 - 37	.041	.055	.096
	38 - 60	.065	.130	.195
	61 - 90	.132	.026	.158
	above 90	.229	.066	.295

Note : All rates are in terms of the Number of D.W.I. Offenses
Per Person

impact of the jail term, but rather to the character of the individual receiving this sentence. With the operator's license suspension, the higher recidivism pattern is found with those with the moderate time for license suspension i.e., an average of 0.29 offenses per person for those receiving a suspension of six to twelve months.

With the fine, those with the higher category of fine exhibited recidivism almost twice as high as those with the lowest category (0.33 offenses per person compared with 0.19 offenses per person). The court delay exhibits mixed findings; worthy of note is the fact that those with a court delay of more than three months exhibited a high recidivist rate of 0.30 offenses per person.

Again using the multivariate analysis of variance procedure, the court delay and prior improper driving offenses are the only significant variables in relation to the first year's subsequent D.W.I. behavior. For the second year, the significant relationships are for jail term, length of time of operator's license suspension, prior D.W.I. offenses, and the prior improper driving offenses. When considered in combination (post D.W.I.-Total), the prior improper driving offense variable remains significant. Also, the fine emerges as a significant variable due to the fact that all variables are now being considered.

Are there any differences for A.S.A.P. participants by location? In the New River Valley, one's prior reckless driving record is significant for the first year, and one's educational level is significant for the second year, with the prior reckless driving level being the only significant factor overall. In Arlington County, one's prior D.W.I. offense record is significant for the first year, while the prior reckless driving record is significant for the second year. The overall pattern shows one's prior D.W.I. offenses remaining significant, with marriage emerging as also being significant.

Looking at non-A.S.A.P. participants by location, the New River Valley shows age, operator's license suspension, court delay, and prior improper driving record as being significant for the first year. The factors for the second year are fine, prior D.W.I. record, and prior improper driving record, with age, prior D.W.I. record and prior improper driving record. In Arlington County, the first year shows fine and prior D.W.I. offenses being significant, the second year shows nothing at a significant level, and the overall pattern has the same factors as the first year.

In sum, differences regarding subsequent D.W.I. behavior have been observed between programs, and there are some differences based upon location. However, caution must be used

in interpreting these findings. Certainly, the variables cited are significant, in a statistical sense, with respect to their differences on the dependent measures of recidivism. That is, real differences are found between recidivists and non-recidivists in relation to factors such as educational level or court delay. But there is a limitation with this insight. A specific example will illustrate this limitation.

The multivariate analysis of variance done with the dependent measure of Post D.W.I. Offenses - Total shows that of all the independent measures examined, two emerged as statistically significant: program (with an observed F-value of 18.37) and prior reckless driving record (with an F-value of 3.19). However, the R-square for this analysis is only 0.056. This means that only 5.6 percent of the variance in the post-program D.W.I. behavior can be explained by the two noted independent variables. Thus, although there are, indeed, statistically significant differences in subsequent D.W.I. behavior for various variables, they are capable of accounting for, in a statistical sense, only a small part of the variance which occurs with regard to the dependent variable of recidivism. It should be emphasized, however, that it is not realistic to expect to be able to account for most variance in a social analysis of this kind, as we are deal-

ing with a population of distinct individuals and an almost infinite number of causal factors. Yet, at the same time, we have been provided with numerous insights of factors which are helpful in better understanding differential recidivism rates for each of a variety of different variable categories.

PREDICTION OF RECIDIVIST BEHAVIOR

Since we find that the variance in recidivist behavior can not be explained at a high level using the analysis of variance approach, it is deemed necessary to examine the problem of understanding this recidivist factor from a different approach. To aid in understanding and ultimately predicting recidivist behavior, an approach known as stepwise canonical discriminant function analysis is used. With this, the underlying concept is to distinguish, in the best way possible, between the members of two groups (e.g., recidivist and non-recidivist). With canonical discriminant analysis, combinations of several variables are weighted so that a single score is derived which will distinguish among group members. Essentially, a multivariate problem is reduced to a univariate problem. The stepwise aspect of this approach means that each variable is treated as if it were measured last, thereby resulting in its variance not being shared with other variables.

In attempting to differentiate between individuals who participated and those who did not participate in the A.S.A.P. program, one's prior D.W.I. record is found to be the most significant factor when using this procedure. The days from the offense to the court hearing was second, followed by prior reckless driving record and age. These four factors are effective in accounting for 29% of the variance between the two groups (the canonical correlation of this function is 0.538), a rate which is quite satisfactory for social science research. Overall, the derived function distinguishes between A.S.A.P. and non-A.S.A.P. individuals with an F-statistic of 88.88 ($p < 0.00001$).

Turning now to those factors which differentiate between recidivism and non-recidivism, program is the most significant factor. This was followed by the prior improper driving and reckless driving offense records of the individual. However, the canonical correlation is only 0.20, resulting in the derived function accounting for only 4.0% of the variance. If we omit the program in which an individual was involved from consideration, the significant factors, in order of importance, are prior reckless driving offenses, the time that it took to get to court, and the prior improper driving offenses. This function accounts for 2.7% of the variance, as the canonical correlation is 0.167. The F-sta-

tistic for the function designed to distinguish recidivists from non-recidivists is 10.55 ($p < 0.00001$).

How well does the derived function distinguish individuals who have zero, one, two and three post-program D.W.I. offenses? It actually does quite well, as seen in Table 16. The post-program offenses are distinguished from one another, with the F-value and level of significance listed. Based on the values associated with the variables in this derived function, we can ask how well the weighted variables combine in a meaningful manner. When combining the input variable values, the derived functions distinguish between individuals who have zero and one post-program offenses with an F-value of 6.7601. The derived function is helpful in distinguishing all except those who had one offense from those who had two offenses.

Perhaps we can learn more if we examine the A.S.A.P. participants and non-participants separately. Directing our attention to the A.S.A.P. participants, we find that one's prior reckless driving and improper driving offenses are the most significant factors, followed in order by prior D.W.I. offenses, educational level, occupation, marital status, and BAC level. Not significant as discriminators are age, sex, court delay, income level, and delay of start and finish of the program. This has a canonical correlation of 0.22 which

TABLE 16

EFFECTIVENESS OF DERIVED FUNCTION IN DISTINGUISHING BETWEEN
NUMBER OF RECIDIVIST OFFENSES

		Post-Program D.W.I. Offenses		
		0	1	2
Post-Program D.W.I. Offenses	1	6.7601 (0.0001)		
	2	2.7174 (0.0189)	0.7890 (0.5634)	
	3	16.027 (0.0001)	14.593 (0.0001)	9.4036 (0.0001)

Note : Statistics reported are the F-value and level of
significance.

means that 4.8% of the variance is explained by the significant variables.

As seen in Table 17, the function is helpful in distinguishing all levels of post-program recidivism. Again, we find that the derived function successfully distinguishes among all groups of recidivists with a high level of significance. This means that the value ratings associated with each of the variables, when combined, resulted in a function which is quite effective in distinguishing recidivist behaviors.

With those individuals who did not participate in the A.S.A.P. program, four variables combine to develop a discriminant function which distinguishes recidivists from non-recidivists: prior improper driving offenses, fine, jail term, and prior reckless driving offenses. Factors not significant are sex, age, court delay, prior D.W.I. offenses, and operator's license suspension term. This function has a canonical correlation of 0.42, thereby accounting for 17.2% of the variance. Table 18 shows that this function is helpful in distinguishing all levels of post-program recidivism,

TABLE 17

EFFECTIVENESS OF DERIVED FUNCTION IN DISTINGUISHING
 RECIDIVIST OFFENSES FOR A.S.A.P. PARTICIPANTS

		Post-Program D.W.I. Offenses	
		0	1
Post-Program	1	4.2189 (0.0001)	
D.W.I.			
Offenses	2	2.3954 (0.0083)	2.8397 (0.0018)

Note : Statistics reported are the F-value and level of
 significance.

TABLE 18

EFFECTIVENESS OF DERIVED FUNCTION IN DISTINGUISHING
 RECIDIVIST OFFENSES FOR NON-A.S.A.P. PARTICIPANTS

		Post-Program D.W.I. Offenses		
		0	1	2
Post-Program D.W.I. Offenses	1	2.4136 (0.0366)		
	2	2.6325 (0.0241)	2.4003 (0.0376)	
	3	10.861 (0.0001)	9.9174 (0.0001)	9.0632 (0.0001)

Note : Statistics reported are the F-value and level of significance.

particularly when it comes to looking at those with three offenses.⁹

Where does this analysis leave us? We have found that there are some variables which have differential effects with the dependent variable of recidivism. Specifically, an offender's prior offense record and the court delay are the significant factors cited most often. However, we have learned that much of the variance in recidivist behavior cannot be accounted for. Clearly, this does not mean that those variables which do have differential effects should be ignored. A large amount of insight has been gained from the examinations performed thus far. Our attempt here is primarily to understand better whether or not the A.S.A.P. program is, indeed, effective. We have learned, from this quantitative analysis, that the evidence suggests that it is more effective than the alternative approaches currently being used.

⁹ One last approach was used to determine whether there are any factors which underlie all of the independent variables. Factor analysis, using an oblique rotation, was used with these variables for the group as a whole, and then separately for the A.S.A.P. participants and non-participants. No major factors emerged which are helpful for integration and utilization with the other statistical tests.

Chapter V

RESULTS OF QUALITATIVE ASSESSMENTS

From the statistical analyses described in Chapter IV, we have seen many factors which appear to have an impact upon the dependent variable of recidivism. What more can we learn about the A.S.A.P. program from in-depth conversations with those who have been intimately involved with this program?

In this chapter, I will share ideas, reactions, and experiences of 25 persons who have been involved in the A.S.A.P. program. The first group of these to be examined will be those who have recently participated in the program. As will be recalled from the chapter on Methodology, these individuals were interviewed prior to and following their involvement with A.S.A.P.. Seven individuals from the New River Valley, and five from Arlington County, were interviewed for this purpose. The discussion will then emphasize other individuals who participated in the A.S.A.P. experience several years ago. Four individuals in each location were interviewed. Finally, attention will be given to those involved in a teaching capacity in both the New River Valley and Arlington County locations. One instructor in the New River Valley, and four in Arlington County, were interviewed.

Two initial points are relevant prior to this discussion. First, it should be recalled that this assessment is of the Level II program only. Participants at this level are generally involved in their first D.W.I. offense. Second, the emphasis of this approach was not only to gather the interviewees' insights regarding the program, but also to attempt to get into their own world. The desire was to learn what is experienced by individuals involved with A.S.A.P., and to understand what makes a difference for future drinking and driving behavior with them.

INTERVIEWS WITH D.W.I. OFFENDERS PRIOR TO PARTICIPATION IN THE A.S.A.P. PROGRAM

To begin this qualitative analysis, attention will be directed to interviews conducted prior to interviewees' involvement in the A.S.A.P. program. Individuals convicted of driving while intoxicated approach the A.S.A.P. program with a variety of expectations and feelings, with many people believing that they had been singled out for this "harsh treatment." Most individuals believed that their apprehension was "unfair" or that they had been charged with a "false arrest." A typical reaction is that their driving really was not impaired, as exemplified by the individual who stated: "I know I wasn't staggering because I worked on walking straight." Another said: "Drinking and driving is

different from driving while totally bombed." The phenomenon of "denial" of any problem was very common. Only one individual had a thankful temperament, indicating: "It's a good thing they did pull me over; I would have killed myself or someone."

The experience with the police, and then later with the court system, was unequivocally believed to be a humiliating, embarrassing one. Within the jurisdiction of the police, general experiences of being treated in an even-handed manner were found. Specifically, individuals felt that they were treated neither more gently nor more harshly than others. However, a significant amount of consternation was found with the overall involvement with the police. This feeling is typified by the comment of one individual who noted that she was "treated like any other prisoner." She went on to observe that, "for the kind of arrest, they should have had some consideration." Another individual remarked, "all this was blowing my mind; I was being treated like a bad criminal." The rude awakening which occurred with these participants is that, once arrested, they began to realize that driving while intoxicated was a serious offense - "how dumb it was." The fact that many of these individuals were handcuffed, placed under arrest, and even spent the night in jail appears to have caused some internal

tension due to inconsistent information being received (cognitive dissonance). Specifically, they previously had not viewed driving under the influence as "any big deal," and then were physically constrained and "treated like a bad criminal." As a result of this enforcement activity, individuals typically began to wonder whether their D.W.I. behavior had been, in fact, of a criminal nature. These threads of a questioning stance will have a significant impact for them later, as we will soon see.

Within the judicial system, participants found the judge to be fair, yet wished that greater time could have been granted to hear their particular "unique" circumstances. There appears to be a belief that a less severe sanction would have been imposed if only the judge had known how responsible they "really were." Interviewees find the judge to be following standard procedure, and that they were handled in a routine manner like other offenders.

When asked why these individuals chose to participate in the A.S.A.P. program, the majority indicated that their reason was to keep their record clean.¹⁰ Other motivating factors included the desire to maintain transportation abil-

¹⁰ It should be recalled that at this time, individuals who successfully completed the A.S.A.P. program would have the D.W.I. conviction reduced to a reckless driving conviction. This is no longer the case under current Virginia law.

ity for work purposes and to avoid receipt of points on the driving record.

Expectations regarding the A.S.A.P. class were fairly consistent among most of the interviewees. Essentially, the class was anticipated as a hassle and boring. Individuals believed that they really would not learn anything new. They expected that the instructors would "tell you not to drink and drive," and some expected intimidation to be used in this process. One individual observed: "How much can they teach me? They can say what you need to learn in a matter of minutes - don't drink and drive." Two individuals interviewed expected that the program would be worthwhile, and that it would benefit them. One of these observed that he wondered whether he had a drinking problem, and that his involvement in the course would help him answer this question for himself.

The interviewees were divided on the issue of the length of time of participation (16 hours) in the A.S.A.P. program. Half felt that this was much too long, although my interpretation is that this contention was really an expression of the perceived inconvenience in their personal lives. The other half of the interviewees had faith in the planners of the program as to the need for such a lengthy program. As one said, "I'm sure there's a reason for it - they know more about this than any of us."

Most of the individuals had a fairly accurate perception of what would be occurring during the class time. They expected movies, lectures, and discussions with others in the class. Generally, they expected that fundamentals and facts would be taught. Half of the individuals believed, as one observed, that the course instructor would be "drilling the theme of not drinking and driving into you."

"Relief that it's over" is a quote which typifies the unanimous opinion regarding how individuals expected to feel at the end of the course. They also expected that they would be quite leary of drinking and driving following this experience. This hesitancy regarding drinking and driving appeared to be based upon their desire not to get caught again, since it was clear that "more severe sanctions" would be imposed. Further, this initial experience was expected to be "such a hassle" that they certainly would not want to repeat even this. In a concrete sense, they expected to learn, simply, not to drink and drive. Further, they expected to learn "how to tell if you've had too much to drink." Some individuals, the same as those who expected to learn nothing, indicated that they had already learned their lesson.

The significant issue of their expected future drinking and driving behavior deserves some close attention. When

asked what they expected for this, a variety of answers were obtained. Most individuals believed that drinking and driving behavior is "stupid and dumb." Several participants made comments such as "it already has stopped." Others observed: "If I do drink I will have others drive; I won't drive." One individual noted that "if I am weaving to my car, I won't get in it: I'll have someone else drive." He further observed: "I can't say that it's going to stop, but it will be more in proportion." Overall, the attitude typified by "my drinking and driving behavior has already changed" was found with these individuals. The rationale for this change was fairly clear and consistent - it was a desire not to get caught again for this offense, because "it's too much of a hassle." The emphasis of all individuals but one was upon themselves - the problems that getting caught for such an offense causes them. The exception observed was that he was concerned with others' safety if he were to drink and drive.

Several extreme reactions were found. One individual was incensed that anyone else would proscribe behavior for him: "Who are you to tell me what my limits are? If I feel I'm capable of operating a vehicle, it's my decision to make about my own limits." Another individual noted that "it's kind of crazy that alcohol is legal in the first place."

Alcohol's deleterious influence upon drivers is highlighted by the comment: "It's not you that's in control of the situation - alcohol controls your destiny." One individual observed that he could not be honest with the A.S.A.P. case-worker who decided the program level to which he would be assigned: "If I told them the truth, I'd be in Level III, and I know that I don't have a drinking problem." This individual's denial is thus very high; he realizes that his actual drinking behavior is such that, if reported honestly, it would result in classification as a problem drinker. Regardless of this classification, he believes that no drinking problem exists.

Overall, the individuals were very cooperative and appeared uninhibited with their responses to interview questions. Half of the participants wished to participate so that they could help other people avoid involvement in such problematic behavior. I believe that many wished to participate so that they would feel that they were making a contribution to others, in an attempt to ease some of the guilt surrounding their embarrassing current situation. As observed, individuals at the initial phases of the process following their offense felt like they were picked upon, although they also acknowledged that the police and the court had treated them fairly. Expectations about the A.S.A.P.

program were mixed, yet generally few concrete results were anticipated. The hostility toward the police, the judge, and the A.S.A.P. program appear to be related to the embarrassment and possible self-disappointment regarding the driving-while-intoxicated offense. Prior to the arrest, individuals had not perceived this to be any significant problem, since it appeared to them that "everybody does it." The harsh reality that it is, indeed, a criminal act had just been faced by them, and they were striving to orient this within their own emotional and cognitive frameworks. Some displaced blame is thus understandable, although perhaps not appropriate or deserved. What, then, are their perceptions of the program following its completion?

D.W.I. OFFENDER INTERVIEWS FOLLOWING THE A.S.A.P. PROGRAM

Attitudes about the A.S.A.P. experience held by recent graduates of the program were noticeably different from when they entered the program. Interviewing these same twelve individuals again, they stated, contrary to the denial and hostility first expressed, general approval of the A.S.A.P. course. Most found it a worthwhile experience. Let us review these comments in detail.

Of all the individuals interviewed, only one found the course boring and a waste of time. He noted, however, that

he learned a lot from it. The remaining participants believed that it was a good course. One individual admitted that "I don't want to say that I'm glad I went through it, but I kind of am."

Why did they find it helpful? Most course participants found the discussion of the physical aspects of alcohol use to be of major interest. One participant stated that he had learned about "the effects of alcohol on the body and mind, that previously were not solidified."

Also highly regarded were discussions when other participants' points of view were shared. One interviewee noted: "The group environment makes the difference - other people's comments." Another observed: "It made you think more about yourself."

A third agreed-upon helpful element of the course was the presence of a young alcoholic to share insights about his experiences. As one class member stated, "The best class was with the guy from A.A., showing some of the extremes. I saw some of myself in that." Another class member stated that the class "needed more discussion with more personal questions into the lives of people who tell stories of what they know (like A.A.)."

Two aspects of the course were generally observed to be not so helpful. First, the films used appeared to most participants to be outdated, and thus were not well-respected.

It was observed by several individuals that the acting and technical quality of many of the movies was so poor that they had to "work hard" to get the point.

The other aspect of concern was the technical, elaborate treatment of long-term medical aspects associated with alcohol use. One participant suggested that "they should skip some of the scientific terminology."

This is not to imply that these were the only things that were not liked or that participants believed should be changed. Most of the interviewees suggested that the format of the course be less structured. They appreciated the opportunity for dialog with other group participants, yet found that this was quite limited. The dialog format, noted one person, "let you talk about yourself so that you can look at yourself and ask, 'do I have a problem?'" It was also suggested by two individuals that the format be varied from week to week: "It was in a rut: we'd have an icebreaker, then a movie, and then a discussion."

The instructor's role appeared to play a very important part. Those participants whose instructor was a recovering alcoholic believed that this was vital to their learning, as such an individual "can reflect more on what it is really like." Several participants observed that their instructor was not fully in command of the class, and needed to be less

lenient for the course to be effective. Most individuals appreciated the style of their instructor, observing that he or she "was straight to the point," "kept the format open," "made it interesting for us" and "helped people relax." Emphasizing the speaking style of their instructor, half of the participants found him or her to be boring and not well organized.

The length of time of the course, initially generally viewed to be too long, was still seen as too long by three of the eight interviewees. The remainder saw it as an acceptable length, with one individual observing that "to make it shorter would hurt the presentation of information." Several of the individuals interviewed had participated in an altered course format whereby four four-hour sessions (instead of eight two-hour sessions) had been offered. Unanimously, they believed this to be undesirable, as their attention span was not good during the end of each course session and the important factor of group dynamics did not have a chance to develop.

Although it is interesting to observe that most of the participants had basically positive feelings about the course, the critical question revolves around what they actually learned. Generally, the participants concluded that drinking and driving, and alcohol use in general, are larger

problems than they had first realized. Beyond this, they realized that they were not being singled out for this "punishment," as exemplified by the young man who stated; "I learned that I had been narrow-minded. I had thought I was the only one experiencing the feeling of being picked on." Most participants agreed that their drinking and driving was a stupid thing to do: "Drinking and driving is not where it's at - it's a pretty serious crime." Participants learned how not to drink and drive, how to be aware of their inhibited behavior, and how to develop alternative means of behavior so that they are not faced with such problematic behavior (of driving while intoxicated). The general effects of alcohol on the body, as well as warning signs of the onset of alcoholism, were also observed to be among the main things learned as a result of the program.

Moving from the course itself to the overall experience beginning with their arrest and ending with the course, interviewees were asked what they believed made the biggest difference with regard to their drinking and driving behavior. One individual cited the A.S.A.P. course as being most significant, as it provided pertinent information and was interesting for him. Two individuals found the experience of being stopped by a police officer and then arrested for D.W.I. to be the most important factor. For one, the exper-

ience of being fingerprinted added to the arrest significance. One participant noted that the court experience had been the most influential: "When I went to court, I was sitting with all of these people who looked like derelicts. The judge made me feel like dirt; he made some strong statements, and I felt that I didn't deserve that. But yes, I did." One individual reflected the feelings of two others: "Getting thrown in jail had the singlemost effect on me. I messed up; I was there alone - it wasn't a game, not TV. A lot of things go through your head - you see yourself as a law-abiding citizen, but now you're scum, you're low. If I hadn't gotten put in jail, I would have felt like I got away with something." One individual observed that it was the accumulation of all of the cited factors which had the impact upon him.

What actually appears to be making the difference with these individuals? As they project into the future, it is overwhelmingly the negative consequences of getting caught for a second offense which is influential in their current decisions to monitor their drinking and driving behavior. The emphasis is, with two exceptions, not upon the tragic loss of life or personal injury which might occur as a result of drinking and driving. This is poignantly illustrated by an individual who stated that he would not drink and

drive because he was "scared of being locked up for life for killing someone." With him, the emphasis is upon his potential loss of personal liberty, and not upon the potential loss of another individual's life. This self-focus has major implications for the manner in which attention is directed in the A.S.A.P. course.

These interviewees had several other noteworthy observations. Several course members observed that an effective deterrent would be the fear of public ridicule - this could be accomplished by having the names of individuals arrested for D.W.I. published in the newspapers. Numerous individuals stressed that the problem is a broad societal one. This is well illustrated by one participant who had seen parents and friends "driving back from parties smashed, thus making me think that drinking and driving isn't that big a deal." She observed that education has to improve, and that effort needs to be directed to get involved with the families so that "the social attitude of a whole population can be changed." Another individual agreed that social change is necessary to help reduce the problem, but acknowledged that one generation was not enough to solve this.

One quotation is helpful to bring this section to a close, as it reflects an underlying feeling that was quite prevalent with many of these individuals. One young man

stated: "It was a good thing that I got caught, because otherwise I still would be doing it. I've been fortunate to have gotten caught before any accidents."

The insights provided by these individuals who recently completed the A.S.A.P. course have been helpful in understanding what makes a difference with them. However, a limitation with this insight is that they have just recently completed the course. Only the passage of time will reveal what difference it will actually make on their behavior. What happens later with individuals who participated in the A.S.A.P. program? Is the program effective on a long-term basis, and what do individuals recall about their program experiences several years later? To seek answers to these questions, we now move to an examination of interviews with former participants in the A.S.A.P. program.

PAST A.S.A.P. PARTICIPANT INTERVIEWS

As will be recalled, a total of eight individuals, four in each location, were interviewed who had successfully completed the A.S.A.P. program several years prior to the interview. These sessions revealed that the central message of the course - don't drink and drive - remained with them. Although these individuals generally did not recall specific aspects of the course which were helpful or not so helpful,

they did have one or two main points of learning that they attributed to the course. Let us now turn to some specific reflections held by these individuals, and note the relationship between their responses and those held by current A.S.A.P. participants.

Reactions to the judicial process in which they had been involved were that it had been fair. In fact, one individual noted that the court had been too lenient with him. Two interesting points emerged. One interviewee observed that the same type of sanction needed to apply to all individuals - he observed that those in influential positions received a less severe sanction. Two interviewees were upset with the fact that they had obtained the services of a lawyer, mainly because they did not realize that a lawyer was not needed to enter the A.S.A.P. program. The hostility directed to the court and police found with the current participants was not evident at all with these past participants.

A clear parallel between current and past participants was found, however, with respect to reasons for becoming involved in the A.S.A.P. program. Specifically, these past participants wanted to have a clean record and desired a less severe sanction (which could be obtained by participation in the A.S.A.P. program). One individual observed: "I wanted to find out what I was doing to myself; I couldn't learn this on my own, and needed a class to help me."

Most participants entered the program with few expectations. At the time, the program was generally a relatively new one, and they did not know of other participants in the program. Those who had some ideas generally expected films, lectures, and discussions.

What was learned by these individuals as a result of their program participation? As observed, the message of not drinking and driving was clearly heard. One individual summarized this nicely: Drinking and driving - they just flat don't mix." Specific content messages recalled by these individuals included how to have better control of drinking, how to be careful, how "everyone thinks they're sober even though they've been drinking," how little it takes to be legally intoxicated, how alcohol affects the body, and the warning signs of alcoholism. At least half of the interviewees observed that they already knew much of the information learned during the A.S.A.P. experience - the course served to reinforce these ideas: "It made me aware of some of the things I already knew." One participant stated: "I didn't think I'd learn as much as I did." Nonetheless, "it opened your head up."

Turning now to the manner in which the material was presented, the overwhelming assessment was that it was done quite well. Even though the process could have been con-

condensed more, this was seen as not desirable. One individual commented: "Much repeat stuff was done. But it's better to drill it in than lightly touch on it. I saw no overkill." The discussion groups, when offered, were viewed as helpful, although the lectures and movies aided in opening up the class for these discussions. Most of the time, however, "they talked at us." In fact, one interviewee noted that "there was only one occasion when everyone talked - we got 30 seconds per person."

How about the length of the course? Only one individual stated that it was too long, with the remainder indicating that it was sufficient. One participant noted that "to get any good out of something, you gotta spend some time with it." He went on to say: "If anything, make it longer. The longer you're in it, the more you'll dread it or the more you'll learn."

General reactions to the course was that it was worthwhile. One participant noted that he was never bored. Two participants observed that having a mixed group - both young and older participants - was important. One young man stated that the course made him "take a long look at my own life, at what was happening. I couldn't drive, I lost my job and my friends - it just wasn't worth it. I began realizing that I could have had an accident, and killed some-

body, and that I was just going downhill." Reflecting on his involvement in the course, another person stated "you might be the lucky one because you are here."

Once again, the questions vital for careful assessment are not how much they enjoyed the course or what they learned, but rather whether the course was effective with their behavior. From these in-depth interviews, it appears that the course was, indeed, effective. Individuals report that their drinking and driving behavior, and often their overall alcohol consumption patterns, have been altered. Participation in the course "brings you to a realization about drinking and driving, that you're actually wrong. Your mind has tricked you." To look for alternative means of transportation after drinking may, according to one individual, "be an inconvenience, but you come out in the long run." This is not to imply that all individuals are one hundred percent effective with not drinking and driving: "For most participants, the idea of not drinking and driving has to be back in their head somewhere. I won't say they don't do it again, but the chances may be lower." Indeed, the chances do appear to be lower, since attitudes and behavior patterns promoted in the A.S.A.P. course seem to be well-ingrained.

Pushing a bit beyond this, it is helpful to understand the nature of why individuals choose to not drink and drive. As observed with the current participants, the primary motivation was the humiliation and embarrassment associated with participation in the program. They also did not like the "hassles" associated with the program - infringement upon their time, cost, and restricted driving privileges. These factors did not emerge during the discussion with those who had successfully completed the program several years prior to the interview. It appeared that the notion of not drinking and driving was well-ingrained. Certainly, the experience had been an embarrassment, costly, and, at times, unpleasant. But it was only after some time that information and attitudes communicated throughout the course had apparently become integrated into personal lifestyles, and therefore the specific rationale for their behavior was no longer at a conscious level. One interviewee remarked: "Since the course, I am very aware of myself; it has served a purpose." Another observed that, during the course, "I started to change. But it took awhile for it to take effect."

Let us now shift our attention to other insights that were gained from these interviews. One participant observed that he "had never been taught anything about drinking. It's useful to know some things about a legalized drug -

what you're taking and what it does." Another person remarked that "if we didn't have A.S.A.P., we would need more jails. Thus, A.S.A.P. is an escape valve." Overall, the attitudes held by these individuals can be summed up by one succinct comment: "Drinking and driving is kind of crazy."

INTERVIEWS WITH A.S.A.P. COURSE INSTRUCTORS

Shifting now to those who see the A.S.A.P. experience from a totally different perspective, we shift our attention to the course instructors. By way of introduction, it should be noted that the instructors exhibit a wide range of experience - the number of individuals they had taught in the Level II program ranges from 200 to 5,000.

All of the instructors interviewed believed that most of the program participants view it favorably. Although the participants acknowledge to them that they would rather not be there, these same participants also state to the instructors that they did get something out of the course. The resistance to the program is quite obvious at the start of the course, but time usually takes care of this. Looking further at the participants, the instructors noted that the strong feelings of personal victimization experienced by the participants (i.e., "why me?") at the beginning of the program are altered as the course proceeds. They soon realize

that a number of people are affected by the drinking and driving behavior, and alter this initial outlook.

Two different approaches are seen by instructors for dealing with this resistance - one emphasizes the individuals talking about their experiences, their anger, and their perceptions of unfairness. It is based upon the belief that discussion and sharing with other course participants is essential to dealing with this anger and frustration. Some dialog is believed to be helpful for addressing and adequately dealing with one's own feelings.

A second approach assumes that the material itself will break down defenses. It is based upon the belief that an individual needs to deal with one's own feelings alone. Discussion with others is not helpful for working through this resistance according to this approach; the presentation of material and its cognitive assimilation is all that is necessary.

Two additional observations regarding the nature of the participants are helpful. First, one instructor noted that there has been a different attitude expressed by the participants recently. Their level of awareness has been higher, and their resistance has been lower. Cautioning that "two groups do not constitute a trend," he speculates that there is an increased national consciousness regarding the prob-

lems associated with drinking and driving. The second concern with the participants centers around the classification for the program. Prior to participating in the A.S.A.P. course, individuals are diagnosed by an A.S.A.P. case worker who decides whether the Level II or Level III program is most appropriate. Those identified with a more severe drinking problem are generally mandated to participate in the Level III program.

Of course, there are some individuals for whom a diagnosis is difficult. With these, the tendency has been, according to several instructors, to assign them to the Level II program. This causes several problems in the class, as these individuals actually have decreased decision-making ability, a shorter memory span, and a higher degree of denial regarding the possibility of their own drinking problem. To compound this issue, several instructors report that the A.S.A.P. case workers have purposely moved the "demarcation line" between Levels II and III so that there is a greater tendency to err on the side of underclassification (i.e., when in doubt, definitely assign to Level II). The rationale for this adjustment appears to be a concern with legal repercussions associated with over-classification. It was suggested by several instructors that if individuals are classified into a Level III program when, in fact, they are

only of a Level II nature, there are numerous potential problems due to the additional costs in time and money, and possibly social stigma, involved with the Level III program. It was suggested that the "movement of the demarcation line" was a political judgment and not based upon an unbiased assessment of the most appropriate treatment for these individuals.

Turning now to the course content, the instructors are in basic agreement with the participants with regard to those elements which are most helpful. They cite the physical aspects of drinking and the speaker from Alcoholics Anonymous to be the most helpful program elements. Group discussions were cited by half of the instructors as important for the program's success.

This leads us to the format of the course. There is a clear demarcation among the instructors about the most effective manner of leading the course. One approach emphasizes the information that needs to be communicated to the participants. Group members simply need to be presented with the facts about alcohol, and it then becomes their responsibility to integrate this on their own. As one instructor succinctly stated, "information itself is sufficient to make changes."

The alternative approach emphasizes the group process as an important element of the course. An informal, relaxed class is the best way to approach a topic such as this. An open presentation with time to answer the variety of questions raised is vital for course effectiveness. Individuals are seen to need help in interpreting the information that is provided. This dilemma is summed up by one of the instructors: "One must compromise, since there is a trade-off between the amount of information presented and group discussions."

Another aspect of the manner in which the course is conducted is due to the variety of individuals present. As noted above, there are some individuals who actually should be involved in the Level III program. Further, there is a range of backgrounds, education, age, and attitudes with individuals. The problem posed by this mixture of individuals is that the presentations "must be interesting enough for the sophisticated individual, and simple enough for the illiterate people."

I personally participated in one group process and discussion class. In it, the variety of individuals present was quite clear to me. All types of individuals were present, with large amounts of denial of drinking problems being quite prevalent. There were no clear stereotypes of "typical" problematic individuals (based on variables such

as sex, race, age, socio-economic status), although it was quite easy to determine which participants had a larger drinking problem, and for whom subsequent recidivist behavior would be more likely to occur.

All of the instructors agreed that it is important for the instructor to become trusted as a resource. The instructor needs to develop a personalized style, yet an honest approach is viewed as vital to the program's effectiveness.

Another important aspect of the course cited by the instructors is that individual self-evaluation must occur. Whether this is done within the class framework or as a "homework" assignment, it is deemed important for the participants to take a close, hard look at themselves.

Another observation by several of the instructors revolved around the issue of confrontation. This was seen as a tricky thing to do, as it was important that the trust of the participants be maintained. On the other hand, to ignore a comment of an irresponsible nature often implies an endorsement to the other class members. Confrontation becomes easier as the course proceeds, as the class participants have more information about the trustworthiness of the instructor.

A few additional comments about the format of the course are helpful. Most of the instructors agreed that a longer period of time for the course would be beneficial. They have learned to adjust to a sixteen-hour program,¹¹ although they believe that more time would be helpful in interpreting the information to the participants. It would also provide an opportunity for participants to experiment further with new behavior (i.e., not drinking and driving). Half of the instructors indicated a preference for a smaller group. Currently, class enrollment averages between twenty and twenty-five participants. To have ten or twelve members would, they believe, be more ideal and more effective. A final suggestion is that a "refresher" type of course be offered several months following completion of the structured course. This would provide an opportunity for followup with individuals as they hopefully become involved with new behaviors. Processing of the experiences encountered with family, co-workers, friends, and themselves would be beneficial in dealing with obstacles to effective personal integration of a desired behavior of not drinking and driving.

¹¹ The program was twenty hours in duration until two years ago.

Do these instructors view the course as effective with the participants? Overall, they believe that it is effective. The information presented assists the participants in making responsible decisions for the future. The instructors point out, however, that although the experience with the A.S.A.P. course is good for the participants, other factors combine with it to "make the difference" with their drinking and driving behavior. One instructor stated that it is "the combination of the legal aspect and the information presented that makes the difference." This instructor acknowledges that the fear of getting caught is a significant behavioral determinant for participants. Another instructor argues that it is the negative consequences, however they are defined for a particular individual, which motivates change. These may be the cost, having to come to classes, having someone (the judge) to whom they must answer, the jail experience, or the personal humiliation. The idea of "having one's freedom taken away" is of central importance. A third instructor agrees with this, calling the influential element "the smack." This is whatever factors help a participant become "painfully aware" than an error in judgment had been made.

Some additional insights are helpful to summarize the insights gained from the instructors. One critical aspect of

the entire process is that the instructors themselves be provided with a debriefing opportunity at least once a week. In this way, they can better understand what is happening within their group, and will become less resentful of the A.S.A.P. participants and the overall A.S.A.P. process. Another concern is with how "non-compliance" is handled. Non-compliance occurs when an individual is removed from the course, and is due to such things as non-attendance or arriving at the class while "under the influence." Greater support is called for by the A.S.A.P. case workers and particularly by the judicial system, as it is the belief of several instructors that non-compliance is being treated too gently, and that this is counterproductive to the success of the A.S.A.P. program as a whole.

As noted already, appropriate assessment is essential to the success of a group, both for specific misdiagnosed individuals (for whom education is simply not sufficient to address the drinking problem) and for others within the group. One instructor observes that "by putting them in Level II, you are assuming that they can assimilate and synthesize the information." An elaborate screening device which incorporates marital problems, emotional issues, and chemical dependencies would be helpful, but it was observed that this is not possible within the current law in the state. This

instructor also acknowledged the problems inherent in diagnosis and classification based on self-reports, noting that "a self-report is not valid for those with chemical dependency problems." It was further observed that, "to do decent treatment, the screening must involve the family," noting that some counties do require family involvement to get into the A.S.A.P. program.

The setting is noted by several instructors to be important. The location must be similar to a classroom so that the instructor and the information is viewed in a professional and credible manner.

The mixture of class participants should be such that there is no major imbalance. For example, having only one female in the class is not acceptable according to two instructors. The rationale for this is that these women tend to get picked on by the other class members. Further, the instructors believe that it is important for each individual to have several others toward whom attention can be directed in a comparative, and perhaps even helpful, manner. With only one or two women in the class, this comparison and potential support is not possible. For similar reasons, instructors note that a class which is heavily weighted with older or younger individuals is not believed to be healthy. What is most effective is a mixture, as then good interaction and increased challenging behavior will occur.

In overview, the instructors have rich insights and varied experiences with the A.S.A.P. participants. They appear to differ in their style, although the content of the course is generally uniform. They are realistic with regard to the negative attitudes held by many of the group participants. I do believe that they may be somewhat overly optimistic with regard to the impact that the course actually has with the participants. That is, the participants appeared to be moved more by the overall negative experience (from being arrested to having to participate in the class) than the quality of the course or instruction. The actual content of the course may not have actually been as vital and helpful to participants as the instructors wish to believe. This does not mean that instructors should lower the conscientiousness with which they approach their roles. It does suggest, however, that they should be a bit more realistic with regard to the impact that specific elements of the course are actually having.

SOME CLOSING REMARKS

Having summarized the perceptions and insights of those intimately involved with the A.S.A.P. program, how do these improve our understanding the quantitative analyses described in Chapter IV? How do these two types of research

inquiries reinforce each other in providing an even deeper understanding of the effectiveness of the A.S.A.P. program?

While most of the information provided in these two chapters is distinct, there are several areas which do overlap. One has to do with the sex of the individual participant in the program. From the quantitative analyses, we found that there was a four-to-one difference in recidivism rates when comparing men and women, with the latter far less recidivist. If we were to attempt to make predictions from the interviews alone, this would not have been appropriate. Based on the women interviewed, no such generalization could be made, as the women appeared similar to the men from a global perspective.

Insights were quite consistent when examining the age differences. The interviews conducted were primarily with young individuals, and a very high denial of any drinking problem was found among them. This parallels the higher recidivism rate found among young participants in the A.S.A.P. program. I would suggest that their personal denial resulted in a perception that many of the alcohol-related problems and avoidance behaviors cited in the course were viewed as not applicable to them, and subsequent recidivist behavior resulted.

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Where does all of this now leave us? Having summarized the insights gained from the variety of interviews, we have increased our understanding of what actually makes a difference with the A.S.A.P. participant. Clearly, there is not a consistent "A.S.A.P. personality." Some generalizations have been cited, and some aspects of the arrest, court, referral, and educational processes have been generally viewed as having an impact. However, much of the process appears quite individualized. Individuals respond differently to various aspects of the overall process. Even they may not really know what had, or will have, an impact upon them. Does this leave us in a hopeless situation, with no direction for the future? Definitely not. Some specific conclusions and helpful recommendations follow in Chapter VI.

Chapter VI

CONCLUSIONS AND RECOMMENDATIONS

At the outset of this dissertation, a social problem facing the United States was defined. Specifically, the unnecessary and tragic loss of life and property associated with drinking and driving was cited as an issue demanding careful attention. Attempts have been undertaken for many years to deal with individuals arrested for driving while intoxicated. The main research question posed in Chapter I was whether rehabilitation efforts with convicted drunk drivers are effective. Do these intervention activities, in fact, perform the job which they purport to do? Also of defined interest was to gain some insight into the type of individual for whom such rehabilitation efforts are most effective.

In the course of this dissertation, I have outlined the extent of this problem and the variety of efforts that have been undertaken with varying degrees of success to deal with it. With the observed gaps currently found in the professional literature regarding the effectiveness of the Alcohol Safety Action Program rehabilitation component, a multidimensional research design was implemented to provide evidence directed toward appropriate interventions. Insights of a quantitative and qualitative nature were gained in Chapters IV and V.

What, now, have we learned about dealing effectively with the drinking driver? What conclusions can be drawn from the research results? Looking ahead, what recommendations emerge which, if implemented, will enhance these current efforts to result in meeting the desired goal of reducing the incidence of drinking and driving in a manner which is effective and reasonable? Finally, some broader applications will be noted briefly. It is to these questions that we now turn.

CONCLUSIONS FROM THE RESEARCH

As stated in Chapter III, the central hypothesis to be tested was that "the recidivism rate for those individuals who participate in the A.S.A.P. program is less than that for those who do not participate in the program." This hypothesis is clearly supported by the results cited in Chapter IV, as there is a three-to-one difference in recidivism rates when comparing A.S.A.P. program participants with non-participants. Over a two-year period, A.S.A.P. participants incur arrests for driving while intoxicated at a rate of six per one hundred, while the rate for non-participants is nineteen per one hundred. This conclusion is further supported by the results of the variety of interviews conducted, as participants report having incorporated a lifestyle of extreme care with their drinking and driving behavior.

Underlying the central hypothesis was the question of whether it was the A.S.A.P. program that actually made the difference with these individuals. More caution must be used when answering this question, as the participants reported that, whereas they did learn something from the program, they believed that it was the overall negative experience that was influential. It will be recalled that aspects of the process such as the arrest, the time spent in jail, the cost, and the associated humiliation were most significant for their lives. In sum, it appears that the "hassle" associated with the offense - the "smack" as one individual labeled this - was the aspect which actually made the difference with their subsequent behavior.

Does this mean that the A.S.A.P. program itself is ineffective? Emphatically not, as it is clear that those who did not participate in the program were also faced with these same elements. They, too, had experiences with arrest, jail, costs, and humiliation. They did not experience the same extent of "hassle" associated with the A.S.A.P. program, as they were not obliged to attend eight classroom sessions on a regular basis. They were, however, faced with a different type of "hassle," as they typically had their operator's license suspended for several months.

Another caution with respect to over-speculating about the A.S.A.P. program's comparative effectiveness centers around the equivalence of the A.S.A.P. and non-A.S.A.P. populations. In this particular research design, equivalence could not be achieved. As reported in Chapter IV, the non-participants had a higher incidence of prior D.W.I. offenses. In fact, some of these individuals may have participated in the A.S.A.P. program as part of one of these previous offenses. This is not sufficient to explain the difference between A.S.A.P. and non-A.S.A.P. recidivist rates, however, as 57% of these individuals did not have any prior D.W.I. offense record. More importantly, when the two populations are controlled for prior record (by examining only those with no prior record), recidivism for A.S.A.P. participants is still substantially below that for non-participants.

What we can show is that there is evidence that the A.S.A.P. program "works," at least to some degree. There is a clear difference in recidivism rates when comparing participants with non-participants, and the nature of the program (A.S.A.P. or non-A.S.A.P.) is the primary differential factor which accounts for this. There may, in fact, be some other factors which account for the differential recidivism rates which also relate to the rationale underlying why an

individual did not choose, or was not given the opportunity, to participate in the A.S.A.P. program. The fact that these offenders differ greatly as individuals means that countless other variables are present. The presence of other factors is painfully clear from the low R-square.

What are the important aspects of the A.S.A.P. rehabilitative approach which are gleaned from this research? One is the actual functions, rather than claimed functions, that the Level II program is performing. I have summarized these from my distillation of the quantitative and the qualitative data.

First, there is punishment associated with participation in the program. An individual, once agreeing to participate in the program, is faced with being a non-compliant participant if class sessions are missed. There is thus a sense of forced participation. The inconvenience associated with these regular class sessions, when combined with the perceived expectation of the program being a "waste of time" with "no new information," serves to constitute a sanction which is perceived by the participant as punishment.

The second function is that the publicly-touted purpose of the program is to educate these individuals so that they will be deterred from driving while intoxicated in the future. Information is shared and attitudes are challenged

within the framework of communicating a "not drinking and driving" message.

This research shows a third major function which is not publicly observed. Realizing that it is the problem drinker or alcoholic who causes many of the alcohol-related highway crashes, the A.S.A.P. program attempts to address the issue of alcoholism within the course. Information about alcoholism and referral resources are provided so that participants can be aware of danger signals and how to deal with them. This acknowledgment is also observed with the initial classification into a Level II or a Level III program.

The final component of what the program appears to be doing is to deter others in the general public from driving while intoxicated. It is hoped that the participants' insights and their overall negative experience will eventually become public knowledge, thereby instilling in them the idea that one should not drink and drive.

This overall delineation of four program functions is provided as a summary of A.S.A.P.'s role - as perceived by me - as it relates to drinking and driving. The first two functions, punishment and education, have been the primary items addressed in this dissertation. As previously noted, it is not clear that the education, itself, makes the difference with the program participants. It is, rather, a

blend of these two items which is successful in having an impact upon the individuals. The third and fourth functions (alcoholism identification and public deterrence) have not been central to the research design, but do remain important for consideration with future recommendations.

Let us now turn to the sub-hypotheses which were developed in Chapter III. One of these centers around the length of time that it takes to get to court from the date of the offense. It will be recalled that it was hypothesized that "the longer that an individual has to wait to begin the program, the higher will be the chances of being a recidivist." Several findings emerge to produce a mixed conclusion. First, there was a significant difference in the court delay when comparing A.S.A.P. participants and non-participants. Second, with the A.S.A.P. participants, court delay time did not make any significant difference regarding subsequent recidivism. But, the court delay did make a difference for the non-participants. In fact, court time emerged as the most significant factor differentiating recidivists and non-recidivists for the first year of followup. Whether it was the court time itself, or some other underlying factor which in turn resulted in a delayed court date, which then caused a lower recidivism rate for the non-participants, is unknown. For example, it may be

that an individual has a need to do a significant amount of preparation prior to the court date, and thus asks for a court delay before the judge hears the case. The need for the court delay may, in fact, be due to a prior offense record. Alternatively, the elapsed time reflected by the court delay, itself, may be the most significant causal factor for post-program recidivism. The fact remains that there is a relationship between the court date and subsequent recidivism behavior among the non-participants.

A second sub-hypothesis was that "those with a previous record will have a higher recidivism rate than those without a previous record." This appears to be supported for both the A.S.A.P. and the non-A.S.A.P. participants. With the A.S.A.P. participants, prior reckless driving behavior emerged as the most significant factor for prediction of subsequent D.W.I. offenses. For the non-participants, prior improper driving offenses were important for first year offenses, and both prior D.W.I. and improper driving offenses were significant for the second year. The importance of this prior record has already been stressed in this dissertation. Specifically, an individual may have an outlook toward driving which is not reflective of the a cautious driver. The behavior may be of an unsafe nature, thus resulting in citations for reckless and improper driving. This same

attitude may carry over into the behavior of driving after having been drinking, as the individual may have greater belief in the personal ability to maneuver the automobile than is actually justified.

Each of the three remaining sub-hypotheses is now presented for examination. It was hypothesized that age would be an influential factor with regard to subsequent recidivism patterns - this did not emerge as true for the A.S.A.P. participants. Although we observed some differences, these did not emerge as statistically significant with respect to the recidivist behavior.

On the other hand, the hypothesized lower recidivism rate for women is supported - 3.6% of the women had a subsequent D.W.I. offense, whereas 8.9% of the men demonstrated this recidivist behavior. Part of this may be explained by the fact that men have more difficulty in altering their lifestyle than do women. Associated with this is the "macho" image so often associated with men. It may also be the case that men have a more difficult time in learning about the importance of not drinking and driving - i.e., their denial of drinking and driving being a problem may be higher than is found with women.

One's status as a permanent or transient resident was operationalized by whether an individual held a full-time job

or was a student. The occupation variable, overall, did affect recidivism, and the student status recidivism rate (0 offenses per one hundred individuals) is significantly less than the overall mean recidivism rate for A.S.A.P. participants.

What other conclusions can be drawn from the data and perceptions that have been presented? One item found was that there was a slight increase in the recidivism rate for A.S.A.P. participants with the passage of time, whereas there was a decrease among the non-participants. A possible explanation for this is that the impact of the educational aspect of the A.S.A.P. program is beginning to diminish. For the program participants, the first year following the completion of the program may result in a clear remembrance of the hassle associated with the experience, and the specific cognitive information provided may remain quite clear. As time passes, this information impact may fade as a deterrent, thereby resulting in a higher recidivism rate. This is supported by the interviews with past participants, as they recalled only a few points of information that they specifically attributed to the A.S.A.P. course. They did recall, however, the overall theme of not drinking and driving and the negative experience that they had undergone. With the non-participants, there is only the negative experience as defined by them (fine, court record, arrest, etc.).

In short, non-A.S.A.P. participants did not receive any "treatment" or "rehabilitation" - they received only the sanction. They seek to avoid this type of encounter in the future, and perhaps to learn new ways of doing this on their own. This is not to suggest that, in the long run, it is better to have individuals learn to cope with drinking and driving on their own. It is simply a possible scenario of what may be occurring which would explain these changes in recidivism rates over time. Further intensive followup research over a longer period of time would provide additional insight regarding this issue.

Another research result worthy of attention centers around the prior D.W.I. offense record. This appears to be a major factor with assignment to the A.S.A.P. program, as well as an overall determining variable for all individuals' recidivism rate. This suggests that there may be individuals who have a propensity to drive while intoxicated, which may in turn be related to an underlying drinking problem. These individuals may be what is known as a "habitual offender." They may be incorrigible - none of the present sanctions or approaches currently used may be effective with them to deter future drinking and driving behavior.

Let us examine a bit more carefully the variables which have an impact for future recidivism rates. With A.S.A.P.

program participants, one's prior driving offenses, educational level, and occupation were the items which distinguished recidivists from non-recidivists. Let us review the findings for each factor.

With the prior offenses, one who has more prior offenses is less likely to be affected by the A.S.A.P. program as currently offered. The notion here is of one who is more "hardened" to change, and an educational approach such as A.S.A.P. faces quite a difficult challenge in altering the attitudes and behaviors of an individual such as this.

The educational level is revealing, as the greater education an individual has, the less likely he or she is to exhibit recidivist behavior. In fact, those who had completed college had no incidences of recidivism. This is indicative of the strong parallels between the societal educational process and the educational approach used with the A.S.A.P. program. Further, the individuals with high educational attainment have been quite successful in this effort, and can be expected to integrate the information presented in the A.S.A.P. program to a greater degree.

Occupation is also revealing, as the highest success rate (lowest recidivism) is found with, in order, agricultural, manufacturing, and clerical and sales. The lowest rate was found with those in professional occupations and service po-

sitions. The only observation which may be appropriate here is that there is probably a high correlation between one's occupation and one's educational level. To suggest why a particular occupation demonstrates a lower recidivism rate would be pure conjecture.

For the non-A.S.A.P. participants, prior improper driving offenses and the imposed fine have been shown to have the greatest impact on recidivism. Increased improper driving offenses (which could have been reduced from D.W.I. or reckless driving after successful completion of a specified probationary period) are correlated with higher recidivism rates.

The fine offers special information. Those with the lowest fine (below \$200) had a recidivist rate of 15.2%; those with the middle fine (from \$200 to \$250) had the lowest recidivism rate, which was 10.0%. Individuals receiving the most severe fine also had the highest recidivism rate - 22.0%. This suggests that a low fine is not as effective as a middle-range fine. The negative results associated with the higher fine may not actually be related to this sanction, as the fine may reflect a decision made by the judge that underlying factors with the D.W.I. offender needed to be addressed by a more severe fine. The higher recidivism rate may be a result of these prior factors which influenced the individual's behavior in spite of the fine imposed.

The setting in which the program was located (New River Valley or Arlington County) does not appear to make much of a difference for the recidivism rates. In both locations, one's prior reckless driving offense, educational level, and occupation are found to be the most significant variables related to recidivism. In Arlington County, the participant's marital status also appeared as a significant factor. With the non-participants, fines and improper driving offenses were the most significant variables correlated with recidivism. Age became an additional factor in the New River Valley. These differences in location, however, are not significant, as the primary variables of significance remained the same for both locations. They are simply subtle factors which provide additional information regarding each specific locality.

Reflecting upon the interviews with individuals who participated in the program, a variety of conclusions can be drawn. First, one concern with the A.S.A.P. program was that it was a standardized effort in which a variety of different individuals were involved. How, one may ask, could such an effort possibly be successful with the variety of needs and motivations of participants? Indeed, this was a question posed by this researcher following completion of the first set of interviews with current A.S.A.P. partici-

pants. Surprisingly, the participants emerged with a fairly homogeneous attitude toward the issue of central importance: drinking and driving. Since the program is comprised of a variety of elements and approaches, those that were influential with one individual may have been different from those influential with another participant. Precisely what makes the difference for specific individuals is not known, even to them. In an overall sense, it is the "hassle" factor - common in its impact upon all - which is believed to be meaningful.

Another related conclusion is that there does not appear to be an "A.S.A.P. personality." It would be very easy to summarize the "typical" A.S.A.P. participant, as well as the non-participant, through use of the computed means for a variety of variables. However, this only goes to demonstrate the masking character of aggregate statistics. The interviews clearly demonstrated that, while there were overlaps with individual perceptions, no one type of person is dominant.

There are individuals with a variety of educational backgrounds, occupations, and other factors. Each of these individuals was involved, for whatever the reason, in a similar offense. Each appears to respond to the program in a different manner, with ultimately a similar outcome (i.e., no recidivism).

Also significant is the fact that individuals participating in the A.S.A.P. program are at different points of progression toward becoming an alcoholic. Some participants are strictly social drinkers with no probability of alcoholism occurring in the future, and the event of driving while intoxicated was a rare occurrence. For others, there is beginning to emerge a pattern of problematic drinking. The program, as noted earlier, does make some attempt to deal with this issue of alcoholism. The denial of individuals within the Level II program with regard to their own potential alcoholism is quite large, as evidenced by comments from participants, observations of the instructors, and perceptions gained from personal involvement in one course session. One conclusion emerging from this is that greater attention ought to be provided to the overall issue of alcoholism within the course without negating the positive impact currently held with those who do not require this attention.

Numerous additional conclusions emerge regarding the A.S.A.P. program from interviews with the participants and instructors. These emanate from observations cited in Chapter V, and, when combined with the conclusions just cited, serve as the foundation for numerous recommendations regarding the Alcohol Safety Action Program.

RECOMMENDATIONS

Numerous prescriptive elements are based on the literature reviewed and the research conducted focusing on attempts to deal with the drinking driver. The problem of "drinking and driving" is a massive one, and one for which there are no simple solutions. The intent of the overall A.S.A.P. program, with all of its components, has been to ameliorate the drinking driver problem. The recommendations which follow are of an "Improve It" character.

Having found that the rehabilitation portion of the A.S.A.P. program does not really "rehabilitate" but appears to make at least a modest favorable impact on Level II offenders, it is desirable not to replace A.S.A.P. but to build upon what already appears to be a sound structure. It is acknowledged that many of the recommendations may not currently fall under the purview of the A.S.A.P. program; they are included here since this programmatic agency is central to dealing with issues related to drinking and driving.

The recommendations which follow are of four general types: Administrative Mechanisms, Laws and Policies, the A.S.A.P. Course, and Evaluation. Recommendations within each of these will be dealt with in turn, and will be accompanied by some supporting and elaborative comments. Some

additional general comments with less specific recommendations will follow these specific recommendations.

Administrative Mechanisms

Recommendation 1: A clear delineation of options and associated costs and consequences should be outlined for all individuals arrested for driving while intoxicated. There is often confusion about what the alternatives are, and what the real costs are. Awareness of the facts by those arrested, as well as by the general public, would minimize this concern. Part of this recommendation includes fair indications regarding the need for legal services. One advantage of implementing this recommendation is the increase of perceived fairness for the individuals. Another is that, currently, much of the negative feeling about the judicial system is being, perhaps unfairly, directed to the A.S.A.P. program.

Recommendation 2: Classification into an A.S.A.P. or non-A.S.A.P. program should be done utilizing standardized and in-depth criteria. Any effort to enhance honesty, rather than deception, during the process should be considered. Incorporation of the family into this classification process may be helpful, as it may provide further behavioral information about the potential client and involves them in the

treatment process. When there is a question as to whether an individual should be classified as Level II or Level III, a special assignment ought to be made. The individual may be placed in Level II initially, with completion of the A.S.A.P. program being based upon the extent of participation in Level II combined with a prognosis of future problematic drinking behavior based upon the instructor's evaluation and the outcome of a standardized alcoholism assessment instrument. Consideration ought to be given to making Level and actual group assignments based on the outcome of individual motivation and/or level of alcohol problem instruments. Careful and clear standardization of the classification approach will protect numerous individuals. Individuals who really need focused assistance will be provided this; society at large will be "protected" to some extent, since those in need will actually receive assistance; and individuals, whether they be participants, instructors, or the general public, will know that the assignment process is, in fact, done in an unbiased manner.

Recommendation 3: Non-compliance with any aspect of the judicial or rehabilitation process should be treated most severely. For individuals who do not participate in the program or do not make payment in the specified manner, strict sanctions of a traditional variety should be imposed.

For individuals who have had their operator's license suspended or restricted, strict sanctions should result for violations. Currently, many individuals do not view non-compliance or driving without a license as serious offenses. Thus, they realize that if they do not comply with the original terms made for them, there are no major consequences. Possible sanctions for this may include a much more stringent fine, lengthier operator's license suspension, and a jail term. Further, distinctive license plates may be issued for the automobile, resulting in careful attention to whether the driver is, in fact, licensed to drive.

Recommendation 4: Participants in the A.S.A.P. program should fund fully all costs of the program, and should receive a monetary fine in addition to this program cost. The purpose of the separate fine would be to demonstrate that the program itself is not punitive, but educational and rehabilitative in nature. Funds received from the fine could be directly invested into other efforts aimed to prevent D.W.I. activity. Further, in this way, individuals are responsible for paying for their own "treatment" or "rehabilitation," and this does not become a burden for or a complaint held by the general public. For individuals unable to make immediate payment, special provisions for delayed payment ought to be made so that they are not deprived of the opportunity for such a rehabilitation opportunity.

Recommendation 5: Significant attention should be provided to having the court hearing scheduled at the earliest possible time. As found with the quantitative assessment, the higher recidivism rates are associated with longer court delays. While this may not mean that this is a central causal factor, it appears incumbent upon those committed to reducing the recidivism rate to shorten this elapsed time due to the inherent merits of a relatively quick remedy. The longer elapsed time is also a lost opportunity to impress the offender with the importance of their D.W.I. behavior, if not a lost opportunity to deter them from subsequent behavior.

Laws and Policies

Recommendation 6: For all individuals convicted of D.W.I., the operator's license should be at least restricted. There may be circumstances where individuals ought to retain the right to drive for some situations, but restrictions should be imposed upon everyone. This helps to heighten the "hassle factor" experienced by them, thereby deterring them from such behavior in the future. This "hassle factor" was seen to have a major impact with those who participated in the A.S.A.P. program. The hassle - or the "smack" - is different for each individual. Individuals become highly con-

cerned and restricted in their regular lifestyle if a significant part of their behavior is constrained. This is precisely what the A.S.A.P. program ought to be doing - constraining a part of the individual's lifestyle that was, at least in the past, contained in it. Such a consistently enforced element will also serve to communicate publicly that this constraint is being utilized, and is, in fact, a "hassle."

Recommendation 7: Participation in the A.S.A.P. program should remain voluntary, but alternative options should be such that A.S.A.P. becomes virtually mandatory, unless an individual had participated previously. The information shared and attitudes developed through participation in the A.S.A.P. program is generally valuable for the individuals involved and thus helpful for society in reducing the drinking driver problem. Thus, all individuals should participate in the program. To retain a voluntary program, the alternative available to an individual should be made less attractive. For example, considering the sanctions currently used, the alternative to participation in A.S.A.P. may be an imposed jail sentence, a higher fine, or an operator's license suspension for a longer period of time.

Recommendation 8: Public embarrassment for behavior of driving while intoxicated should be increased through at-

tempts to have published in the local newspapers the names of all individuals convicted of D.W.I. This could have a tremendous deterrent effect with individuals, and would make clear the fact that driving while intoxicated behavior is an offense against society and is behavior that will not be tolerated. Such public attention brings greater public acceptance of the idea that individuals may appropriately intervene with others prior to their involvement in D.W.I. behavior. Many individuals interviewed observed that they were glad that the names currently were not being published. One individual even observed that, even though names in his jurisdiction were being published, he was successful in his efforts to have his name withheld. Clearly, this public embarrassment is an additional "smack" factor.

Recommendation 9: Individuals arrested for D.W.I. should be physically constrained through the use of handcuffs and overnight confinement. The constraints placed on an individual physically restricts personal liberties, something that is important for several reasons. Underlying this rationale, it must be acknowledged that the individual has already been found to be in a drug-affected state; thus, he or she is not fully in control of personal behavior. First, there is the issue of the safety of the arresting officers. On an emotional level, handcuffs and confinement are symbol-

ic. Intellectually, internal conflict occurs due to the association of these constraints with criminals, and the perception that driving while intoxicated is not a criminal act. Confinement is recommended overnight (or at least until the person becomes sober) for two reasons: (1) to allow the person to resume personal self-responsibility only when sober; and (2) such confinement has a significant impact on future D.W.I. behavior.

A.S.A.P. Course Content

Recommendation 10: The content of the course should remain essentially the same, with additional attention being provided to individual decision-making, peer pressure, a contract regarding drinking, and methods and resources for seeking assistance. How to make responsible decisions, and how to cope with the perceptions of one's friends, family and peers are difficult issues for many A.S.A.P. participants, and thus should be provided special attention in the course. A specific contract which emphasizes the amount, setting, and reasons for consumption should be established with the components of desired and actual behavior. One focus may be an attempt to reduce much of the "macho" image held by male participants, and to provide a foundation for deemphasizing problem drinking. Much of the current con-

sumption and driving problems associated with it are due to the lack of conscious decision-making being made regarding alcohol use. Thus, the course should actively stress this, and help provide participants with the skills necessary for effective functioning.

Recommendation 11: Discussion and group processing should be integral to the A.S.A.P. course. Often lacking is the time to reflect upon and integrate the information shared during the course. Discussions with others in the class about how they are dealing with the information, or with revised behaviors, would be helpful for participants. This discussion should emphasize free interchange, understanding by the facilitator, and processing of feelings. This approach is recommended for two reasons. First, most of the participants and several of the instructors recommended that this aspect was lacking. The instructors observed that this was the case primarily due to the lack of the time necessary for it, and to the priority given to the amount of information that needed to be covered. The other reason for this recommendation emerges from the literature review provided in Chapter II. Small group processing and group dynamics were observed to be influential in altering individual's behavior and attitudes. Thus, since behavior and attitudes are central to the rehabilitative approach being used, it is recommended that this approach be emphasized here.

Recommendation 12: The format of the course should vary from week to week, and should include a variety of experiential elements. The style of the course itself should incorporate a variety of approaches. Participants often become bored with routine formats, and a greater opportunity for keeping their interest and attention is gained by altering the approach used. Including "hands on" experiences or first-hand information would be highly desirable, as this helps them make the application to their own life situations. This includes a variety of guests (a young alcoholic, a rehabilitated drug addict, a police officer, an Alcoholics Anonymous member, a medical specialist, and an accident victim), role playing (where participants can actually practice new behavior), and confrontation and feedback (where class members and the instructor provide reactions to expressed attitudes). It may also include an experience with driving under the influence, with some course participants becoming intoxicated and attempting to demonstrate driving skills under controlled conditions.

Recommendation 13: "Homework" should be an integral element of the course. The transfer of learning from the classroom to the class members' real world, and then back to the classroom, would aid in the integration of the desired behavior of not driving while intoxicated. Homework assign-

ments may include an examination of newspapers for articles and advertising related to alcohol, a rating of one's own drinking, a diary which includes activities (what one drinks) and feelings (problems and pressures faced), preparing a listing of ways in which loss of the driving privilege would change one's lifestyle, and other experiments or challenges to be tried. Part of the rationale for the "homework" emphasis is the reality that alcohol is pervasive in this society's social structure, and ways of dealing effectively with this must become integrated into these individuals' lifestyles.

Recommendation 14: The group should be of a heterogeneous nature, with 12 to 15 participants. A variety of individuals is helpful so that differing perspectives can be shared. Attention must be directed to the group composition so that there are not just one or two women, or older individuals. As cited earlier, such an imbalance causes problems and is not productive for these individuals' incorporation of the necessary information. It is assumed here that all individuals are of a Level II diagnosis. Also, the size should never exceed fifteen individuals so that individualized attention can be directed to each participant.

Recommendation 15: The group should be offered twice each week, for a duration of at least five weeks. A total of ten

two-hour sessions are needed so that the information currently provided is continued, and additional time made available for group interaction and processing of the information. Two mandatory followup sessions should be offered several months following completion of the regular course. These will provide opportunities for all individuals to discuss how well their drinking and driving plans have been working, and to discuss the obstacles encountered in this. This overall format allows the necessary time for group discussion, and provides opportunities for active incorporation of the essential lifestyle skill elements with each individual.

Recommendation 16: Instructors for the A.S.A.P. course should be very knowledgeable, maintain a process orientation, set limits for the class members, and have an opportunity for debriefing on at least a twice-monthly basis. The need for each of these elements evolves specifically from the interviews. The class participants need to have, as their instructor, an individual who is well informed on the subject matter, possesses group processing skills, and is receptive to them. The instructor must also, however, set some limits for their behavior. If this control is not established, the class is reported to have a tendency to restrain the necessary activities from occurring. The debriefing is recom-

mended for the instructors because of their manifest need for this - they need it so that they do not end up "hating" their class participants, and so that they maintain their overall effectiveness without "burning out."

Recommendation 17: The content and overall approach of the course should publicly (to class participants and to the general public) acknowledge that there are two main emphases of the class. First, there is the central theme of not drinking and driving. This is the reason for which each of the individuals is directly involved with the program, and this emphasis ought to be maintained throughout the program. Second, there is concern with minimizing future potential situations of alcoholism. This should be emphasized because of the observed high relationship between D.W.I. behavior and problematic drinking behavior. To deny this relationship is to fall into the "trap" and that the alcoholic also faces, and very often fails to confront, namely that excessive drinking can be tolerated if one does not drive. The public ought to know about this also, as this helps communicate that alcoholism is a problem in our society, and that the A.S.A.P. program is one way in which this is being addressed.

Evaluation

Recommendation 18: Central to the A.S.A.P. program should be a comprehensive, in-depth evaluation effort. This should occur on an ongoing basis, with honest observations and feelings provided by the program participants and non-participants. Interviews should be utilized, yet on a limited basis since they are time-consuming and costly. A variety of types of evaluation, from effectiveness and efficiency to processual evaluation should be utilized. The emphasis of any evaluative effort should continually be upon improvement of the existing approach. Alternative elements should be experimented with on a systematic basis to determine whether they are more effective in dealing with the D.W.I. offender. Also helpful in the evaluative process is a "tracking" of individuals for several years to determine the differential impact of the program in which they participated.

Recommendation 19: A data base which is computerized and standardized in format should be incorporated into all A.S.A.P. programs. Current record-keeping is archaic and not conducive to efficient assessment of the program's effectiveness. As cited in the chapter on Methodology, there were gaps in the data collection process due to missing information. Further, the process of obtaining and processing the necessary information was a tedious and cumbersome one,

but one which was necessary due to the current status of record-keeping for the targeted program areas. It is also recommended that different types of information be gathered about A.S.A.P. participants to attempt to explain much of the variance in recidivism which, utilizing current available information, is not possible. For example, participant testing of a variety of psychological factors which are hypothesized to relate to subsequent recidivist behavior would be appropriate.

I would like to make some additional recommendations of a general nature at this point. First, it should be reaffirmed that the task of effectively confronting the drinking driver problem is appropriate for more than one agency or setting. The Level II classes which have been the focus of attention for this dissertation are just one aspect of the overall Alcohol Safety Action Program. Similarly, other agencies and efforts must be undertaken to deal effectively with this problem. Several insights emerged from this research which emphasize the fact that a comprehensive approach is essential.

One idea is that responsible attitudes about drinking must be taught early in life. This is the responsibility of the family as well as of the educational institution. It

can further be enhanced in driver education curricula, and incorporated as a major aspect of driver's license testing procedures.

Also it should be acknowledged that policies regarding alcohol, and specifically about drinking and driving, are determined in a political arena. With such a realization, individuals and organizations desirous of promoting legislation and activities designed to confront alcohol-related problems should do so in a manner which will affect these political processes. Associated with this is the need to support existing laws at all levels and in a consistent manner. To do otherwise reveals that a lack of commitment to implementation. Failure to enforce, or to apply the noted sanctions for, existing laws represented in a widely publicized "crack-down" can easily result in a situation similar to that found in Britain in 1967. If the commitment is stated to be present to enforce a law in a particular manner, then this must be put in practice in order to remain credible.

Greatly increased public information campaigns are necessary to inform the public about the safety hazards and legal consequences associated with drinking and driving. Information should be shared to encourage individual citizens to become involved with others to reduce the opportunity for

drinking and driving behavior. This will include ways of intervening with others who are preparing to drive after having had too much to drink, what role one should personally take if a driver is intoxicated, and how to avert such crisis situations from occurring.

APPLICATIONS FOR OTHER PUBLIC POLICY ISSUES

Throughout this dissertation, the emphasis has been upon the policy area of drinking and driving. While certainly an important area for attention, there are numerous other issues calling for evaluative research and policy consideration. What can be gleaned from this focused research which may be of assistance for other policy areas where an intervention is introduced with the goal of altering human behavior?

At the outset, it is noted that, while some overlap to other areas does exist, there is a variety of unique factors incorporated within the topic of D.W.I. rehabilitation. With the drinking driver, one finds a situation where an individual's irresponsible behavior can lead to personal injury, property damage or loss of life of another individual. Typical efforts of the rehabilitation style are of a semi-voluntary nature. We also find attention being given to two traditionally "private" areas - an individual's drinking behavior and one's driving. Thus, any parallels to other hu-

man behavior areas, such as deterring individuals from smoking cigarettes or encouraging them to wear seat belts while in an automobile, must be made with caution.

One major insight gained from this research is that, in order to have a change in behavior, individuals actually need to perceive a significant deterrent. There must be important consequences associated with specified behaviors which will motivate them to act in a particular manner. These consequences must be realistic and have a perceived high probability of occurring for there to be any notable influence with the individual.

Associated with this is the idea that it is further helpful if the impact is made at both the emotional and the cognitive levels. In terms of the D.W.I. offenders who participated in the A.S.A.P. program, it is desirable to have an individual encounter a "smack," and then to have this reinforced with some rationally based cognitive information. In summary, any behavior change approach must be assessed from the point of view of the individual.

A third application of the current research is based on the methodology employed. Specifically, the general triangulation concept combines several weaker, less conclusive approaches into an assessment designed to be more powerful. This may have broad applications when doing research on be-

havioral issues due to the difficulty in measuring human human attitudes and behaviors.

Related to this is the specific approach of utilizing personal, in-depth interviews to gain insights. This can be a most valuable approach for two distinct reasons. First, information and suggestions are gained which otherwise are not possible. Reflections by individuals, including current participants, past participants, and instructors, about their unique experiences provides new understandings of the program and ways of making improvements upon it. Second, these individuals all noted that no one had solicited from them their personal opinion prior to these interviews. The process of having interviews with these individuals, particularly the course instructors, was important to them, as they believed that their observations and opinions really were worthwhile. This is an important statement for managers and supervisors, as well as for other researchers.

Finally, one caution related to the interpretation of research results is noteworthy. Statistically significant results may be obtained, as occurred with the recidivism data in this case. However, the researcher must pay careful attention to the extent to which variance with the dependent measures is explained by the independent variables under consideration. Specifically, the R-Square and the canonical correlation values help provide this information.

SUMMARY AND CONCLUDING REMARKS

The Alcohol Safety Action Program is an approach based upon educational foundations designed to influence participants in a manner so that they will not drink and drive in the future. Prior attempts to deal with the drinking driver problem had not resulted in satisfactory reduction in the drinking driver problem, so an educational approach was launched. This research study demonstrates that this approach is, indeed, effective when compared to the alternative traditional approach of dealing with the convicted drunk driver. As we recall from Chapter IV, there is approximately a three-to-one difference in recidivism rates when comparing those who participated in the A.S.A.P. program with those who did not participate in the program.

Precisely what aspects of the program make it effective for what types of individuals is difficult to state, although it appears to be a blend of the educational and punitive approaches. The nature of the impact depends upon the specific characteristics and background of the individual. We can conclude that it is feasible to promote a human manner of dealing with this type of problem.

The four functions of the A.S.A.P. rehabilitation program combine to provide an approach which attempts - with some success - to ameliorate the drinking driver problem in this

society. Punishment and deterrence for participants serve as the primary, publicly-supported basis of the program. When one adds to this the deterrence of the general public and the screening mechanism for alcoholics or problem drinkers, a social program emerges which is broader in actuality than is perceived.

Some say that the A.S.A.P. approach is too soft and ineffective. On the basis of my research findings, I disagree. It has a measurable effect. Others argue that A.S.A.P. is simply a symbol of attempts to reduce the drunk driver problem. It may have symbolic value, by demonstrating to the public that "something is being done;" that "we are trying." Whether or not this is actually the case, the fact is that the program is currently more effective than the alternatives being utilized. The need now is to make the program even more effective.

Beyond all of this, to demonstrate that we are, genuinely, concerned about providing the best rehabilitation opportunity possible for convicted drunk driving offenders, we must actively engage in ongoing research and evaluative efforts. This dissertation has certainly not been exhaustive in nature; significant evidence has been provided, however, which supports the overall approach currently being undertaken to deal with this problem. Nonetheless, as observed

in Chapter IV, other factors beside the program, age, court delay, prior record, and other independent variables are involved in accounting for the variance in the recidivist behavior. Is it possible learn what these factors are, and to work with this new understanding to implement an effort which is even more effective? I believe that we should attempt to do so.

Clearly needed are research, careful evaluation, some experimentation with innovative approaches, and commitment and support at all levels. Creatively challenging current assumptions and establishing realistic and meaningful short- and long-range goals are essential to this process. Let us get on with it - As Soon As Possible.

Appendix A

INTERVIEW GUIDE FOR CURRENT A.S.A.P. INTERVIEWEES

How do you feel about participating in this series of interviews?

Can you describe the circumstances surrounding your arrest for driving while intoxicated?

How do you feel about the way the court acted in your case?

If you were the judge, what would you have done in your case?

Why did you choose to participate in A.S.A.P. (Session 1 only)?¹²

When you think about the weeks that you'll be spending in A.S.A.P., what comes to mind (Session 1 only)?

What are you expecting to be doing, specifically, during these 10 weeks (Session 1 only)?

How do you feel about the length of time of participation in this program?

What do you expect to learn as a result of this experience (Session 1 only)?

How do you expect to feel when you finish the course (Session 1 only)?

What do you expect with respect to your own future drinking and driving behavior?

How do you view drinking and driving, in general?

¹² For comparative analysis, most of the questions will remain the same from one session to another. Some of the questions are relevant for only one or two of the interview sessions - these are appropriately identified, as in this instance.

How do you think the courts ought to view this?

Now that you've been in the program, how do you feel about the A.S.A.P. experience (Session 2 only)?

Please talk about the program specifics.

- the course material
- the format used
- the value of discussions
- the value of information shared
- the instructor's style
- the nature of your group
- the order in which the material is being presented (these questions for Session 2 only)

What overall changes would you make if you were designing the course?

What is the main thing that you learned in this course (Session 2 only)?

If you were responsible for deciding how to deal with those arrested for driving while intoxicated, what would you do?

What should be included/excluded that would be more helpful to you (Session 2 only)?

What is the one thing through this whole process that made the biggest difference regarding your own drinking and driving behavior (Session 2 only)?

What did you learn that had nothing to do with drinking and driving behavior (Session 2 only)?

How would you say that your drinking behavior has changed so far as a result of this overall experience?

Do you have any significant personal or professional changes occurring at the present time?

Now that you've finished the course, how do you feel (Session 2 only)?

Do you have any other comments to share?

Appendix B

INTERVIEW GUIDE FOR PAST A.S.A.P. INTERVIEWEES

How do you feel about participating in this series of interviews?

Can you describe the circumstances surrounding your arrest for driving while intoxicated?

How do you feel about the way the court acted in your case?

If you were the judge, what would you have done in your case?

Why did you choose to participate in A.S.A.P.?

Did you have any significant personal or professional changes occurring at the time of the A.S.A.P. program?

When you thought about the weeks that you'd be spending in A.S.A.P. what came to your mind?

What did you expect to be doing, specifically, during the 10 weeks of the program?

How do you feel about the length of time that you spent in the program?

What did you expect to learn as a result of this experience?

How did you think you'd feel when you finished the course?

What did you expect with respect to your own future drinking and driving behavior?

How do you view drinking and driving, in general?

How do you think the courts ought to view this?

How do you think most participants in the A.S.A.P. program view drinking and driving, in general?

When you think back on your experience, would you make the same choice to participate in A.S.A.P.? Why?

Overall, how do you feel about the experience?

Overall, what are the major things that you learned as a result of the experience?

Please talk about the program itself

- the course material
- the format used
- the value of discussions
- the value of information shared
- the instructor's style
- the nature of your group
- the order in which the material was presented

What overall changes would you make if you were designing the course?

What is the main thing that you learned in the course?

If you were responsible for deciding how to deal with those arrested for driving while intoxicated, what would you do?

What should be included/excluded that would have been more helpful to you? What would have been more helpful to other participants?

What is the one thing through this whole process that made the biggest difference regarding your own drinking and driving behavior?

As a result of your experience with the A.S.A.P. program, are there any changes in your overall drinking behavior which you believe are as a result of this program?

Overall, how do you now feel about the A.S.A.P. experience?

Do you have any other comments?

Appendix C

INTERVIEW GUIDE FOR CURRENT GROUP LEADERS

How do you feel about participating in this series of interviews?

Why do you serve as a group leader?

How do you feel about the sanction that group participants receive from the court?

If you were the judge, what sanction do you believe should be used?

How do you view drinking and driving, in general?

How do you think the courts ought to view this?

How do you feel about the length of time spent with the individuals in the course?

How do you think the participants view the course, in an overall sense?

How do you think the participants view the general issue of drinking and driving when they enter the course?

How do you think the participants view the general issue of drinking and driving when they finish the course?

Please talk about the program itself . . . both from your own perspective and then from how the participants see these:

- the course material
- the format used
- the value of discussions
- the value of information shared
- the instructor's style
- the nature of the group
- the order in which the material is presented

Are there some general trends that you can comment on - for example, what types of individuals are more significantly influenced by what types of approaches in the course?

What would you change if you were designing the course?

What do you think the participants would change if they were designing the course?

What should be included/excluded that would be most helpful to you as a group leader?

What should be included/excluded that would be most helpful to the participants, in general?

What is the one thing, through the whole A.S.A.P. course process, that makes the biggest difference regarding individuals' drinking and driving behavior?

To what extent do you believe that significant personal or professional changes in the lives of the participants during the A.S.A.P. program impact upon the effectiveness of the program with them?

Do you have any other comments?

Appendix D

INTERVIEW GUIDE FOR NON-A.S.A.P. PARTICIPANTS

How do you feel about participating in this series of interviews?

Can you describe the circumstances surrounding your arrest for driving while intoxicated?

How do you feel about the way the court acted in your case?

If you were the judge, what would you have done in your case?

What factors led you to choose not to participate in A.S.A.P.?

What did you expect that you would be doing, if you had enrolled in the A.S.A.P. program?

How did you feel about the length of time of participation in the A.S.A.P. program?

Did you have any significant personal or professional changes occurring at the time of your sanction?

How do you view the effectiveness of your sanction?

What do you think made your sanction effective or non-effective?

What would have helped make your sanction more effective? Why?

What do you expect with respect to your own future drinking and driving behavior?

How do you view drinking and driving, in general?

How do you think the courts ought to view this?

What is the one thing through this whole process that made the biggest difference regarding your own drinking and driving behavior?

How would you say that your drinking behavior has changed so far as a result of this overall experience?

Do you have any other comments to share?

Appendix E

LETTER TO CURRENT A.S.A.P. PARTICIPANTS



PETER J. LARKIN
DIRECTOR

ARLINGTON COUNTY, VIRGINIA ALCOHOL SAFETY ACTION PROGRAM



November 12, 1982

Dear

Since you will begin participation in the Level II aspect of the Alcohol Safety Action Program in the near future, I would like to request your consideration of a special research project. David Anderson, a doctoral student in Public Administration and Policy at Virginia Tech, is doing some research on the effectiveness of court sanctions. As part of this project, he is interviewing several individuals who are participating in our program. Your name has been randomly selected for possible participation in this project.

Specifically, what he would like is to talk with you on two occasions - before you participate in our program and after you complete the program. Each of these sessions would take approximately one hour of your time, and would be scheduled at your convenience. All information gathered will be kept totally confidential, and your name will never be reported. What he learns from these sessions will be shared only in an anonymous way, and then only months after you complete your participation in the A.S.A.P. program. Should you be willing to participate, anything that you say will not be shared with your group leader. Further, when you choose to participate or not to participate will have no bearing whatsoever upon your completion of the A.S.A.P. program, and will not be shared with court or law enforcement officials.

He will be contacting you at home within the next week, so if you have further questions about this project, you are encouraged to discuss them with him at that time. Thank-you for your consideration of this worthy project.

Sincerely,

Director

PJL/st

Appendix F

LETTER SENT TO PAST A.S.A.P. PARTICIPANTS



New River Valley
Alcohol Safety Action Program

Executive Director

Fiscal Agent
Town of Blacksburg

Date

Dear

Since you participated in the Alcohol Safety Action Program several years ago, I would like to request your consideration of a special research project. David Anderson, a doctoral student in Public Administration and Policy at Virginia Tech, is doing some research on the effectiveness of court sanctions. As part of this project, he is interviewing several individuals who participated in our program. Your name has been randomly selected for possible participation in this project.

Specifically, what he would like to do is to talk with you on one occasion - this session would take approximately one hour of your time, and would be scheduled at your convenience. All information gathered will be kept totally confidential, and your name will never be reported. What he learns from these sessions will be shared only in an anonymous way. Should you be willing to participate, anything that you say will not be shared with court or law enforcement officials. Further, whether you choose to participate or not to participate will not be indicated in your V.A.S.A.P. case file, and will not be shared with court or law enforcement officials.

He will be contacting you at home within the next week, so if you have further questions about this project, you are encouraged to discuss them with him at that time. Thank-you for your consideration of this worthy project.

Sincerely,

David P. Craig
Executive Director

DPC/st

Appendix G

STATEMENT OF UNDERSTANDING FOR CURRENT A.S.A.P. PARTICIPANTS

STATEMENT OF UNDERSTANDING

The purpose of this statement is to insure full understanding about the nature of participation in interview sessions regarding involvement in the Alcohol Safety Action Program.

- The interviews to be conducted are part of the data gathering process for a dissertation being prepared by David Anderson, a doctoral student at the Center for Public Administration and Policy at Virginia Polytechnic Institute and State University. The title of the dissertation is "A Multidimensional Assessment of Virginia's Alcohol Safety Action Project."
- Two interviews will be necessary - one prior to and one following participation in the A.S.A.P. Level II sessions. Each session will be approximately one hour in length.
- No tape recording of the interview sessions will occur. Notes will be taken during and following the interviews so that insightful comments and quotations can be used in the dissertation.
- All information gathered will be kept totally confidential. The interviewee's name will never be reported or used in any way. The name of the interviewee will be known only by the researcher.
- What is learned from the interview sessions will be shared only in an anonymous way, with no indication (by name or other identifying information) of the source of what is learned.
- The results of the interview sessions will be compiled in the researcher's dissertation as part of the "Research Results" chapter, and subsequent journal articles may also evolve. All documents published will be in the public domain, and will be available for examination by the interviewees. Again, absolutely no identification of the individual interviewee will be made.
- Any questions or concerns regarding this research may be directed to the researcher or to the researcher's Dissertation Committee Chairman, Dr. Charles Goodsell (Professor, Center for Public Administration and Policy, Virginia Polytechnic Institute and State University, 961-5133).
- The researcher may be contacted at home (961-3551) or at his office (961-6309) with any questions or concerns regarding this project.
- The interviewee may refuse to answer any question, and may withdraw from the project at any time.
- The interviewee will be provided a copy of this statement for his/her personal records prior to the beginning of the first interview session.
- The interviewee agrees that s/he has read and understands all of the above statements, and indicates this understanding by the signature below. The signature further indicates that the interviewees voluntarily agrees to participate in these interview sessions.

Signature of Interviewee

Date

Signature of Researcher

Appendix H

STATEMENT OF UNDERSTANDING FOR PAST A.S.A.P. PARTICIPANTS

STATEMENT OF UNDERSTANDING

The purpose of this statement is to insure full understanding about the nature of participation in interview sessions regarding involvement in the Alcohol Safety Action Program.

- The interview to be conducted are part of the data gathering process for a dissertation begin prepared by David Anderson, a doctoral student at the Center for Public Administration and Policy at Virginia Polytechnic Institute and State University. The title of the dissertation is "A Multidimensional Assessment of Virginia's Alcohol Safety Action Project."
- No tape recording of the interview session will occur. Notes will be taken during and following the interview so that insightful comments and quotations can be used in the dissertation.
- All information gathered will be kept totally confidential. The interviewee's name will never be reported or used in any way. The name of the interviewee will be known only by the researcher.
- What is learned from the interview session will be shared only in an anonymous way, with no indication (by name or other identifying information) of the source of what is learned.
- The results of the interview session will be compiled in the researcher's dissertation as part of the "Research Results" chapter, and subsequent journal articles may also evolve. All documents published will be in the public domain, and will be available for examination by the interviewees. Again, absolutely no identification of the individual interviewee will be made.
- Any questions or concerns regarding this research may be directed to the researcher or to the researcher's Dissertation Committee Chairman, Dr. Charles Goodsell (Professor, Center for Public Administration and Policy, Virginia Polytechnic Institute and State University, 961-5133).
- The researcher may be contacted at home (961-3551) or at his office (961-6309) with any questions or concerns regarding this project.
- The interviewee may refuse to answer any question, and may withdraw from the project at any time.
- The interviewee will be provided a copy of this statement for his/her personal records prior to the beginning of the interview session.
- The interviewee agrees that s/he has read and understands all of the above statements, and indicates this understanding by the signature below. The signature further indicates that the interviewee voluntarily agrees to participate in this interview session.

Signature of Interviewee

Date

Signature of Researcher

Appendix I

LETTER TO NON-A.S.A.P. PARTICIPANTS



A LAND-GRANT UNIVERSITY

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

CENTER FOR PUBLIC ADMINISTRATION AND POLICY

January 7, 1983

Dear :

I am writing to request your assistance on a research project which examines the effectiveness of court sanctions. From my review of the public court dockets, I noted that you have been charged with a traffic offense. If you are not the individual involved, please ignore this letter.

My research focuses on how individuals who have had charges brought against them are treated by the legal system, and how effective they believe the sanctions used are. Specifically, I am examining the effectiveness of the Alcohol Safety Action Program in dealing with those charged with driving while intoxicated. To gain this insight, I am contacting randomly selected individuals including people like yourself who were not involved in the program. I am interested in talking with you about your experience, realizing that it occurred several years ago.

If you would be willing to assist me in this project, I would like to talk with you in a confidential manner. The time and place of this discussion, which should take less than one hour of your time, would be at your convenience. Your name would never be revealed, and no information regarding your participation or non-participation in this project will be shared with court or law enforcement personnel. What would be used in the final research report would be statements and conclusions generalized from all of the interviews, as well as some anonymous questions.

I will be contacting you by telephone at home within the next week to determine whether or not you would be willing to participate in this project. At that time, I would be happy to answer any further questions that you have about this.

Thank you for your consideration of this.

Sincerely,

David S. Anderson
Graduate Student

DSA/pbd

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