

Drinking Behavior of High-Risk, Multiple Offender Drivers

Dennis M. Donovan¹, David B. Rosengren¹, Brent L. Baxter¹, and Philip M. Salzberg²

¹University of Washington and ²Washington Traffic Safety Commission

ABSTRACT

The present study examined the drinking motives and behaviors of high-risk drivers (HRD), defined as having 4 or more moving violations in a 12-month period. A survey was sent to a pool of 2750 HRD and 2750 general driving population (GDP). A total of 1217 (22.4%) individuals responded. The HRD group was significantly younger, more likely to be male, and to have a more hazardous drinking pattern on the three consumption items of the AUDIT (AUDIT-C). The multivariate difference between groups on these 3 items was accounted for by the HRD group's consuming more drinks on a typical day and the frequency of heavy drinking (6+ drinks) occasions, but not the frequency of drinking per se. A greater percentage of the HRD group was classified as hazardous drinkers based on standard cut points on the AUDIT-C and the AUDIT item dealing with frequency of drinking 6+ drinks per occasion. An overall multivariate difference also was found on drinking-related items from the Research Institute on Addictions Self Inventory (RIASI); the HRD group required significantly more drinks before feeling the effects of alcohol, consumed more drinks per drinking occasions, and drank in more places during an evening than the GDP group. The groups did not differ, however, in the number of days during the week on which they drink or the largest number of drinks consumed on one occasion. There was also a multivariate difference between groups on reasons for drinking. The HRD group drank more often to be sociable, to cope with negative emotions, and to enhance excitement and positive emotions. The groups did not differ, however, in drinking to "fit in" or in response to social pressure. This pattern of heavy drinking, by primarily young males, and their tendency to drink in multiple locations, contributes to this group's risk of becoming involved in DUI offenses and accidents, thus making it an appropriate group for targeted secondary prevention efforts.

BACKGROUND

Current efforts dealing with driving under the influence (DUI) have often focused on preventing the repetition of DUI violations among prior offenders. A second area of importance is the prevention of drinking driving among the general driving public. Potentially the greatest impact on drunk driving could be achieved through prevention programs. This appears particularly true in light of the fact that most DUI convictions reported to the Washington State Department of Licensing (70-80%) are the drivers' first alcohol-related offense and that most alcohol-related fatalities in the state (80-90%) involve drivers with no prior DUI convictions.

A major problem in developing DUI prevention programs is the difficulty in identifying particular subgroups in the driving population that exhibit a high risk of alcohol-involved driving prior to their identification by law enforcement. Prior research has identified one such group that represents an appropriate target for DUI prevention efforts: individuals with multiple moving violations. This group shares many personality characteristics in common with convicted DUI offenders as well as having a heavier drinking pattern than the general driving population. Analyses conducted on a large probability sample of drivers from Washington state (over 39,000 drivers) found that among drivers who had four or more moving violations during the base year, 17% subsequently were convicted of their first DUI within the next three years. The relative risk of an initial DUI was 10 times greater among those with four or more moving violations than the 1.6% risk among drivers who had clean records during the same base year.

Subsequent studies have examined potential factors that might differentiate multiple violators who receive an initial DUI from those who do not. Differences are most apparent on drinking-related measures. Those who received their first DUI charge over the 36 months following their identification as high-risk drivers by the Department of Licensing reported at the time of the interview more drinking occasions per month, more occasions per month in which they consumed five or more drinks and, more total drinks consumed per month compared to high-risk drivers who were not convicted of an initial DUI charge.

The present study was conducted to further explore the drinking behavior and the reasons for drinking of this group of high-risk, multiple offender drivers.

METHODS

- The Washington State Department of Licensing (DOL) identified an initial pool of 2,720 high-risk drivers (HRD), defined by their having had 4 or more moving violations in a 12-month period, and an equal number of drivers from the general driving population (GDP).
- An introductory letter, survey packet, and return envelope were mailed to individuals at the addresses provided by the DOL.
- The survey contained a number of measures, including the first three items of the Alcohol Use Disorders Identification Test (AUDIT-C); the Research Institute on Addictions Self-Assessment Inventory (RIASI), which is a measure developed for use with drinking-driving offenders and which includes measures of drinking behavior; and Cooper's 4-dimension measure of reasons for drinking.
- Of the 5440 mailed questionnaires, a total of 1217 (22.4%) were returned with usable data. Respondents were paid \$5.
- The analysis sample consisted of 1180 respondents (646 HRD, 534 GDP).
- Groups were compared using chi-square, multivariate analysis of variance (MANOVA), and subsequent univariate analyses.

Figure 1. Percent of Drivers Classified as Hazardous Drinkers on AUDIT-C and AUDIT Item # 3

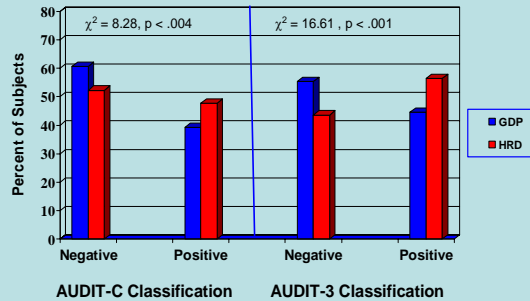


Table 1. Comparison of HRD and GDP Groups on Drinking-Related Items from the AUDIT-C and RIASI

AUDIT-C Consumption Items ¹						
	HRD Group (n = 646)		GDP Group (n = 534)		F	p
	Mean	St. Dev.	Mean	St. Dev.		
AUDIT #1 - How often do you have a drink containing alcohol?	1.52	1.18	1.42	1.28	1.95	.163
AUDIT #2 - How many drinks containing alcohol do you have on a typical day when drinking?	1.60	1.41	1.32	1.25	13.26	.000
AUDIT #3 - How often do you have six or more drinks on one occasion?	0.94	1.04	0.69	0.95	18.45	.000
RIASI Drinking Items ²						
If you go out drinking, how many places do you drink at in one evening?	1.27	1.05	1.13	.92	4.28	.039
What is the largest number of drinks you have ever consumed in a 24 hour period?	13.59	11.58	12.80	11.79	0.98	.323
How many days of the week do you usually drink?	1.41	1.23	1.48	1.63	0.61	.434
When you are drinking, how many drinks do you usually have?	3.87	2.90	3.37	2.87	6.13	.014
How many drinks does it take before you begin to feel the effects of alcohol?	3.35	2.64	2.87	2.14	8.50	.004

¹ Results of multivariate comparison between groups on the three AUDIT-C Items Pillai's Trace = .02, Multivariate F = 7.88, df = 3/1176, p < .001

² Results of multivariate comparison between groups on the RIASI Items Pillai's Trace = .020, Multivariate F = 3.516, df = 5/852, p < .005

Table 2. Comparison of HRD and GDP Groups on Reasons for Drinking Scale

Reasons for Drinking	HRD Group		GDP Group		F	p
	Mean	St. Dev.	Mean	St. Dev.		
Social Reasons	11.80	5.79	10.35	5.04	19.34	.000
Coping Reasons	8.00	4.05	7.32	3.82	8.12	.004
Enhancement Reasons	10.52	5.66	9.07	4.70	20.84	.000
Conformity Reasons	6.26	2.57	6.13	2.39	0.75	.388

Results of multivariate comparison between groups on the for Reasons for Drinking Items, Pillai's Trace = .022, Multivariate F = 6.13, df = 4/1104, p < .001

RESULTS

Demographics

- The HRD group was significantly younger than the GDP group (25.6 vs 40.3; t = 20.01, p < .001).
- The HRD group had a significantly higher proportion of males than the GDP group (68.2% vs 60.0%; $\chi^2 = 8.83$, p < .005).

Drinking-Related Variables - AUDIT

- The HRD group had significantly higher total scores on the AUDIT-C than the GDP group (4.06 vs 3.43, t = 3.53).
- Significant overall multivariate difference on the three AUDIT-C items
 - HRD group consumed more drinks on a typical drinking day
 - HRD group had more occasions of drinking 6+ drinks per occasion
 - No difference in frequency of drinking
- A greater percentage of HRD members were classified as hazardous drinkers on item # 3 of the AUDIT-C (47.7% vs 39.3%)
- A greater percentage of HRD members were classified as hazardous drinkers on item # 3 of the AUDIT dealing with frequency of heavy drinking (56.4% vs 44.6%)

Drinking-Related Variables - RIASI

- Significant overall multivariate difference on the five RIASI items
 - HRD group drank in more different locations in an evening
 - HRD group consumed more drinks on a drinking occasion
 - HRD group needed to consume more drinks before feeling the effects of alcohol
 - No difference on frequency of drinking or largest number of drinks consumed in a 24-hour period

Reasons for Drinking

- Significant overall multivariate difference on the four Reasons for Drinking Items
 - HRD group had higher endorsement of drinking to be sociable, to cope with negative emotions, and to enhance excitement and positive emotions
 - No difference in drinking to "fit in" or in response to social pressure

SUMMARY

- High-risk, multiple offender drivers have a heavier, more problematic drinking pattern than do members of the general driving population.
- While not drinking more frequently, the HRD group drinks in more different locations, drinks more on typical drinking days, has more occasions of heavy drinking, and reports needing to consume more drinks before feeling the effects of alcohol.
- The HRD group endorses higher levels of social, coping, and enhancement, but not conformity reasons for drinking
- This pattern of heavy drinking, by primarily young males, and their tendency to drink in multiple locations, contributes to this group's risk of becoming involved in DWI offenses and accidents, thus making it an appropriate group for targeted secondary prevention efforts.

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