DUI Arrests, BAC at the Time of Arrest and Offender Assessment Test Results for Alcohol Problems

Donald D Davignon, Ph.D.

8-14-01

Abstract

Many DUI/DWI offenders have drinking problems. To further reduce drinking and driving, remedial measures that address offenders' drinking problems are needed. The Driver Risk Inventory-II, a self-report DUI/DWI assessment instrument, can be very useful in determining offender risk/needs and selecting appropriate remedial intervention measures. In this study of 11,832 DUI/DWI offenders 30.6 percent of the offenders had two or more DUI/DWI arrests. DRI-II scales had high reliability (coefficient alphas at or above .90), proven validity (nearly 100% correct identification of problem drinkers) and accuracy to within 2% of predicted risk range percentages. Many first time offenders (38%) had been treated for drinking problems and nearly two-thirds (62%) of multiple offenders had been in treatment. The average BAC of multiple offenders was 0.158% and the average BAC for first offenders was 0.145%. The offenders' number of DUI/DWI arrests was highly correlated with their DRI-II Alcohol Scale scores. The correlation between BAC level and Alcohol Scale scores was much lower.

Introduction

Despite reductions in the occurrences of drinking and driving over the past 18 years, alcohol-related fatalities remain high. Alcohol was involved in 38 percent of the total highway fatalities in 1999 (NHTSA, 2000). That percentage is down 19 percent from 1982. However, these figures have leveled off over the past six years. To continue downward trends in reducing drinking and driving further analyses of the problem and appropriate interventions are needed.

Using offenders arrest records to decide punitive measures implies that arrest records are tantamount to having drinking problems. This in turn implies that imposing punitive measures is a means of resolving drinking problems and thereby reducing drinking and driving behaviors. If

punitive measures were meant to reduce drinking problems then we should expect a strong relationship between offenders arrest records and the severity of their drinking problems. The present study examined the relationship between offenders Blood Alcohol Concentration (BAC) level at the time of their DUI/DWI arrest, their number of DUI/DWI arrests and assessment results for alcohol and drug abuse severity. A matter of interest is the increase in the number of offenders with increases in BAC levels above 0.08%. It is of interest to know how many offenders are likely to be affected by reducing the legal intoxication limit from 0.10% to 0.08%.

Peck, Sadler and McMillen (1985) suggested a "multiple strategy" approach to reducing drinking and driving offenses. This approach emphasized using punitive measures in conjunction with remedial intervention. Punitive measures such as license suspension had been shown to have a strong impact on reducing drinking and driving offenses. However, such measures are effective at their outset and have diminishing effectiveness over time. The data on alcohol-related highway fatalities bear this out. The past six years have shown little or no reductions in alcohol-related traffic fatalities. Punitive measures alone would not substantially reduce recidivism in the long run. On the other hand, remedial interventions have the potential to increase in effectiveness over time and thereby continue to reduce recidivism.

Peck, et al. (1985) concluded that remedial measures had a small beneficial effect on drinking and driving behaviors and that part of the reason for limited effectiveness was that DUI/DWI offenders differed widely in terms of alcohol abuse, personality and attitudes. They also differed widely on outcomes to specific remedial interventions. Differences among DUI/DWI offenders and the reliance on specific interventions suggest that the intervention programs did not match the DUI/DWI offenders' individual needs. The catchall approach to intervention did not work. It is likely that alcohol and drug abuse severity level, personality and attitudes were not taken into account and led to poorly designed interventions. An understanding of offenders and the extent of their problems are necessary to ensure that interventions match offenders need. Determining DUI/DWI offender risk and needs can be easily achieved through the use of a self-report assessment test. Ideally the assessment test is multidimensional and incorporates measures of substance abuse, personality and attitudes.

Assessment tests can help determine offender risk/need and aid in selecting appropriate intervention programs. Because DUI/DWI offenders vary widely in terms of alcohol abuse, personality and attitudes these tests must be more than just alcohol and drug tests. Successful intervention programs would be based on assessment measures that incorporate personality and attitude in addition to alcohol and drug abuse severity. It is generally agreed that DUI/DWI offenders are a unique population and require remedial programs that are tailored to their specific needs (National Commission Against Drunk Driving, 1986). The question is, then, how can offenders arrest record and assessment results be used to select appropriate interventions? Part of the answer to this question lies in the relationship between arrest record and assessment results.

The magnitude of the relationship between BAC at the time of arrest, the number of DUI/DWI arrests and alcohol and drugs severity level may suggest uniformity between arrest history and assessment results. Or it could be that there is only a superficial relationship between arrest record and alcohol and drugs severity. It could be that there is little relationship between

BAC and alcohol severity because a DUI/DWI arrest may be an isolated event. Having a history of DUI/DWI arrests, however, would be suggestive of a drinking problem. This study sought to determine the relationship between BAC, DUI/DWI arrest history and alcohol and drugs severity. This information would help to determine the usefulness of arrest history in deciding remedial intervention and predicting future DUI/DWI offenses.

Aggressive driving habits and stress coping abilities are factors that are relevant to drinking and driving behaviors. These factors of personality and attitude can be amplified by substance abuse or they themselves can lead to substance abuse. That is why assessment tests for DUI/DWI offenders must be more than just alcohol and drug tests. They must be useful for determining offenders needs and designing remedial intervention programs to meet those needs. Personality and attitude factors, often referred to as dynamic variables, are capable of change and are amenable to intervention programs. Positively changing offenders' personality and attitudes can lead to reductions in recidivism. This is how the number of alcohol-related highway fatalities can be further reduced.

Driver Risk Inventory-II Study

The present study used an assessment test called the Driver Risk Inventory-II (DRI-II) to determine DUI/DWI offender risk and need. A valid assessment test is essential for providing accurate measures of alcohol and drug abuse severity and in turn determining offender risk and need. An assessment test that is multidimensional lends itself to recidivism prediction.

The DRI-II contains measures or scales to measure alcohol and drug abuse severity (Alcohol & Drugs Scales), driving attitude or aggressiveness (Driver Risk Scale) and emotional or mental health problems (Stress Coping Abilities Scale). In addition, there is the Truthfulness Scale to measure offender truthfulness while completing the test. Offenders who deny or minimize their problems are detected with the Truthfulness Scale. The Truthfulness Scale then truth-corrects the other scale scores. The higher the Truthfulness Scale the more truth-correction is applied to the other scales. A Substance Abuse/Dependency Scale is included in the DRI-II to classify offenders as abuse, dependent or neither in terms of DSM-IV criteria. This classification scale is in addition to the severity scales for alcohol and drug abuse. This scale is helpful to those evaluators who are familiar with the DSM-IV classification criteria. The Substance Abuse/Dependency Scale indicates whether or not offenders meet the DSM-IV criteria for abuse or dependency, and, therefore it is not a measurement scale.

The participants in this study were DUI/DWI offenders who were processed as part of standard DUI/DWI evaluation procedures in a Midwest statewide DUI/DWI program. DRI-II scales were examined in this study using two validity methods. The first method (discriminant validity) compared first and multiple offenders' scale scores. Multiple offenders are those offenders that have two or more DUI/DWI arrests and first offenders have only one DUI/DWI arrest. A test that measures severity level ought to show that multiple offenders score higher than first offenders. Certainly multiple offenders would be expected to score higher on the alcohol and drug scales than first offenders because having a second DUI/DWI arrest would indicate a substance abuse problem. A single DUI/DWI arrest could be an isolated event so that a first time offender would not necessarily be expected to have an alcohol problem history. A second arrest

would signify a definite problem. The results of this analysis showed that multiple offenders did score significantly higher than first offenders on both the Alcohol and Drugs Scales. It is of interest to compare first and multiple offenders on the personality and attitude scales (Driver Risk and Stress Coping Abilities) as well.

The second validity method (predictive validity) used in this study examined the accuracy at which the DRI-II identified problem drinkers and drug abusers. To be considered accurate a DUI/DWI offender test must accurately identify problem offenders (drinkers or drug abusers). Accurate tests differentiate problem and non-problem offenders. An inaccurate test, for example, may too often call non-problem drinkers problem drinkers or vice versa. In the DRI-II, treatment information is used because it is readily obtained from the DUI/DWI offenders' responses to test items. It is likely that there are some offenders who have alcohol or drug problems but have not been in treatment. Nevertheless, those offenders that have been in treatment would be expected to score in the problem range.

The criterion in this analysis for identifying offenders as problem drinkers or drug abusers is having been in treatment (alcohol or drug). Having been in treatment identifies DUI/DWI offenders as having had an alcohol or drug problem. If a person has never had an alcohol or drug problem it is very likely they have not been treated for an alcohol or drug problem. Thus, offenders are separated into two groups, those who had treatment and those who have not had treatment. Then, offender scores on the Alcohol and Drugs Scales are compared. It is predicted that DUI/DWI offenders with an alcohol and/or drug treatment history will score in the problem risk range (70th percentile and above) on the Alcohol and/or Drugs Scales. Non-problem is defined in terms of low risk scores (39th percentile and below). The percentage of offenders that have been in treatment and also score in the 70th percentile range and above is a measure of how accurate the scales are. High percentages of offenders with treatment histories and problem risk scores indicate the scales are accurate. The results of this analysis showed that nearly all of the offenders that had been in treatment scored in the problem ranges on the DRI-II Alcohol and Drugs Scales.

For ease in interpreting DUI/DWI offender risk, the DRI-II scoring methodology classifies offender scale scores into one of four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of offenders scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). DUI/DWI offenders who score at or above the 70th percentile are identified as having problems. For example, offenders' Alcohol Scale scores of 70 or above identify them as problem drinkers. DUI/DWI offenders scale scores at or above the 90th percentile represent severe problems. The accuracy of the DRI-II in terms of risk range percentages was examined in this study.

Participants

The participants in this study were 11,832 DUI/DWI offenders that were processed as part of the routine procedures in a statewide DUI/DWI program in the Midwest. There were 9,686 (81.9%) males and 2,146 (18.1%) females. The average age of the participants was 33.5 for the males and 32.7 for the females. The demographic composition of the participants was the following. Race/ethnicity: Caucasian 93.3%, Black 4.3%, Hispanic 1.2%, Other 1.3%. Education: 8th grade or less 2.1%, Some high school 16.5%, High school graduate 45.8%, Some college 24.6%, College graduate 11.0%. Marital Status: Single 44.0%, Married 26.8%, Divorced 19.1%, Separated 8.2%, Widowed 1.8%. The participants' records for DUI/DWI arrests and BAC level at the time of arrest are presented in Tables 1 and 2. The average BAC level of the participants is presented in Table 3.

Table 1. The DUI/DWI Arrests Records of the Participants							
		Ma	les	Fem	ales	То	tal
	Number	N	%	N	%	N	%
DUI/DWI	1	6,489	67.0	1,718	80.1	8,207	69.4
Arrests	2	2,171	22.4	347	16.2	2,518	21.3
	3	720	7.4	56	2.6	776	6.6
	4 or more	306	3.2	25	1.2	331	2.8

Table 2. The BAC Level at the Time of Arrest of the Participants						
BAC Levels 0.07% to 0.20%	%	BAC Levels 0.21% to 0.34+%	%			
0.07% & below	2.7	0.21%	2.4			
0.08%	1.2	0.22%	2.1			
0.09%	1.3	0.23%	1.6			
0.10%	11.9	0.24%	1.4			
0.11%	8.3	0.25%	0.8			
0.12%	10.0	0.26%	0.7			
0.13%	9.2	0.27%	0.5			
0.14%	8.7	0.28%	0.5			
0.15%	7.7	0.29%	0.2			
0.16%	7.3	0.30%	0.3			
0.17%	6.4	0.31%	0.1			
0.18%	5.7	0.32%	0.1			
0.19%	4.0	0.33%	0.1			
0.20%	4.5	0.34% & higher	0.1			

Table 3. The Average BAC Level by Gender and Offender Status					
Average BAC					
Males	0.148%				
Females	0.153%				
First Offenders	0.145%				
Multiple Offenders	0.158%				

Driver Risk Inventory-II

The assessment instrument used in this study was the Driver Risk Inventory-II (DRI-II). The DRI-II contains six measures or scales. These scales are described as follows. The Truthfulness Scale measures the truthfulness of the respondent while taking the DRI-II. The Alcohol Scale measures severity of alcohol use or abuse. The Drugs Scale measures severity of drug use or abuse. The Driver Risk Scale measures aggressive driver severity. The Stress Coping Abilities Scale measures ability to cope with stress. The Substance Abuse/Dependency Scale is a classification scale derived from DSM-IV criteria for dependency and abuse. The participants completed the DRI-II as part of the normal routine for DUI/DWI evaluation in a statewide DUI/DWI program.

Results and Discussion

The majority of the DUI/DWI offenders in this study were males. Nearly 82 percent of the participants were male. A higher percentage of the males were multiple offenders than females. Just over 33 percent of the males had two or more DUI/DWI arrests compared to 19.9 percent of the females. However, the average BAC level of the females was higher than the average BAC level of the males. The average BAC for males was 0.148% and for the females average BAC was 0.153%. The average BAC levels for males and females were well above the federal legal intoxication level of 0.08%.

The BAC levels for these participants, presented in Table 2, show that 1.2 percent had a BAC level at 0.08% and 1.3 percent at 0.09%. Over half (55.8%) of the participants had BAC levels from 0.10% through 0.15%. With each 0.01% increase in BAC level from 0.10% through 0.15% there was about 8 percent to 9 percent of offenders at that BAC level. With the federal level of 0.08% becoming law in most states the percentage of offenders at 0.08% and 0.09% will increase. Using he percentage of offenders having BAC levels between 0.10% and 0.15% as a guide, there is likely to be 16 to 18 percent of the offenders having BAC levels of 0.08% and 0.09%. That is about 14 percent higher than the data shown in Table 2. About 14 percent of DUI/DWI offenders will be affected by lowering the legal intoxication level from 0.10% to 0.08%.

In terms of DUI/DWI arrest history 69.4 percent of the participants were first offenders. Sixty-seven percent of the males were first offenders and 80.1 percent of the females were first offenders. 22.4 percent of the males had two DUI/DWI arrests and 10.6 percent had 3 or more arrests. This compares to 16.2 percent of the females with two DUI/DWI arrests and 3.8 having 3

or more arrests. These results show that males are more often involved in drinking and driving than are females. Males tend to continue drinking and driving at a substantial rate.

The comparison of BAC levels between first offenders and multiple offenders indicates that the BAC levels of multiple offenders are not very much higher than first offenders. The average BAC level for the first offenders was 0.145% and the average BAC level for the multiple offenders was 0.158%. This result suggests that BAC level does not distinguish first offenders from multiple offenders. A first offender is just as likely as a multiple offender is to have a high BAC level.

The inter-item reliability (alpha) coefficients for the five DRI-II measurement scales and the Substance Abuse/Dependency classification scale are presented in Table 4. All scales were highly statistically reliable. All of the alpha reliability coefficients for all DRI-II scales were at or above 0.90. These results demonstrate that the DRI-II is a very reliable DUI/DWI assessment test. These reliability statistics are very impressive for any test, especially for a DUI/DWI offender assessment instrument or test.

Table 4. The Reliability of the DRI-II.							
DRI-II Scale Coefficient Alpha Significance Level							
Truthfulness	0.87	p<.001					
Alcohol	0.92	p<.001					
Drugs	0.90	p<.001					
Driver Risk	0.87	p<.001					
Stress Coping Abilities	0.91	p<.001					
Substance Abuse/Dependency	0.91	p<.001					

The discriminant validity results for the comparisons between first and multiple offenders are presented in Table 5. The table presents the mean scale scores for each DRI-II measurement scale for first offenders and multiple offenders along with the t-test comparisons. The number of first offenders and multiple offenders is shown in parentheses. The Substance Abuse/Dependency Scale is a classification scale. Offenders meet abuse or dependency criteria or they do not. There are no scores associated with this scale and it is not included in this analysis.

Table 5. T-test Comparisons between First Offenders and Multiple Offenders.								
DRI-II Scale	First Offenders Mean (N=8,207)	Multiple Offenders Mean (N=3,625)	T-value	Level of Significance				
Truthfulness Scale	8.44	8.08	t = 3.51	p<.001				
Alcohol Scale	6.57	14.25	t = 38.61	p<.001				
Driver Risk Scale	9.38	12.42	t = 18.77	p<.001				
Drugs Scale	2.34	3.90	t = 12.98	p<.001				
Stress Coping Abilities	139.76	133.85	t = 6.88	p<.001				

Note: Scores on the Stress Coping Abilities Scale are reversed in that higher scores are associated with better stress coping abilities.

Table 5 shows that the mean (average) scale scores of the first offenders were lower than the scores for multiple offenders on all DRI-II scales except the Truthfulness Scale. As expected, multiple offenders scored significantly higher on the Alcohol, Driver Risk, Drugs and Stress Coping Abilities Scales than did first offenders. With regards to the Truthfulness Scale, first offenders scored significantly higher than did multiple offenders. This result has been demonstrated many times over the years with different tests. One explanation for this result suggests that first offenders try to minimize their problems more than do multiple offenders who may be more sensitized to the availability of their court record.

The Alcohol, Driver Risk, Drugs and Stress Coping Abilities Scales results support the discriminant validity of the DRI-II. These results are important because they show that the Alcohol, Driver Risk, Drugs and Stress Coping Abilities Scales do measure level of severity. The offenders who are thought to have more severe problems (multiple offenders) scored significantly higher on these scales than the first-time offenders. These results support the discriminant validity of the Alcohol, Driver Risk, Drugs and Stress Coping Abilities Scales. It is interesting to note that multiple offenders scored significantly higher on the Stress Coping Abilities Scale than did the first offenders. Offenders who have prior DUI/DWI arrests demonstrate poorer stress coping skills.

The predictive validity results examined the percentage of offenders that had alcohol and/or drug treatment and scored in the problem risk range on the Alcohol and Drugs Scales. In these analyses Alcohol and Drugs Scale scores in the Low risk range represent no problem, and scores in the Problem and Severe Problem risk ranges represent a problem. For the Alcohol Scale comparison between these groups there were 1,755 offenders who reported having been in alcohol treatment and these offenders were classified as problem drinkers. Of these 1,755 offenders, nearly all of the individuals or 99.3 percent had Alcohol Scale scores at or above the 70th percentile.

The DRI-II Drugs Scale was also very accurate in identifying offenders who have drug problems. There were 1,806 offenders who reported having been in drug treatment, of these, 1,805 offenders, or 99.9 percent, had Drugs Scale scores at or above the 70th percentile. These results are similar to those reported for the Alcohol Scale and represent very accurate assessment. These results support the validity and accuracy of the DRI-II Alcohol and Drugs Scales.

The Alcohol and Drugs Scales accurately identified offenders who have had alcohol and/or drug treatment. The DRI-II Alcohol and Drugs Scales identified nearly all DUI/DWI offenders who have alcohol and drug problems. In comparison to other DUI/DWI assessment instruments, this is very accurate assessment. The Alcohol Scale correctly identified nearly all of the offenders categorized as problem drinkers and the Drugs Scale correctly identified nearly all of the offenders categorized as problem drug users. These results support the validity of the DRI-II Alcohol and Drugs Scales.

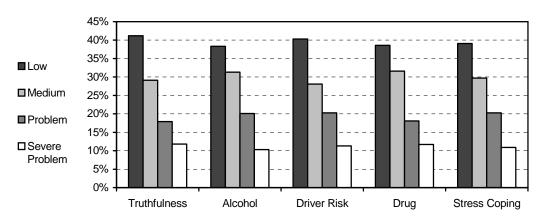
The percentages of offenders that had alcohol treatment and drug treatment are presented in Table 6. This table shows that many first offenders had alcohol treatment, and nearly all of

these offenders scored in the problem risk range on the DRI-II Alcohol Scale. The Alcohol Scale identified the first offenders as well as multiple offenders who were problem drinkers. This result demonstrates that the DRI-II Alcohol Scale accurately identified problem drinkers. It also shows that many first time DUI/DWI offenders have drinking problems.

Table 6. The Percentage of Offenders that had Treatment.						
Offender Status Had Alcohol Treatment Had Drug Treatment						
First Offenders	38.0	43.0				
Multiple Offenders 62.0 57.0						

The DRI-II scale score risk range percentile accuracy is presented in Table 7. Percentages of offenders scoring in the four risk categories (low, medium, problem and severe problem) are compared to predicted percentages for each of the five measurement scales. The differences between obtained and predicted percentages are shown in parentheses in the table below the graph. The closeness of obtained scale scores and the predicted determine accuracy. The Substance Abuse/Dependency Scale is a classification scale (offenders meet criteria or they do not) rather than a measurement scale. For this reason it is not included in this risk assessment analysis.

Table 7. The DRI-II Risk Range Accuracy



DRI-II Scale	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Truthfulness	38.0	(1.0)	30.2	(0.2)	21.2	(1.2)	10.6	(0.4)
Alcohol	40.1	(1.1)	29.6	(0.4)	19.8	(0.2)	10.5	(0.5)
Driver Risk	39.6	(0.6)	30.8	(0.8)	19.5	(0.5)	10.1	(0.9)
Drugs	40.8	(1.8)	29.7	(0.3)	19.4	(0.6)	10.1	(0.9)
Stress Coping	38.4	(0.6)	30.8	(0.8)	19.8	(0.2)	11.0	(0.0)

Note: The differences between obtained percentages and predicted percentages are given in parentheses.

As shown in Table 7, obtained risk range percentages for all risk categories and all DRI-II scales were within 1.8 percentage points of the predicted percentages. Of the 20 possible comparisons (5 scales x 4 risk ranges) between attained and predicted percentages, 17 were within one percentage point from the predicted percentage. Only three obtained risk range

percentages were greater then 1.0% from the predicted percentage, and these were within 1.8 percent. These results demonstrate the accuracy of the DRI-II.

The correlation coefficients between BAC, DUI/DWI arrests and the DRI-II scales are presented in Table 8. These results demonstrate that DUI/DWI arrests were highly correlated with Alcohol Scale scores. DUI/DWI arrests are also correlated with Driver Risk and Drugs Scales scores. BAC level is correlated with the Alcohol Scale but not as high as DUI/DWI arrests.

Table 8. The Correlation Coefficients between BAC, DUI/DWI Arrests and DRI-II Scales								
	Truthfulness	Alcohol	Drugs	Driver Risk	Stress Coping Abilities			
BAC	040	.166	.018	016	.029			
DUI/DWI	023	.452	.157	.213	.091			
Arrests								

There is a high positive correlation between the number of DUI/DWI arrests and severity of alcohol abuse as measured by the DRI-II Alcohol Scale. This result indicates that multiple offenders score higher on the Alcohol Scale than do first offenders. This result is in agreement with the discriminant validity t-test comparison between first offenders and multiple offenders. Multiple offenders scored significantly higher on the Alcohol Scale than did first offenders. The lower correlation results with the Drugs Scale indicate that drugs are not involved in DUI/DWI arrests to the extent that alcohol is. DUI/DWI arrests are somewhat correlated with Stress Coping Abilities Scale scores but the relationship is not well established.

The correlation result between BAC level and DRI-II Alcohol Scale scores indicates that there is only a slight relationship between BAC level and problem drinking behavior. Inasmuch as BAC level is the basis for a DUI/DWI arrest it has little to do with problem drinking. BAC level also is not related to Driver Risk or Stress Coping Abilities scores and indicates that BAC is not involved in aggressive driving behavior or emotional or mental health problems.

Conclusions

Nearly one-third (30.6%) of the participants in this study had a previous DUI/DWI arrest. Of these multiple offenders 62 percent had been in an alcohol treatment program. Over one-third (38.0%) of the first offenders had been in alcohol treatment. These results mean that a substantial number of people who are involved in drinking and driving have drinking problems. This finding suggests that punitive measures would not have a lasting impact on reducing alcohol-related fatalities because many of the individuals who engage in drinking and driving have drinking problems.

There is a strong positive correlation between DUI/DWI arrests and alcohol problems. The DRI-II Alcohol Scale scores were highly positively correlated with the number of DUI/DWI arrests. This correlation shows that DUI/DWI offenders have drinking problems. The more DUI/DWI arrests an offender has the higher they score on the DRI-II Alcohol Scale.

The DRI-II correctly identified nearly all problem drinkers, that is, the offenders that had

been in alcohol treatment scored in the problem range on the Alcohol Scale. This finding demonstrates that the DRI-II Alcohol Scale accurately measures alcohol problems. Identification of drinking problems enables selecting offenders for appropriate intervention programs. Placing offenders in programs that can have the biggest impact on their drinking behavior is a major step to reducing alcohol-related traffic fatalities.

BAC levels at the time of DUI/DWI arrest is a weak indicator of drinking problems. There was only a slight correlation between BAC levels and DRI-II Alcohol Scale scores. This finding suggests that BAC level alone should not enter into the decision for intervention. BAC level does not appear to signify a drinking problem. However, the average BAC level for multiple offenders (0.158%) was higher than average BAC level for first offenders (0.145%). Multiple offenders tend to drink more than first offenders.

The results of this study demonstrated that the Driver Risk Inventory-II accurately identified DUI/DWI offenders who have serious driving-related problems. Validity analyses indicated that multiple offenders (having prior DUI/DWI arrests) scored significantly higher than first offenders on the Alcohol, Drugs, Driver Risk and Stress Coping Abilities Scales (discriminant validity). Moreover, the Alcohol and Drugs Scales correctly identified offenders who have had treatment for alcohol and drugs, respectively (predictive validity). And, obtained risk range percentages on all DRI-II scales closely approximated predicted percentages. It is reasonable to conclude that the Driver Risk Inventory-II measures what it purports to measure, that is, DUI/DWI offender risk.

The DRI-II can be used to tailor intervention to each DUI/DWI offender. Alcohol and Drugs Scales scores give the severity for alcohol and drug abuse. Based on Alcohol and Drugs Scales results an intervention program can be determined. For example, scale scores in the medium risk range would suggest counseling and educational intervention, problem risk would suggest outpatient treatment and counseling, whereas severe problem risk would suggest intensive outpatient or inpatient treatment. Driver Risk Scale scores would suggest driver education. Stress Coping Abilities Scale scores would suggest the need for emotional or mental health intervention. In short, the DRI-II can be instrumental in reducing drinking and driving behavior that would lead to reductions in the number of alcohol-related highway fatalities.

References

- Traffic Safety Facts 1999: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System. National Highway Traffic Safety Administration, December 2000.
- Peck, R.C., Sadler, D. and McMillen, M.W., The Comparative Effectiveness of Alcohol Rehabilitation and Licensing Control Actions for Drunk Driving Offenders: A Review of the Literature. Alcohol, Drugs, and Driving: Abstracts and Reviews, 1985, 1, p. 15-29.
- National Commission Against Drunk Driving, Zeroing in on Repeat Offenders, Atlanta, Georgia, September 16, 1986.