DWI ARRESTEES: DEMOGRAPHY, TRAFFIC ACCIDENTS, AND RECIDIVISM

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A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN THE GRADUATE SCHOOL OF THE TEXAS WOMAN'S UNIVERSITY

> COLLEGE OF HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

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February 26, 1987 Date

To the Provost of the Graduate School:

I am submitting herewith a thesis written by S. Joan M. Linnander entitled "DWI Arrestees: Demography, Traffic Accidents, and Recidivism". I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Community Health Education.

Major Professor

Accepted.

ealth

Dean, College HPERD

Provost, Graduate School

DEDICATION

This study is dedicated to Erika Lee and Robert Martin Linnander. May they learn to objectively approach a problem.

ACKNOWLEDGMENTS

I wish to acknowledge those individuals who have assisted me in the completion of this study. My special thanks go to Ruth Tandy, Ph.D., my advisor and chairperson of my committee, who gave freely of her support, time, and wisdom. I appreciate the contributions of Roger Shipley, Ph.D., and Bettye Myers, Ph.D., who were my committee members. My deep appreciation also goes to my family who gave whole-hearted support to this project in spite of the many sacrifices which its completion has entailed for them. COMPLETED RESEARCH IN HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE Texas Woman's University, Denton, TX.

> A. Uhlir Institutional Representative

LINNANDER, S.J.M. <u>DWI arrestees: demography, traffic</u> <u>accidents, and recidivism.</u> M.A. in Health Education, 1987, 59 p. (R. Tandy)

Demography, traffic accidents, and recidivism were described in 382 driving while impaired arrestees, aged 18-20 (n=80), 21-24 (n=138), and 25-29 (n=164), who entered a driver education program between September, 1984 and December, 1985. Self-reported data indicated the subjects were predominately male (85%), Caucasian (90%), single (45%), and blue-collar workers (41%). Arrestees, aged 18-20, earn less than \$5,000 (26.25%); aged 21-24, \$10,000 to \$14,999 (28.99%); and, aged 25-29, \$20,000 or more (23.17%). Findings indicated 36 subjects, aged 18-20, were involved in an alcohol related traffic accident within the last 3 years as compared with 51 subjects, aged 21-24, and 54 subjects, aged 25-29. Results of chi square (p < .05) were insufficient to demonstrate an association between age and alcohol related traffic accidents. One year recidivism was examined in 36 subjects who attended the program September through November, 1984. No subject was listed in the adult probation files for committing a second offense.

v

TABLE OF CONTENTS

DEDICATI	ON	iii
ACKNOWLE	DGMENTS	iv
ABSTRACT		v
TABLE OF	CONTENTS	vi
LIST OF	TABLES	viii
Chapter		
1.	INTRODUCTION	1
	Rationale Purpose Statement of Problem Research Questions Assumptions Delimitations Definition of Terms	1 2 3 4 4 5 5
2.	REVIEW OF LITERATURE	7
	Studies on Demography Studies on Traffic Accidents Studies on Recidivism	7 11 18
3.	METHODOLOGY	26
	Introduction Setting Population and Sample Selection Instrumentation Preliminary Procedures Data Collection Treatment of Data	26 26 27 28 30 31 31
4.	ANALYSIS OF DATA	34
5.	SUMMARY, RESEARCH QUESTIONS, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS	42

	Summary	42
	Research Questions	43
	Discussion	44
	Conclusion	47
	Recommendations	47
REFERENCI	ES	49
APPENDIX		
Α.	Data Form of the Denton County Safety	
	Education Program	53
в.	Graduate School Approval to Conduct Study.	55
С.	Permission from Agencies	57

,

LIST OF TABLES

TABLE 1.	Sex, Race, and Marital Status of Subgroups
	by Percentage35
TABLE 2.	Occupation and Total Income of Subgroups
	by Percentage
TABLE 3.	Distribution of Accidents by Age Groups and
	Chi Square Values
TABLE 4.	Frequency of Accidents Reported in the 18-20 Year
	Age Group Compared with the 21-29 Year Age Groups40
TABLE 5.	Frequency of Accidents Reported in the 21-24 Year
	Age Group Compared with the 18-20 Year and the
	25-29 Year Age Groups40
TABLE 6.	Frequency of Accidents Reported in the 25-29 Year
	Age Group Compared with the 18-24 Year Age Groups41

CHAPTER 1

INTRODUCTION

<u>Rationale</u>

Automobile accidents represent one of the most serious health problems in the United States. In 1982, motor vehicle accidents killed 44,000 people and led to 2,158,000 injuries (U.S. Department of Transportation, 1984). Provisional data from the National Center for Health Statistics (1984) indicate that in 1982, motor vehicle accidents were among the four leading causes of death in the United States and the leading cause of death in the 15-34 year age group.

Use of alcohol by the driver has been implicated as a major risk factor in driving related accidents, fatalities, and injuries. The relative probability of involvement in a crash increases as blood alcohol concentration (BAC) increases (Richman, 1985). From 1977 to 1981, the proportion of young drivers with measurable BACs steadily increased by 8 percent (Centers for Disease Control [CDC], 1983). Males, aged 16-24 years, accounted for only 11 percent of all licensed drivers in 1982 but for more than one-third of all alcohol related fatalities (National Center for Health Statistics, 1984).

The driving while impaired (DWI) population has been found to be at risk for both accident involvement and the development of more severe, drinking-related problems. Most

therapeutic programs treat the DWI arrestees (ADWIs) as a homogeneous group. This treatment approach often leads to minimal, if any, modification in drinking behavior or subsequent accident involvement (Donovan, Marlatt, & Salzberg, 1983).

Although accurate differentiation of ADWIs from nonalcohol involved drivers is a difficult task, Richman (1985) argues that using data on BACs alone does not assess the extent of alcohol involvement in accident-involved drivers. Different demographic factors affect the role alcohol impairment plays in traffic crashes.

This study's focus on the demographic delineation of subtypes within a high-risk group may provide target populations for intervention strategies to modify problem drinking and accident involvement. Identifying subtypes within the DWI group may provide groups for comparison of personality and drinking variables to determine the relative importance of such factors to the interaction of high-risk driving.

Purpose

The purpose of this study was to describe the demography, traffic accident involvement, and DWI recidivism of subgroups within the DWI population , aged 18 through 29 years.

Statement of Problem

The problem of this study was to analyze

characteristics of the DWI population aged 18-20 years, 21-24 years, and 25-29 years. Characteristics that were studied include sex, race, marital status, occupation, income level, involvement in alcohol related traffic accidents, and DWI recidivism. Data were collected from a self-report data form constructed by the Texas Council on Alcoholism and administered to ADWIs enrolled in a driver education course taught by the Denton County Driver Education and Traffic Safety Department, and from the probation files of the Texas Department of Public Safety in Denton County. The data were collected during January and February, 1986 in Denton, Texas. Data collected from the study were converted to percentages to determine the predominant demographic characteristics and the DWI recidivism within the groups. Data collected on involvement in an alcohol related traffic accident were subjected to a chi square statistical procedure.

Research Questions

1. What is the sex, race, marital status, occupation, and income level of the ADWI, aged 18-20 years?

2. How many ADWIs, aged 18-20 years, had been involved in an alcohol related traffic accident within the last 3 years prior to the time of the present DWI arrest?

3. What is the sex, race, marital status, occupation, and income level of the ADWI, aged 21-24 years?

4. How many ADWIS, aged 21-24 years, had been involved

in an alcohol related traffic accident within the last) years prior to the time of the present DWI arrest?

5. What is the sex, race, marital status, occupation, and income level of the ADWI, aged 25-29 years?

6. How many ADWIs, aged 25-29 years, had been involved in an alcohol related traffic accident within the last 3 years prior to the time of the present DWI arrest?

7. How many ADWIs, aged 18-29 years, will be listed in the Adult Probation Department records of the Texas Department of Public Safety in Denton County for having committed a second DWI offense within a year from the time of the driver safety education course?

Assumptions

The following assumptions were made concerning the study:

 the responses on the data form describe the respondent's demographic profile.

2. the responses on the data form reflect the respondent's involvement in alcohol related traffic accidents.

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3. the probation files of the Texas Department of Public Safety in Denton County are current and accurate.

Limitations

The study was subject to the following limitations: 1. the 382 subjects who attended a driver education course in Denton County, Texas, as partial penalty for DWI.

 the degree to which the subjects are representative of the DWI population, aged 18-29 years.

3. the many variables in determining recidivism including mobility, mortality, and the time lag between arrest, conviction, and probation.

4. the validity of using a self-report data form.

Delimitations

The study was subject to the following delimitations:

 recividism of subjects originally and subsequently convicted in the Denton County Courts.

 recidivism of subjects who attended the driver education course during the time period from September, 1984 through November 1984.

Definition of Terms

For purposes of clarification, the following definition of terms was established for the study:

1. blood alcohol concentration (BAC) - the weight of alcohol in the blood based on grams of alcohol in 100 milliliters of blood and expressed as percent (%) (Borkenstein, 1985).

2. blue-collar worker - one who is employed as a craftsman and kindred, operative, or nonfarm laborer (American Public Health Association, 1975).

3. cause number - a five digit number assigned by the courts to each individual at the time of any conviction

and used for identification and record keeping purposes (Investigator, 1987).

4. Denton County Driver Education and Traffic Safety Department - Texas state designated facility, located on the North Texas State University campus, to conduct alcohol driver safety education programs (Investigator, 1987).

5. driving while impaired (DWI) - operating a motor vehicle with a BAC equal to or greater than .10% (Richman, 1985).

6. farmworker - one who is employed as a farmer, farm manager, farm laborer, or farm foreman (U.S. Department of Labor, 1984).

7. probation - the modality in which a DWI offender must report to a probation counselor on a monthly basis for a court specified amount of time and for a court specified amount of fee (Investigator, 1987).

8. service worker - one who is employed in protective service occupations, food and beverage preparation and service occupations, health service occupations, cleaning service occupations, or personal service occupations (U.S. Department of Labor, 1984).

9. white-collar worker - one who is employed as a professional, technical worker, manager (other than farm manager), administrator, sales worker, or clerical worker (American Public Health Association, 1975).

CHAPTER 2

REVIEW OF LITERATURE

Studies on Demography

The present knowledge concerning the profile of the drinking driver, of the drinking driver who is at greatest risk of collision involvement, or the drinking driver at risk of being charged with DWI is sketchy. One difficulty is that the research has been fragmented (Haight, 1985). The pioneering research of the classic Grand Rapids Study (Borkenstein, Crowther, Shumate, Ziel, & Zylman, 1964) was conducted over twenty years ago. The tentative conclusions were based on a modest sample of selected variables in a particular locality. No full scale nationwide long-term investigation has been undertaken to fully explore the preliminary findings. Regarding the Grand Rapids Study, Haight (1985) stated the following:

> Instead, the restrained conclusions of this excellent study have been used (and misused) as arguments to defeat opponents, as propaganda to enlighten the public and as facts to persuade legislators. A preliminary research finding has been immediately translated into the sphere of intervention before being firmly grounded.(p.13)

A second difficulty is that the research almost always tends to be directly oriented toward intervention. Research purely for gaining knowledge without a goal of some specific intervention has become almost reprehensible (Haight, 1985).

Sex, age, marital status, race, education, and occupation are variables used to describe the DWI population. A single variable itself is not conclusive for describing the ADWI because many of the variables exert an interactive influence on DWI (Donovan et al., 1983; Richman, 1985; Vingilis, 1983). Following an extensive review of the literature, Donovan et al. (1983) described the ADWI as male, probably under the age of 30 years, divorced or separated, and employed at a blue-collar job. Results of an extensive investigation of epidemiological research by Vingilis (1983) indicated that the large majority of ADWIs are white and have an average educational level of 11.5 years.

An initial factor in the investigation of the demographic characteristics of the ADWI is the sex of the driver. Men are overrepresented in populations of drivers who drink and among drivers with BACs greater than .08% who are involved in accidents. The overrepresentation of men is thought to be due to the fact that men typically drive more, particularly at night, when most drinking and driving occurs. However, when women do combine drinking and driving, they are more likely than men to be involved in traffic accidents (Richman, 1985). The DWI population

comprises approximately 5-10 percent women (McCormack, 1985). This estimate is argued to be an underrepresentation for two reasons: women seem to be underselected in police conducted traffic spot checks (Vingilis, 1983) and women are less likely than men to be arrested, prosecuted, and convicted (McCormack, 1985).

Wilsnack, Wilsnack, and Klassen (1984) studied women's drinking and drinking problems. In a stratified national survey, 917 women in the general population were interviewed regarding alcohol consumption, drinking contexts, problems resulting from drinking, and symptoms of alcohol dependence. The results indicated that adverse drinking consequences and episodes of extreme drinking were most common among women aged 21-34 years and among women who were unmarried, divorced, or separated. The most common adverse consequence of drinking was DWI. Among all women drinkers, 17 percent had driven while feeling drunk or high.

McCormack (1985) investigated the relationship between marital status and risk for alcohol-related automobile accidents. Information on 10,544 subjects (12% women) who entered driver alcohol education programs in 1983 was examined in regard to sex, marital status, age, and living arrangements. Of the subjects, 1,878 (18%) were divorced or separated. More women (28%) than men (16%) were divorced or separated; more divorced or separated women (32%) than divorced or separated men (21%) were under the age of

30 years.

Cameron (1982) examined data from the Alcohol Safety Action Program's (ASAP) nighttime roadside breath-testing surveys regarding age of driver and nighttime driving with a BAC greater than 0.10%. Results showed that of the 68,893 nighttime drivers surveyed, 18 percent were aged 15-19 years and 39 percent were aged 20-29 years. Further analysis of the data showed that 3,287 of the total nighttime drivers had BACs greater than 0.10%. Of the drivers with BACs greater than 0.10%, 6 percent were in the 15-19 year age group and 38 percent were in the 20-29 year age group.

Landrum et al. (1982) evaluated the effectiveness of probation in comparison to traditional sanctions for DWI. Five thousand ninety-six ADWIs participated in the project. Demographic data were taken from a self-report personal data form completed by the participants after court referral. The demographic profile indicated that the ADWI typically was a white male, 20-50 years of age (78%), with the 20-29 age group accounting for the greatest proportion of offenders (37.5%). Approximately half (51%) of the ADWIs had completed a high school education or more, and 26.3 percent of the ADWIs had some high school education. The ADWIS reported the following family yearly income: less than \$10,000, 64.9%; \$10,000-\$14,999, 20.1%; and greater than \$15,000, 15%. Of the participants, 78.9 percent were employed, 8.1 percent were unemployed, and 13 percent were

housewives, students, retired, or disabled. The ADWIs worked as craftsmen (27.5%) or in unskilled occupations (operative, 17.8%; laborers, 14.7%). More ADWIs, than the population in general, were separated or divorced.

Studies on Traffic Accidents

For over a half century, the relationship between alcohol and traffic accidents has been recognized as a major source of injury and death in the United States (Douglass, 1983; Holcomb, 1938). Youth have been a dominant factor in the problem of alcohol related traffic morbidity and mortality since the 1940's. Annually, traffic crashes produce increasing numbers of fatalities and permanent disabilities (Douglass, 1983). Motor vehicle accidents are the leading cause of death in the 15-34 year age group (National Center for Health Statistics, 1984).

Data from the Fatal Accident Reporting System (FARS) (CDC,1984) indicated that there were 37,971 fatal motor vehicle incidents in 1983, resulting in 42,584 fatalities. Alcohol was a contributing factor in 42% of the deaths. Of the 54,649 drivers involved in the accidents, 30 percent had positive BACs or the accidents were judged by the investigating officers to be alcohol related. Thirty-three percent of all drivers in fatal motor vehicle incidents were between the ages of 16-24 years. Thirty-eight percent of the drivers from the 16-24 year age group were drinking compared with 26 percent for all other age groups. In 1983,

incidents involving young drinking drivers claimed 7,784 lives, of which 51 percent were the young drivers themselves.

On the state level, the Bureau of Vital Statistics (1984) for the Texas Department of Health reported that in 1983, motor vehicle accidents were the leading cause of accidental death in all age groups 64 years and younger. Of the total 3,899 deaths from motor vehicle accidents, 72.8 percent of the deaths were males, 27.2 percent were females, 89.6 percent of the deaths were whites, and 10.3 percent of the deaths were Blacks. Analyzing the data by age revealed that 56.8 percent of the deaths occurred in the '15-34 year age group (15-19 year group, 13.4%; 20-24 year group, 19.4%; 25-34 year group,23%).

The extent of alcohol involvement in traffic accidents is associated with a number of varied factors such as: type of vehicle, severity of the accident, who was involved, single vehicle or multiple vehicle accidents, age and sex of the casualty, day of the week, and time of day. Information regarding these factors is needed for systematic assessment of changes in alcohol involved accidents (Richman, 1985).

Studies (CDC, 1984; Cerrelli, 1983; Douglass, 1983; U.S. Department of Transportation, 1983) indicated that motor vehicle associated deaths involving young drinking drivers were not uniformly distributed. A higher proportion of multiple car crashes occurs in the daytime while a higher

proportion of single car crashes occurs at night and on weekends. A higher proportion of alcohol involved accidents also occurs at night and on weekends (Cerrelli, 1983). Single vehicle accidents, compared with multiple vehicle accidents, tend to occur more frequently among young drivers. Young drinking driving fatalities tend to occur in summer months and on Friday, Saturday, and Sunday. The majority of young fatalities occurs between 8:00 P.M. and 4:00 A.M. on the weekend. More fatalities occur in rural areas than in urban areas (CDC, 1984: U.S. Department of Transportation, 1983).

The Centers for Disease Control (1984) analysis of 1983 FARS data for youth related alcohol involved fatalities indicated that July and August were peak months for fatalities, and January had the fewest fatalities for the year. Of the 6,833 alcohol related young driver fatalities, approximately 67 percent of all deaths occurred on Friday, Saturday, or Sunday, and 70 percent of all deaths occurred between 8:00 P.M. and 4:00 A.M. Major holiday periods for motor vehicle accidents involving young, drinking drivers were Memorial Day, Independence Day, and Labor Day.

Richman (1985) stated that objective measures of BACs, in a representative group of accident involved drivers, and relative risk studies that included BACs were the most definitive way to assess the significance of alcohol involvement. Although the relative probability of involvement in a crash increases as BAC increases, the relationship is not linear. Drivers at low BACs have a risk that is not appreciably different from that of drivers who have not consumed alcohol. However, the risk of accident involvement begins to rapidly increase at BAC levels between .08 and .10%. Generally, the risk of having a severe injury or being killed increases as the BAC increases (Richman, 1985; Simpson, Mayhew, & Warren, 1982).

Using data collected and assembled by the Traffic Injury Research Foundation (TIRF) of Canada, Simpson et al. (1982) studied the frequency of alcohol detection among fatally injured automobile drivers of various ages. Results from the data collected for a three year period showed the following percentages of BAC greater than 0.10% in the fatally injured driver: 16-19 year old drivers (742), 50%; 20-24 year old drivers (825), 56%; 25-29 year old drivers (487), 55%; and all age groups (3,928), 46%.

In an expanded research study to include involvement of alcohol in nonfatal injury collisions, Warren, Buhlman, Bourgeois, and Chattaway (1982) described the results of breath or blood specimens obtained from 713 road crash victims reporting to emergency wards for treatment. Approximately 45 percent of the drivers were 16-25 years old, and males (76%) accounted for the greatest proportion of injured drivers. Alcohol (BAC greater than .021%) was detected in 28 percent of the injured drivers.

Comparing data on the presence of alcohol from the two previous studies, Simpson et al. (1982) concluded that alcohol is present among nonfatally injured drivers (28%) less frequently than alcohol is present among fatally injured drivers (46%). When comparable groups were compared, the incidence of high BACs (greater than 0.10%) was less among the hospitalized victims than among the fatally injured drivers. The data supported the implication that the presence of alcohol may affect not only the collision likelihood, but also collision severity.

The concept of exposure has been used as a dominant explanatory variable in highway safety (Simpson et al., 1982). Richman (1985) defined exposure as "... driving when accidents are generally more frequent, as well as when drinking and driving are more frequent, ..." (p.29). The operational definition of quantitative exposure is the number of miles driven per year (Simpson et al., 1982).

Studying exposure, Mayhew, Warren, & Simpson (1981) used data obtained from roadside surveys, designed principally to sample BACs of nighttime drivers. The frequency of various age and sex groups in the nighttime driving population was indexed to compare the age distribution of drivers in the nighttime population at risk to the age distribution among the nighttime drivers fatally injured. In using Bayesian relative risk analysis, average relative risk is set at 1.0. Values in excess of

1.0 reflect increased risk or overrepresentation; values below 1.0 reflect lower than average risk or underrepresentation. The risk ratios for fatal collision of nighttime drivers obtained for the various age groups were as follows: 16-17 years, 2.32; 18-19 years, 1.69; 20-24 years, 1.23; 25-34 years, 0.71; 35-44 years, 0.58; 45-54 years, 0.58; 55-64 years, 0.91; and 65 plus years, 1.39. The results indicated that drivers under the age of 25 years were overrepresented in fatal nighttime collisions even when controlling for exposure in nighttime driving. Extending the comparisons to include males and females, Mayhew et al. (1981) found that risk factors for females were lower than for males. Of the females, young female drivers were at greater risk of fatality than older females. The fact that the relative risk for young nighttime drivers exceeds 1.0 suggested that factors other than exposure contribute to the overrepresentation.

Richman (1985) stated that different demographic factors affect the role that alcohol impairment plays in traffic accidents. The relationship of sex, marital status, occupation, income level, and education to the risk of an alcohol related crash was examined by several authors (Donovan et al., 1983; Douglass, 1983; Jones, & Joscelyn, 1978; Landrum et al., 1982; Richman, 1985; Simpson et al., 1982). Two major high risk groups were identified: young adult male drivers and passengers; and young adult

female passengers. Women were overrepresented in nonfatal crashes while men were overrepresented in fatal and nighttime crashes. Results have shown that divorced or separated drivers who were fatally injured were more likely to have been drinking or legally intoxicated than married, single, or widowed drivers. However, divorced or separated fatally injured drivers made up a relatively small percentage of all fatally injured drivers. There have been indications that persons of lower income groups, of low occupational level, or of low educational level are overrepresented among drinking drivers. However, these findings were found in persons with very high BACs (greater than .15%) and were indicative of the problem drinking driver rather than the general drinking driving population.

Richman (1985) examined driving history as a risk factor for traffic crash involvement. Data, taken from the FARS report for 1981, showed that of 62,031 drivers involved in fatal accidents, 42.3 percent had previous convictions for moving violations and 4.4 percent had previous convictions for DWI. Further analysis of the data for single vehicle driver fatalities indicated that of 1,133 men, aged 16-24 years with BACs above .10%, 10.3 percent had convictions for DWI in the past three years. Of the 1,340 men, aged 25-54 years with similar BACs, 15.3 percent had previous DWI convictions. The results indicated that the majority of the high risk groups had not had recent

convictions for DWI. Analysis of the data for multiple DWI convictions indicated that 2.1 percent of the 16-24 year age group and 3.6 percent of the 25-54 year age group had multiple DWI convictions.

Studies on Recidivism

Sanctions for the drinking driving offender vary throughout the world. The sanctions range from monetary fines, jail sentences, and license controls to education and rehabilitation. Education and rehabilitation may range from a two hour didactic educational course to a full scale alcohol treatment program. The administration of the sanctions lies within the judiciary, and the actual application of the sanctions is the responsibility of the service providers such as a correctional facility, licensing agency, or a treatment-educational facility (Hagen, 1985).

Hagen (1981) described the DWI sanctioning process. The critical elements of any sanctioning system were listed as follows: equal application of the sanction for all involved drivers; appropriateness of the sanction relative to the public's perceived severity of the offense; economics of applying the sanction; operational feasibility of applying the sanction; and the effectiveness of the sanction.

Historically, the focus on the various elements of the sanctioning system have vacillated. In the 1960s, the economics of sanction application had priority. Fines, jail sentences, and licensing tools were the primary sanctions for the ADWI. In the late 1960s and early 1970s, the National Highway and Traffic Safety Administration (NHTSA) became actively involved in the sanctioning system through funding of 35 ASAPs. The NHTSA involvement broadened the scope of sanction application to include education and rehabilitation, while testing the sanctioning system element of operational feasibility. The ASAPs were completed in the mid-1970s, and presently there is strong focus on equity and effectiveness of the sanction (Hagen, 1985).

A measurement of the effectiveness of a sanction is drunken driving recidivism. Performance measures like alcohol related rearrests or accidents as opposed to nonalcohol rearrests or accidents are indicators of DWI sanction success (Hagen, 1985).

The effectiveness of an alcohol safety school in reducing recidivism of drinking drivers and the sociodemographic characteristics of ADWIs was evaluated by Michelson (1979). Of 4000 persons convicted of DWI, a random sample of 520 first offenders and 120 recidivists was obtained so that sociodemographic variables could be compared. A subset of 30 subjects was randomly selected to represent the treatment group who were subjects assigned to a DWI school by county judges. Thirty subjects were randomly selected to represent the control group who were drivers with records on file in the courthouse but who did not attend DWI school. The treatment and control groups were studied for a three year period.

For the study, Michelson (1979) collected data on age, sex, race, education, occupation, income, marital status, number of dependents, alcohol problems, accident at time of arrest, number of DWI offenses, and license revocation or suspension. The alcohol problem variable was based on results of alcohol screening tests as well as a clinical interview during which experienced counselors used the diagnostic criteria of the National Council on Alcoholism. The results indicated that the recidivists, compared with first offenders, included a disproportionately large number of men, had significantly higher occupation status, and had significantly greater alcohol problems. Significantly more recidivists had been involved in an accident at the time of arrest.

For the treatment and control groups, Michelson (1979) collected data on the number of violations, points, accidents, and DWI convictions during the 3 year period. Analysis of the data indicated that the treatment group had higher rates of traffic violations, points, and accidents than did the controls. The treatment group had one-fourth as many subsequent DWI convictions as did the controls.

Reis (1982a) conducted a comprehensive evaluation of DWI education and rehabilitation sanctions for the NHTSA. In the Comprehensive Driving Under the Influence of Alcohol Treatment Demonstration Project (CDUI), repeat offender

volunteers who pleaded guilty to drunken driving had the sentences postponed for thirteen months in exchange for participation in the project. All volunteers, including a control group who received no treatment, had their convictions reduced to reckless driving at the end of the thirteen months if they were not rearrested. By reducing the conviction, the volunteers avoided mandated licensing action. During the project, the following types of sanctions were evaluated: bi-weekly contact consisting of twenty-six, fifteen minute individual interviews; educational counseling without chemotherapy; and educations in DWI recidivism, but no impact on subsequent accident involvement, were demonstrated.

The impact of educational sanctions for first DWI offenders was also evaluated by Reis (1982b) in the CDUI project. Subjects were volunteers who received reductions in fines and penalties for participating in the project. The volunteers were randomly assigned to a home study program, a four-session in-class education program or a no-treatment program. The home study and in-class groups evidenced a significant reduction in DWI recidivism compared to the no-treatment group. No DWI recidivism difference was evidenced between the home study and in-class group.

Landrum et al. (1982) evaluated the effectiveness of probation in comparison to traditional sanctions. Five

thousand ninety-six convicted drunken drivers were classified as nonproblem or problem drinkers and randomly assigned to probation, rehabilitation, probation plus rehabilitation, or a no treatment group. Probation entailed twelve monthly sessions with a probation counselor, totaling no more than six contact hours. Rehabilitation for the nonproblem drinker was attendance at an alcohol safety school consisting of four weekly, two and one half hourly sessions. Rehabilitation for the problem drinker consisted of group therapy for eight weeks of one and one half hourly sessions. The primary dependent variable was DWI recidivism during twenty-four months of tracking. Neither probation nor the traditional sanctions showed conclusive evidence of effectiveness with either nonproblem or problem drinkers. However, there were significantly more rearrests, accidents, and injuries among the problem drinkers than among the nonproblem drinkers.

Landrum et al. (1982) examined the recidivism data for sociodemographic categories associated with high recidivism rates. The categories associated with high rates of recidivism included middle age (40-59 years of age), low incomes (\$3,000-\$10,000 yearly), less education, unemployment (including retired and disabled) or employment in unskilled or semiskilled occupations, and unstable marital status (separated, divorced, or widowed). Blacks recidivated at a somewhat higher rate than whites. Females

were underrepresented in the sample and exhibited very low recidivism. The females who did recidivate were typically older and tended more often than males to be separated , divorced or widowed, to have had multiple marriages, and to be unemployed.

Landrum et al. (1982) also compared those individuals who were rearrested during the first six months of program participation to recidivists in general. The results indicated that the group of early recidivists did not differ significantly from recidivists in general, with respect to age, race, income, marital status, or employment. However, certain subgroups did stand out as exhibiting relatively high or relatively low proportions of early recidivists. The categories which exhibited a high proportion of early recidivists (45% or more) included teenagers (50% of all recidivists less than 20 years old were rearrested in the first six months), 30-39 year olds (46%), incomes less than \$3,000 (47%), divorced or widowed (46.3%), housewives (55%), and the unemployed (45%). The categories which exhibited a low proportion of early recidivists (35% or less) included students (34%) and incomes greater than \$25,000 (30%).

In Washington State, Salzberg and Klingberg (1983) studied the effectiveness of deferred prosecution (DP) for DWI. In a DP program, the ADWI participates in an alcoholism treatment program and avoids legal sanctions for a two year period. If the ADWI complies with the treatment

program and is not arrested for DWI during the two years of treatment, the original charge is dismissed. The intent of the law is to encourage alcoholic offenders to participate in a treatment program and to reduce the recurrence of the original violation.

Salzberg and Klingberg's study (1983) consisted of 1245 persons cited for DWI and accepted in a DP program and 949 individuals cited for DWI and not placed in a DP program. The control group received licensing suspension, fine or jail sentence or both, and mandatory attendance at an alcohol information school. The alcohol related violations of the subjects were monitored for a three year period. During the two year deferral period, there was no significant difference in alcohol related violations between the DP group and the control group. However, during the third year, the DP group accumulated significantly more alcohol related violations than the control group. The DP group had an adjusted mean of 0.36 alcohol related violations compared with an adjusted mean of 0.30 alcohol related violations for the control group. Accident involvement was the same for the DP group and the control group during the deferral period and during the third year. Both groups were involved in approximately nine accidents per hundred drivers per year. Salzberg and Klingberg (1983) concluded that DP, as compared with licensing sanctions, did

not produce an improvement in recidivism for alcohol related violations.

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CHAPTER 3

METHODOLOGY

Introduction

A retrospective, status descriptive study was conducted to determine the characteristics of subgroups within the DWI population, aged 18-29 years. To accomplish this objective, the following independent variables were studied: sex, race, marital status, occupation, income level, involvement in alcohol related traffic accidents, and one year recidivism. The dependent variable was the ADWI, aged 18-29 years.

Setting

The study was conducted in Denton, Texas, a college community located in the northcentral section of Texas. The actual study setting was in a storage room of the designated Denton County Driver Education and Traffic Safety Department site and in an office at the Probation Department of the Texas Department of Public Safety in Denton County. The storage room was located in the Men's Building at North Texas State University and it housed all the records of ADWIS who had attended Driver Safety Education school from August, 1984 through December, 1985. The storage room was an intérior room with ample indirect lighting. Four data gathering sessions were held in the storage room to collect demographic information on the ADWIs. The office at the Probation Department was located in the back of the building

and housed the computer which contained information regarding prior arrests and subsequent arrests on all ADWIs in Denton County. The data gathering session was held at night after the Probation Department was closed. No distractions or interruptions occurred during any of the five data gathering sessions.

Population and Sample Selection

The subjects in this study were drawn from a population of 920 ADWIs who had completed a driver safety education course, required by law as partial penalty for DWI, from August, 1984 through December, 1985. For this study, the participants had to be aged 18-29 years. Of the total 920 ADWIS, 87 individuals provided insufficient information on age, and 382 (46%) individuals met the age criterion and were selected as the sample group for the study. Since driver alcohol education programs are provided for men and women who are arrested for drunken driving, it was expected that within the program the variables of sex, race, marital status, occupation, income level, and involvement in alcohol related traffic accidents were representative of variables within the DWI population as a whole.

In order to study one year recidivism, a sample was obtained from the 382 ADWIs, aged 18-29 years. The criteria for selection were that the individual had been originally convicted in the Denton County Courts, had a Denton County cause number, and had attended the driver safety

education course during September, 1984 through November, 1984. Of the total 68 ADWIs who were aged 18-29 years and had attended the driver safety education course during the specified time frame, 37 subjects met all the criteria and were selected for the study. One subject was eliminated from the study because the subject was not listed in the Probation Department files. A final sample of 36 subjects (males 31; females 5) was selected for the study. Of the 36 subjects, 21 were on probation, and 15 were off probation.

Instrumentation

The unobtrusive method of abstracting data from existing records was used for this study. The existing records were self report data forms (Appendix A) constructed by the Texas Council on Alcoholism and the adult probation files compiled by the Probation Department of the Denton County Court Services. The data form is administered to ADWIS, by the instructor in the Denton County Driver Education and Traffic Safety Department, on the first day of the alcohol safety course. The data form was used to obtain descriptive information about the subjects' sex, race, age, marital status, occupation, total income, and alcohol related traffic accidents. The probation files were used to collect data on recidivism of the subjects.

The questionnaire survey has been used extensively as a research tool. Under most circumstances, the questionnaire

approach to data gathering and hypothesis testing is assumed reliable and valid. This assumption has been viewed with skepticism when applied unqualified to data obtained from surveys of alcohol consumers. Because heavy drinking and its consequences are generally thought to be socially undesirable and deviant, self-reports of such behavior are often suspected of contamination (Babor, & Mendelson, 1980).

Few researchers have investigated the validity of selfreports of behavior generally considered to be deviant or antisocial. Most of the studies on reliability have been focused on problem drinkers (Williams, Aitken, & Malin, 1985).

Sobell, Sobell, and Samuels (1974) compared the self reports of alcohol-related arrests of 70 men in an alcohol rehabilitation program with the official records of the California Bureau of Criminal Identification and Investigation and the Federal Bureau of Investigation. The Pearson correlation coefficient for congruence between self-report and actual data was .65, and indicated that self-reports are sufficiently valid to use as a primary information source.

In 1978 Sobell and Sobell examined whether the validity of self-reports differs between and within three different populations of alcoholics. The three populations were voluntary outpatient alcoholics (V/OP), coerced outpatient alcoholics who were court referred for treatment

(C/OP), and voluntary inpatient alcoholics (V/IP). In a group setting, the subjects completed a questionnaire containing alcohol, nonalcohol, and demographic questions. The subjects were not aware that the answers would be compared to official records until after the questionnaire was completed. Groups V/OP and V/IP validly answered 87.8 percent and 80.0 percent, respectively, of all verifiable questions. The alcoholics coerced to participate in treatment answered 83.6 percent of all verifiable questions. These results indicated that self-reports of alcoholics who were court referred into treatment were as valid as the reports given by the alcoholics who voluntarily entered treatment. A simple effects analysis for question type indicated that fewer invalid answers were given to demographic questions than to alcohol and non-alcohol questions.

Preliminary Procedures

1. Because the research was carried out in partial fulfillment of the requirements of the graduate program in health education at Texas Woman's University, approval from the investigator's thesis committee was obtained.

2. The research was exempt from Human Subjects Review Committee review because the subjects were 18 years of age or older, data were collected unobtrusively from existing records, and each subject was assigned a number.

3. Written permission to perform this study was

obtained from the Graduate School (Appendix B).

4. After permission to conduct the study was obtained, consent to conduct the investigation was sought and obtained in writing from the director of the Denton County Drivers Education and Traffic Safety Department and from the assistant director of the Denton County Court Services (Appendix C).

Data Collection

The existing records of the ADWIs were grouped by month, year, and day of the week of the class sessions. The total number of records in each group were counted and recorded. The date of birth (D.O.B.) question on the data form was checked. Demographic information on the subjects selected for the study was transferred to an individual card prepared by the investigator.

In order to investigate recidivism, the subject's cause number was entered into the computer at the Probation Department. For each subject, information regarding present DWI conviction, prior offenses, and subsequent offenses was recorded on a master sheet.

Treatment of Data

The dependent variable was subgrouped by the following ages: 18-20 years, 21-24 years, and 25-29 years. From the responses to the D.O.B. question on the data form, each subject was assigned to an age group and given a subject number.

The independent variables were divided as follows: sexmale, female, or no response (NR); race - Caucasian, Black, Hispanic, other, or NR; marital status - married, single, divorced or separated, widowed, or NR; occupational status white-collar worker, blue-collar worker, service worker, farmworker, unemployed, NR, or indeterminable; total incomeunder \$5000, \$5000-\$9999, \$10,000-\$14,999, \$15,000-\$19,999, \$20,000 and over, NR, or indeterminable; involvement in alcohol related traffic accident - yes, no, NR, or indeterminable; and one year DWI recidivism - yes or no. The data relating to the independent variables were secured by tabulating the responses of the subjects to the following questions on the data form: sex, race, marital status, occupation, total income, was there an accident at the time of arrest, and number of accidents in the last three (3) years. The data relating to recidivism were secured by determining if the selected subjects had a subsequent court record on file in the Denton County Probation Department.

The frequency of responses by the subjects was converted to percentages. The response with the highest percentage indicated the predominant demographic characteristic within the subgroup. A.contingency table was constructed from the responses to alcohol related traffic accidents and analyzed with chi square to determine if a relationship existed between age and alcohol related traffic accidents. The number of subjects having a court

record within one year of the driver safety education course was converted to percentage to indicate the recidivism rate.

Descriptive statistics are methods used to derive from a set of numbers, obtained from measurements or observations, certain indices that characterize or summarize the entire set of data obtained by the researcher (Huck, Cormier, & Bounds, 1974). Frequency data and summary counts are a common descriptive statistic that represents volume as a means of naming or categorizing people, objects, events, or characteristics (Huck et al., 1974; Windsor, Baranowski, Clark, & Cutter, 1984).

Because the research questions do not specify homogeneity of variance assumptions about the population from which the sample was drawn and because the data involved nominal measurement as a means of categorizing people and characteristics, the nonparametric statistical procedure of chi square was used in this study. Chi square is an appropriate statistical procedure designed to be applied to nominal measurements expressed as frequencies (Schefler, 1984).

CHAPTER 4

ANALYSIS OF DATA

The population for this study included 382 ADWIs who were subgrouped by the following ages: 18 - 20 years (<u>n</u>=80), 21 - 24 years (<u>n</u>=138), and 25 - 29 years (<u>n</u>=164). Data were collected to determine the sex, race, marital status, occupation, and income level of the ADWIs. The frequency of responses was converted to percentages to determine the predominant characteristics of each subgroup.

The sex, race, and marital status of the subjects in each subgroup are shown in Table 1. According to the data, the ADWI in each subgroup was predominantly male (85% or greater), Caucasian (90% or greater), and single (45% or greater). As the age of the ADWIs increased, the percentage of single ADWIs decreased and the percentage of married and divorced or separated ADWIs increased.

Table 2 shows the occupation and total income reported in each subgroup. According to the data, the highest percentage (41% or greater) of ADWIs in all three age groups was in the occupational category of blue-collar workers. ADWIs in the 21-24 year age group and the 25-29 year age group reported an occupational status of white-collar worker (19.56% and 23.78%, respectively) as the second most represented occupational category. The 18-20 year age group reported an unemployed

Sex,	Race,	and	Marital	Status	of	Subgrou	ps by	Percent	tage
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	Age in Years				
Characteristics	18-20(a)	21-24(Ъ)	25-29(c)		
Sex					
Male	86.25	87.68	85.98		
Female	13.75	12.32	14.02		
No Response	0.00	0.00	0.00		
Race					
Caucasian	90.00	92.02	90.85		
Black	2.50	.73	1.83		
Hispanic	3.75	5.07	4.88		
Other	1.25	.73	.61		
No Response	2.50	1.45	1.83		
Marital Status					
Married	7.50	18.84	31.71		
Single	81.25	69.57	45.73		
Divorced or Separated	5.00	4.35	18.29		
Widowed	0.00	0.00	0.00		
No Response	6.25	7.24	4.27		

(a) <u>n</u>=80.(b) <u>n</u>=138.(c) <u>n</u>=164.

Occupation and Total Income of Subgroups by Percentage

	Aq	e in Year	5
Characteristics	 18-20(a)	21-24(Ъ)	25-29(c)
Occupation			
White-Collar	12.50	19.56	23.78
Blue-Collar	41.25	50.00	54.87
Service Worker	7.50	4.35	6.71
Farm Worker	1.25	0.73	0.00
Unemployed	17.50	6.52	3.66
No Response	10.00	6.52	4.27
Indeterminable	10.00	12.32	6.71
Total Income (\$)(d)			
< 5,000	26.25	11.59	9.76
5,000-9,999	21.25	23.91	14.02
10,000-14,999	16.25	28.99	19.51
15,000-19,999	6.25	11.59	15.25
20,000 or >	0.00	6.52	23.17
No Response	27.50	17.40	17.68
Indeterminable	2.50	0.00	0.61

(a)<u>n</u>=80. (b)<u>n</u>=138. (c)<u>n</u>=164. (d) Expressed in U.S. dollars.

occupational status (17.5%) as the second occupational category.

The total income reported increased with an increase in age. In the 18-20 year group, 27.5 percent did not respond to the total income question and 26.25 percent reported an annual income of less than \$5,000. The investigator was unable to determine if there was a relationship between an unemployed occupational status and no response to the total income question. In the 21-24 year age group, 28.99 percent reported an annual income of \$10,000-\$14,999, and in the 25-29 year age group, 23.17 percent reported an annual income of \$20,000 or more.

Frequency counts from the accident involvement data were converted to percentages. The results indicated that 50 percent of the ADWIs, aged 18-20 years, had been involved in a traffic accident within the last three years prior to the time of the present arrest compared with 41 percent in the 21-24 year age group and 35 percent in the 25-29 year age group.

The nonparametric statistical procedure of chi square was used in this study to determine if a relationship existed between age and alcohol related traffic accidents. Chi square is an appropriate statistical procedure designed to be applied to nominal measurements expressed as frequencies (Schefler, 1984). The significance level of .05 was selected during formulation of the research design. Table 3 illustrates the results of the frequencies and the chi square values computed from the contingency or association tables as shown in Tables 4, 5, and 6. The results of the chi square were insufficient, at the .05 level of significance, to demonstrate an association between age and alcohol related traffic accidents. The computed chi square value was not equal to or greater than the critical value of χ^2 =3.841 (1 <u>df</u>,p<.05) (Schefler, 1984).

Frequency counts from the recidivism data were converted to percentages to determine how many ADWIs, aged 18-29 years, were listed in the Adult Probation Department records for having committed a second DWI offense within one year from the time of the driver safety education course. The results indicated that of the 36 subjects, 32 (89%) were first DWI offenders and 4 (11%) were repeat DWI offenders. Of the 32 first DWI offenders, 3 (.09%) had prior convictions which were not related to DWI. No subject had been convicted for a second DWI offense within one year from the time of the driver safety education course. The only subsequent conviction of all the subjects was an aggravated assault conviction which was recorded for a repeat DWI offender and had occurred six months after the present DWI conviction. Analysis of the data for the repeat DWI offenders indicated that two subjects had been convicted for DWI within six months of the first DWI conviction, one subject within one year, and one subject within five years.

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Distribution of Accidents by Age Groups and Chi Square Values

Group	£ X ²
18-20 years	3.726
Accidents	36
No Accidents	36
No Response	2
Indeterminable	6
21-24 years	.014
Accident	51
No Accident	75
No Response	3
Indeterminable	9
25-29 years	2.841
Accident	54
No Accident	100
No Response	ALL LOG. STRY 3 TIN THE STREET
Indeterminable	7
	-

Frequency of Accidents Reported in the 18-20 Year

Age Group Compared with the 21-29 Year Age Groups

Group	Accident	No Accident	
18-20 years	36 (28.841)	36 (43.159) 7	2
21-29 years	105 (112.159)	175 (167.841) 28	0
	141	211 35	2

Table 5

Frequency of Accidents Reported in the 21-24 Year Age Group Compared with the 18-20 Year and the 25-29

Year Age Groups

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Group	Accident	No Accident	
21-24 years	51 (50.472)	75 (75.528)	126
18-20.25-29 vears	90 (90.528)	136 (135.472)	226
	141	211	352

Frequency of Accidents Reported in the 25-29 Year Age Group Compared with the 18-24 Year Age Groups

Group	Acc	cident	No	Accident		
25-29 years	54	(61.688)	100	(92.312)	154	
18-24 years	87	(79.312)	111	(118.688)	198	
	141		211		352	

These convictions occurred prior to the repeat DWI offenders completing the present driver safety education course.

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CHAPTER 5

SUMMARY, RESEARCH QUESTIONS, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Summary

The purpose of this study was to describe the demography, traffic accident involvement, and DWI recidivism of the DWI population, aged 18-20 years, 21-24 years, and 25-29 years. A retrospective, descriptive study was designed to study the sex, race, marital status, occupation, income level, involvement in alcohol related traffic accidents, and DWI recidivism of the ADWI. The sample consisted of 382 ADWIs who had attended a driver safety education course as partial penalty for DWI. Each subject had completed a self-report data form which included demography and traffic accident involvement. In addition, each subject analyzed for DWI recidivism was listed in the probation files of the Texas Department of Public Safety in Denton County.

Data were converted to percentages to determine the predominant demographic characteristics within the groups and DWI recidivism. The results indicated that the ADWI, aged 18-29 years, was a single, Caucasian male employed as a blue-collar worker. Data collected on involvement in alcohol related traffic accidents were subjected to a chi square statistical procedure to determine if a relationship existed between age and involvement in an alcohol traffic

accident. The results of the chi square were insufficient, at the .05 level of significance, to demonstrate an association between age and alcohol related traffic accidents.

Research Ouestions

1. What is the sex, race, marital status, occupation, and income level of the ADWI, aged 18-20 years?

The profile of the ADWI, aged 18-20 years, is a single, Caucasian male who is employed as a blue-collar worker and earns less than \$5,000 per year.

2. How many ADWIs, aged 18-20 years, had been involved in an alcohol related traffic accident within the last 3 years prior to the time of the present DWI arrest?

Thirty-six (\underline{n} =72) ADWIs, aged 18-20 years, had been involved in an alcohol related traffic accident within the last 3 years prior to the time of the present DWI arrest.

3. What is the sex, race, marital status, occupation, and income level of the ADWI, aged 21-24 years?

The profile of the ADWI, aged 21-24 years, is a single, Caucasian male who is employed as a blue-collar worker and earns between \$10,000 and \$14,999 per year.

4. How many ADWIs, aged 21-24 years, had been involved in an alcohol related traffic accident within the last 3 Years prior to the time of the present DWI arrest?

Fifty-one (\underline{n} =126) ADWIs aged 21-24 years, had been involved in an alcohol related traffic accident within

the last 3 years prior to the time of the present DWI arrest.

5. What is the sex, race, marital status, occupation, and income level of the ADWI, aged 25-29 years?

The profile of the ADWI, aged 25-29 years, is a single Caucasian male who is employed as a blue-collar worker and earns \$20,000 or more per year.

6. How many ADWIs, aged 25-29 years, had been involved in an alcohol related traffic accident within the last 3 years prior to the time of the present DWI arrest?

Fifty-four (\underline{n} =154) ADWIs, aged 25-29 years, had been involved in an alcohol related traffic accident within the last 3 years prior to the time of the present DWI arrest.

7. How many ADWIs, aged 18-29 years, will be listed in the Adult Probation Department records of the Texas Department of Public Safety in Denton County for having committed a second DWI offense within a year from the time of the driver safety education course?

No ADWI, age 18-29 years, was listed in the Adult Probation Department records of the Texas Department of Public Safety in Denton County for having been convicted of a second DWI offense within a year from the time of the driver safety education course.

Discussion

The results of the study are consistent with other research findings (Donovan et al., 1983; Landrum et.

al., 1982; Richman, 1985; Vingilis, 1983) which describe the ADWI as a Caucasian male, probably under the age of 30 years, employed in a blue-collar job, and earning less than \$15,000 yearly. The results did not support studies (Donovan et al., 1983; McCormack, 1985; Wilsnack et al., 1984) which describe the marital status of the ADWI as divorced or separated. In this study the largest number of ADWIs was single. The inconsistent finding may exist because in previous studies, the divorced or separated subjects made up a relatively small percentage of the total population samples, and the effects of marital status on driving while drinking were often intermixed with other effects such as age, employment status, sex, and life-style factors (Richman, 1985).

Although the percentages related to traffic accident involvement supported the findings (Douglass, 1983; Warren et al., 1982) that young people are overrepresented in alcohol related traffic accidents, there was no statistical relationship found in this study between age and alcohol related traffic accidents. Studies (Mayhew et al., 1981; Warren et al., 1982) on relative risk have identified age as a variable to describe overrepresentation in collisions but do not provide insight into why age is a factor. Age alone does not appear to be a significant variable; however, factors associated with age are significant. Among these factors are BAC levels, exposure, drinking history,

life-style, personality, stress, and significant life events. Data continue to be needed to assess what characteristics or attributes of young people make them at higher risk of collision when drinking. All factors need to be researched if effective countermeasures are to be executed.

The results of the study were insufficient to draw any conclusions regarding recidivism of the ADWI. First, the one year time period chosen to study recidivism is inconsistent with studies in the literature (Landrum et al., 1982; Michaelson, 1979; Salzberg & Klingberg, 1983) which use a three year time frame in which to follow each subject. The three year period allows for the time lag, which can be as much as one year, between arrest, conviction, and probation. Also, it is possible that the effectiveness of a sanction may decrease as the length of time since punishment increases. In addition to swiftness of punishment, many ADWIs may receive licensing sanctions at the time of conviction and may lose the privilege to drive for a period of time up to a year.

Secondly, by limiting the subjects to those who attended the driver education program for the 3 month period in 1984 and by limiting the subjects to those originally and subsequently convicted in Denton County Courts, the sample size was small. The delimitations were necessary because only local records were available to the researcher. Research by Hagen (1985) has shown that DWI licensing sanctions, either separately or in conjunction with education and rehabilitation sanctions, are more effective than education and rehabilitation sanctions alone in controlling recidivism. The probation status of the ADWI may or may not influence the decision to drink and drive.

Conclusion

The profile of the ADWI, aged 18-29 years, is a single, Caucasian male employed as a blue-collar worker. The ADWI, aged 18-20 years, earns less than \$5,000 per year; the ADWI, aged 21-24 years, earns \$10,000 to \$14,999 per year; and the ADWI, aged 25-29 years, earns \$20,000 or more per year. Fifty percent of the ADWIs, aged 18-20, were involved in an alcohol related traffic accident within the last 3 years prior to the present arrest as compared with 41 percent of the ADWIs, aged 21-24 years, and 35 percent of the ADWIs, aged 25-29 years. No relationship was found between age and alcohol related traffic accidents. Because of the limitations of the study, no conclusion regarding the recidivism of the ADWIs was drawn. The limitations included sample size, time frame of study, and availability of data.

Recommendations

The recommendations for further study are: 1. Replicate the study using a more detailed data form. This would allow for further validation of responses

concerning occupational status and total income reported.

2. Replicate the study using a drinking history survey and the BAC at the time of arrest. This would support or refute the studies in the literature which have found that more ADWIS involved in traffic accidents are the problem drinkers than the ADWIS not involved in traffic accidents. This would also provide data regarding whether frequent use of alcohol alone contributes to the involvement in traffic accidents or whether other factors associated with life-style play a role in the events leading to alcohol related traffic accidents.

3. Replicate the study on recidivism using a three year time frame and the adult probation files at the state level. This would yield a larger and more meaningful sample.

4. Replicate the study on recidivism using the type of judicial sanction as a variable. This would support or refute the studies in the literature which measure the effectiveness of a sanction by drunken driving recidivism.

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APPENDIX A

DATA FORM OF THE DENTON COUNTY SAFETY EDUCATION PROGRAM

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CONFIDENTIAL.

THE INFORMATION IN THIS COLLECTION OF DATA IS CONFIDENTIAL AND IS NOT FOR 54 COURT RECORDS. IN NO WAY WILL IT BE USED AGAINST YOU.

WHICH THERE ARE INDIVIDUAL INSTRUCTIONS. WE ASK THAT YOU READ EACH SET OF DIRECTIONS CAREFULLY AND ANSWER ALL QUESTIONS.

PLEASE BRING THIS COMPLETED TO THE FIRST SESSION.

NAE:				
ADDRESS:				
CITY:	STATE:	ZIP:		ONE:
DRIVERS LIC. (STATE & NO.)			_SS NUMBER:	
DATE OF BIRTH:	RAC	E:	SEX:	
EPLOYER:		ADDRESS	•	
E-PLOYMENT PHONE NO:		TYPE OR	KIND OF WO	RK:
APPROXIMATE TOTAL NET EAR	NINGS DURING	PAST 12 MON	THS: UNDER	\$5,000
UNDER \$10,000 UNDER	\$15,00 0	UNDER \$20	0,000	OVER \$20,000
MARTIAL STATUS: MARRIED	SINGLE	WIDOWED	_DIVORCED	SEPARATED
THIS DWI OFFENSE: DATE O	F ARREST:		TIME:	-
AUTCHOBILE MAKE:	BODY T	YPE:	MODEL -	YEAR:
AUTO LICENSE NO:	TYPE OF DL:		DATE	DL EXPIRES:
WAS THERE AN ACCIDENT:	INJUR	ED:	KILLED:	
NUMBER OF VEHICLES:		WAS CAR REC	GISTERED IN	YOUR NAME:
NUMBER OF ACCIDENTS IN LA	ST THREE (3)	YEARS:	NUMBEI	R REPORTED:
UTHER ARRESTS FOR DWI OFF	ENSES: DATE	:	AGE:	PLACE:
	DATE	:	AGE:	PLACE:

APPENDIX B

GRADUATE SCHOOL APPROVAL TO CONDUCT STUDY

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TWU Texas Woman's University

P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757, Tex-An 834-2133

THE GRADUATE SCHOOL

56

March 14, 1986

Ms. Shelby Linnander 604 Hogan Run Lancaster, TX 75146

Dear Ms. Linnander:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,

Seder Thompson.

Leslie M. Thompson Provost

kf

cc Dr. Ruth Tandy

APPENDIX C

PERMISSION FROM AGENCIES

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P.O. Box 23717, Denton, Texas 76204 (817) 383-3569

DEPARTMENT OF HEALTH EDUCATION COLLEGE OF HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

> 604 Hogan Run Lancaster, Texas 75146

January 17, 1936

Mr. Kenneth Bahnsen, Director Drivers Education and Traffic Safety Box 13885 NT Station Denton, Texas 76203

Dear Mr. Bahnsen:

As a student enrolled in a program of health education leading to a Master's Degree at Texas Woman's University, I am requesting written permission to use your facilities in order to analyze the demography, accident involvement, and recidivism of the DWI arrestee, aged 18-29 years. Your signature at the bottom of this letter will indicate that permission has been granted for conducting the study. The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.

2. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.

3. Other

Thank you for your support and cooperation.

Sincerely, Joan M. Finnander

Joan M. Linnander

Director, Drivers Education and Traffic Safety

uary 22, 1986



P.O. Box 23717, Denton, Texas 76204 (817) 383-3569

DEPARTMENT OF HEALTH EDUCATION COLLEGE OF HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

> 604 Hogan Run Lancaster, Texas 75146

59

January 17, 1986

Peggy Dollarhide, Assistant Director Denton County Court Services 301 East McKinney Denton, Texas 76201

Dear Ms. Dollarhide:

As a student enrolled in a program of health education leading to a Master's Degree at Texas Woman's University, I am requesting written permission to use your facilities in order to analyze the recidivism of the DWI arrestee, aged 18-29 years. Your signature at the bottom of this letter will indicate that permission has been granted for conducting the study. The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.

2. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.

3. Other no alist into except by mum

Thank you for your support and cooperation.

Sincerely, Joans M. Finn ander Joan M. Linnander

Assistant Director, Denton County Court Services

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