



HEALTH

- THE ARTS
- CHILD POLICY
- CIVIL JUSTICE
- EDUCATION
- ENERGY AND ENVIRONMENT
- HEALTH AND HEALTH CARE
- INTERNATIONAL AFFAIRS
- NATIONAL SECURITY
- POPULATION AND AGING
- PUBLIC SAFETY
- SCIENCE AND TECHNOLOGY
- SUBSTANCE ABUSE
- TERRORISM AND HOMELAND SECURITY
- TRANSPORTATION AND INFRASTRUCTURE
- WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Health](#)

View [document details](#)

This product is part of the RAND Corporation reprint series. RAND reprints present previously published journal articles, book chapters, and reports with the permission of the publisher. RAND reprints have been formally reviewed in accordance with the publisher's editorial policy, and are compliant with RAND's rigorous quality assurance standards for quality and objectivity.

Acculturation and Driving Under the Influence: A Study of Repeat Offenders*

SARAH B. HUNTER, PH.D.,[†] EUNICE WONG, PH.D., CHRIS M. BEIGHLEY, M.S.,[†] AND ANDREW R. MORRAL, PH.D.[†]

RAND, Drug Policy Research Center, 1776 Main Street, Santa Monica, California 90407-2138

ABSTRACT. Objective: In California, driving under the influence (DUI) arrest and conviction rates are disproportionately higher among the Hispanic population. Acculturation and other factors associated with drinking and driving may help explain this disparity. **Method:** Interviews with Hispanic repeat DUI offenders were conducted immediately prior to sentencing and 2 years later. Arrest records from these offenders were also examined. Analyses were performed to examine the association between acculturation and other sociodemographic characteristics at baseline with DUI arrests and convictions at a 2-year follow-up. **Results:** Logistic regression modeling showed that acculturation was significantly related to self-reported DUI recidivism even after controlling for other factors associated with DUI convictions during a 2-year fol-

low-up. Acculturation was not found to have a statistically significant relation to DUI arrest rates during that same period. **Conclusions:** Among a Hispanic sample of repeat DUI offenders, the less-acculturated members were more likely to report a repeat DUI conviction at 2-year follow-up than the more-acculturated ones, even after controlling for other characteristics associated with DUI behaviors, such as drinking severity and marital status. The same pattern was not found between acculturation and arrest rates. Acculturation may serve as a risk factor for repeat convictions. Efforts to reduce multiple DUI convictions may need to consist of ways to target persons who are less acculturated. (*J. Stud. Alcohol* 67: 458-464, 2006)

HISPANIC POPULATIONS in the United States may be particularly vulnerable to driving while intoxicated with alcohol. Hispanics are overrepresented among those arrested for driving under the influence (DUI) in California (Chang et al., 1996; Lockyer, 1997; Tashima and Helander, 1997). Similarly, Hispanics, particularly Mexican Americans, are disproportionately likely to die in alcohol-related traffic crashes (Voas et al., 2000). In national roadside surveys conducted in 1973, 1986, and 1996 of randomly selected drivers, high and growing proportions of Hispanics were found to have been drinking, whereas the proportions of white and black drinking drivers have decreased over that same period (Voas et al., 1997). Moreover, DUI recidivism rates have been found to be higher among Mexican Americans in comparison with whites (Cherpitel and Bond, 2003).

The mechanism whereby ethnicity may impart a vulnerability to driving while intoxicated is not well understood. One possible mechanism is an individual driver's knowledge and level of adaptation to the U.S. culture, or one's degree of acculturation. Although a general consensus on how to conceptualize and measure acculturation has yet to be reached, a widely accepted definition of acculturation is

the extent to which individuals learn the values, behaviors, lifestyles, and language of the host culture (Zane and Mak, 2003). Acculturation has been cited as both a significant risk and protective factor for drinking and driving. For example, researchers have speculated that less-acculturated individuals are more susceptible to DUI violations because of their lack of knowledge about DUI laws (Caetano and Clark, 2000; Cherpitel and Tam, 2000; Ferguson et al., 2002), perhaps because of the notion that DUI laws may be less strictly enforced in their country of origin (Caetano and McGrath, 2005). At the same time, acculturation has been associated with drinking frequency in that foreign-born Hispanics tend to drink less often (Caetano and Rasberry, 2000), may drive less frequently, and report fewer DUI behaviors than their U.S.-born counterparts (Caetano and McGrath, 2005). Researchers have also suggested that integration into one's ethnic group may result in fewer deviant behaviors such as substance use or drinking and driving (Finch and Vega, 2003; Singh and Siahpush, 2001). These studies indicate that the association between acculturation and drunk driving among Hispanics is complex and not well understood.

This study examines the relationship between acculturation and DUI recidivism among a sample of Hispanics who were convicted of a second or third DUI offense in Los Angeles, CA. We examined factors associated with self-reported DUI convictions as well as DUI arrest rates during a 2-year follow-up period. The DUI conviction data in this study were derived from the self-reports of the offenders, and arrest data were collected from administrative

Received: September 23, 2005. Revision: November 18, 2005

*This study was supported by National Institute on Alcohol Abuse and Alcoholism grant AA12457.

[†]Correspondence may be sent to Sarah B. Hunter at the above address, or via email at: sarah_hunter@rand.org. Chris M. Beighley is with RAND, Pittsburgh, PA. Andrew R. Morral is with RAND, Arlington, VA.

records maintained by law enforcement agencies. To understand better the relationship that acculturation plays in DUI arrest and conviction rates, we examined whether acculturation provides additional information on the likelihood of DUI recidivism beyond that contained in age, education, employment status, alcohol problems, and other factors. These characteristics included sociodemographic factors, drinking, and related characteristics that were measured during an interview with the offender that was conducted after an arraignment for a repeat DUI offense.

Method

Participants

Recruitment for the study occurred between May 2000 and December 2002 at the Rio Hondo municipal court in El Monte, in the eastern region of Los Angeles County, CA. The population of El Monte is approximately 122,650; the court serves El Monte and a larger surrounding area. The resident population of this area is 72% Hispanic (U.S. Census Bureau, 2000). The rate of violent crime in El Monte is slightly higher (602 per 100,000) than the national average (475 per 100,000; Morgan, 2003). Overall, the Hispanic population in Los Angeles County drinks less alcohol than the average county resident. Nevertheless, rates of heavy episodic drinking (five or more drinks in a sitting in the past month) among Hispanics are higher, occurring at a rate of 20.7% compared with the overall county population average of 17.1% (Los Angeles Department of Health Services, 2003). California Office of Traffic Safety (2003) data rank the city of El Monte fifth of 47 comparably sized cities in California for rates of alcohol-involved collisions per vehicle miles traveled.

Offenders were eligible to participate in the study if they had a previous DUI conviction and were found guilty of a new DUI or other alcohol-related violation. Judges at the El Monte Superior Courthouse were instructed to refer multiple offenders whom they deemed eligible to participate in the study. Among all offenders who were referred by the court for sentencing, all but three were recruited to participate in the study, which is a recruitment rate of over 99%. One of these offenders absconded before sentencing, one could not be interviewed before sentencing, and one went to prison on a prior conviction before sentencing. Interviews with each participant were conducted either in English or Spanish, depending on the preference of the participant.

Data were drawn from administrative arrest records and interviews conducted at baseline (presentencing) and 2-year follow-up with participants in a longitudinal study of alternative criminal sanctions for repeat DUI offenders. The parent study (the "Rio Hondo Experiment") entailed random assignment of participating offenders either to a therapeutic

DUI court (offering enhanced assessment, treatment, and judicial supervision of alcohol rehabilitation), or to a "usual sanctions" condition (consisting chiefly of the mandatory minimum criminal sentences provided under California law). Details of the study are available in Macdonald et al. (in press). Because experimental assignment was not found to be related to this study's outcomes, it is not presented here.

Procedures

Interviews. Prior to sentencing, participants were interviewed in a private setting at the court by a research staff member. At 2-year follow-up from the initial baseline interview, participants were contacted by telephone and recruited to participate in a second interview in person.

Administrative records. In collaboration with the Los Angeles County Department of Probation, 11 local, state, and federal databases that contained relevant criminal and court information on the participants were identified. The databases used are listed in order of frequency of citations: (Los Angeles County) Trial Court Information System, (California) Criminal Identification Index, (Los Angeles County) Consolidated Criminal History Reporting System, (California) Department of Motor Vehicles, Federal Bureau of Investigation, Extended Traffic Reporting System (for traffic courts), Juvenile Automated Index, (Los Angeles County) Prosecutor Information Management System, (Los Angeles County) Criminal Warrant System, (Los Angeles County) Automated Jail Information System, and (Los Angeles County) Adult Probation System.

Characteristics such as arrest date, arrest charge(s), disposition date, sentence, probation terms and status, and docket number were abstracted. RAND staff created a criminal history database to include the variables that were abstracted by a probation officer. In addition to entering data from the summary sheets, staff reviewed the hard copy files of 100 participants to ensure accuracy and completeness of information. RAND staff also double-coded a random sample of cases to ensure the consistency of data entered into the RAND database. Comprehensive criminal histories were provided on each participant. That is, the entire criminal history for each person, as available in the cited databases, was provided, ending at the 2-year mark after their entry into the DUI program. Arrest data were available from 235 (98%) of the 241 Hispanic participants.

Measures

Interviews. The interview protocols for the study were developed at RAND to assess respondent alcohol use, related attitudes and expectancies, acculturation, and other sociodemographic factors. Translation and back-translation were used to ensure the comparability of Spanish and

English versions of the protocols. Data for this study were drawn from a number of items in the interview protocols, as will be described. With the exception of arrest rates, all variables included in this study were obtained from the interview.

Predictor variables

These variables were derived from responses to the baseline survey.

Sociodemographic characteristics. Demographic measures included age, gender, marital status, education, and income level. Age and education were ascertained and modeled as continuous variables (years). Marital status was coded as a dichotomous variable with those married, living with partner, or remarried coded as 1; those widowed, separated, divorced, or never married were coded as 0. Income for the preceding month was assessed categorically on a 7-point scale, using monthly income brackets ranging from \$500 or less (coded as 1) to \$5,000 or more (coded as 7).

Acculturation. As adapted from prior measures (Cherpitel and Tam, 2000; Cuellar et al., 1980; Marin et al., 1987), the acculturation measure used in this study comprised 12 items, including country of origin, year coming to the United States to work or live, citizenship, parental country of origin, languages spoken, self-reported English and Spanish language competency, and language preference. Scores ranged from 0 to 8, with higher scores indicating more acculturation. Internal reliability of this scale was excellent (Cronbach's $\alpha = .94$).

Drinking. The Global Appraisal of Individual Needs (Dennis et al., 2002) Substance Problem Index (SPI) was used to assess alcohol problems. This scale is composed of 16 recency items (e.g., "When was the last time you ...?"): 7 are based on Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (American Psychiatric Association, 1994), criteria for dependence; 4 are for abuse; 2 are for substance-induced health and psychological problems; and 3 are on lower severity symptoms of use (e.g., hiding use, people complaining about use, and weekly use). The scale has an excellent Cronbach's $\alpha (.77)$. Scores range from 0 to 16, with higher scores indicating more problems resulting from alcohol use.

An alcohol quantity-frequency average was calculated based on the average daily consumption of alcohol over the past 3 months, expressed in standard drinks. Participants were asked how many days a week they drank alcohol and the typical amount of alcohol consumed on drinking days, using drink and ounce response options for the following types of alcohol: beer, malt liquor, wine cooler, wine, fortified wine, distilled spirits mixed, and distilled spirits straight up. Scores ranged from 0 to 54 with a mean (SD) of 2.88 (5.71). Higher scores indicated higher daily consumption during the past 3 months.

Other characteristics

Social Desirability Scale. Previous research has suggested that social desirability may affect offenders' self-reports of drinking and driving (e.g., Schell et al., in press). Therefore, participants' social desirability was assessed using a modified version of a five-item instrument developed by Hays et al. (1989). Responses on items were placed on a 5-point scale, with higher scores indicating a more socially desirable response (scale range: 5-25; Cronbach's $\alpha = .58$). The social desirability scale was included as a predictor variable in the regression analyses to ensure that observed relationships between the behavioral control measures and alcohol-impaired driving were not artifacts of a social desirability response bias.

Stressful Life Events Index (SLEI). Acculturation may be confounded with socioeconomic disadvantage, immigration challenges, and other stressful events (Finch and Vega, 2003). To account for such risks, we incorporated a measure of stressful life events. Items from this scale were based on previous instruments (the Social Readjustment Rating Scale [Holmes and Rahe, 1967] and the Substance Use Disorder Diagnostic Schedule [SUDDS; Harrison and Hoffman, 1987]). The SUDDS has been used in prior studies with DUI populations (Veneziano and Veneziano, 1992). The SLEI is the sum of the ranks of stressors experienced by an individual, with higher scores indicating greater severity of stressful life events (range: 0-144).

Dependent measures

DUI conviction. Respondents were asked at the 2-year follow-up how many times they were convicted for a DUI offense in the past 2 years. Follow-up data were available from 84% ($n = 202$) of the sample. Given that no respondents indicated more than one follow-up conviction, responses were coded as a dichotomous variable, with "0" indicating no follow-up DUI conviction ($n = 165$) and "1" indicating a follow-up DUI conviction ($n = 37$).

DUI arrests. Data from arrests between the time of the baseline interview and 2 years later for the following driving under the influence California penal codes were used: VC23152(A), VC23152(B), and VC23153(A). As very few respondents ($n = 8$) had more than one DUI arrest during the follow-up period, data were coded as a dichotomous variable, with "0" indicating no follow-up DUI arrest ($n = 195$) and "1" indicating at least one follow-up DUI arrest ($n = 40$).

Analytical modeling

Logistic regression modeling was used to assess the association between the dependent and predictor variables. Because we were interested in the added predicted value of

acculturation beyond the other variables, a two-stage modeling approach was used. In the first stage, all variables found to have a bivariate association with the dependent variable, except for acculturation, were entered into the equation. In the second stage, acculturation was added to the existing set of predictor variables. All statistical procedures were conducted using SAS (SAS System version 9.1, Cary, NC).

Preliminary analyses: Examination of potential covariates

To determine a list of covariates to include in the models, a criterion of $p < .20$ association with the dependent variables (i.e., self-report DUI conviction, administrative arrest data) was used. In addition to acculturation, other variables that were considered included age, gender, marital status (coded partner/no partner), education, income, prior criminal history (i.e., number of prior DUI and other arrests), lifetime alcohol problems, alcohol problems in the past year, quantity of alcohol consumed, social desirability, stressful life events index, and experimental condition (i.e., received intervention/no intervention). Acculturation as well as all other potential covariates, except marital status, did not reach criterion in their bivariate association with the arrest variable; therefore, further multivariate analyses were not conducted. Variables with an association ($p < .20$) with self-reported DUI conviction at follow-up included age, marital status (coded partner/no partner), education, lifetime alcohol problems, social desirability, and acculturation.

For the logistic regression analyses using self-reported DUI conviction, nonresponse weights were developed to adjust for any attrition biases. A nonparametric logistic regression model of nonresponse was developed as a function of 74 baseline covariates selected a priori as potentially associated with nonresponse. These covariates included demographic characteristics (age, race, gender, acculturation), alcohol use frequency, quantity and problems, treatment readiness and motivation, criminal history, driving history, and other variables. Nonresponse weights for each case with follow-up data were constructed as $w = 1 / (1 - p)$, where p is the modeled expected probability of nonresponse for the case (Little and Rubin, 1987). Case weights reduce the effective sample size of the follow-up sample from 202 to 201.5.

Results

Sample characteristics

The analyses conducted using the self-report variable as the dependent measure, follow-up DUI conviction at 2 years, represented 84% of the sample ($n = 202$). The analyses conducted using the administrative variable, follow-up DUI arrest at 2 years, represented 98% of the sample ($n = 235$).

TABLE 1. Characteristics of study sample

| Characteristic | Self-report conviction sample ($n = 202$) | Administrative data arrest sample ($n = 235$) |
|---|---|---|
| Nationality, % | | |
| Mexican American | 83.25 | 85.10 |
| Central American | 11.82 | 10.21 |
| South American | 1.48 | 1.70 |
| Cuban American | 0.50 | 0.43 |
| Not specified | 2.95 | 2.56 |
| Citizenship, % | | |
| United States | 38.92 | 37.45 |
| Language preferred, % | | |
| Spanish only | 50.25 | 50.64 |
| Acculturation, mean (SD) | 3.58 (2.51) | 3.48 (2.48) |
| Other demographics | | |
| Age, mean years (SD) | 34.89 (8.89) | 34.49 (8.85) |
| Male, % | 94.10 | 94.04 |
| Married or living with partner, % | 44.83 | 45.53 |
| Education, mean years (SD) | 10.50 (3.22) | 10.35 (3.28) |
| Past 30 day income, <\$2,000, % | 86.21 | 87.24 |
| Employed full-time, % | 75.37 | 74.04 |
| Alcohol use | | |
| % with Lifetime Alcohol Disorder | 72.91 | 71.91 |
| Heavy drinking days per week, mean (SD) | 1.47 (1.39) | 1.49 (1.42) |
| Age of first drink, mean (SD) | 16.20 (4.27) | 16.26 (4.20) |
| Driving history | | |
| Prior DUI offenses, mean (SD) | 2.68 (1.08) | 2.70 (1.10) |
| Prior driving offenses, mean (SD) | 0.53 (0.80) | 0.53 (0.88) |

Note: DUI = driving under the influence.

Our analyses included Hispanics who self-identified in the nationality groups specified in Table 1. Other characteristics of the study sample (e.g., sociodemographic, alcohol use, arrest history) are presented in Table 1. No significant differences between the two samples were found on the characteristics listed here.

Regression results

Measures of association between the predictor variables and self-reported DUI conviction along with model goodness of fit are presented in Table 2. The first model excluding acculturation showed a good model fit (i.e., discrimination between those reporting a DUI conviction during follow-up and those not reporting a DUI conviction at follow-up) on the basis of the five participant characteristics (i.e., age, marital status, education, alcohol problems, and social desirability). Marital status was the only variable that was significantly related to conviction in that having a partner decreased the odds of reporting a conviction at follow-up by 56%. A comparison of log-likelihood ratios across models indicated reliable improvement when acculturation was added to the model ($\chi^2 = 29.62$, 1 df, $p < .001$). Prediction rates were good in the first model (71%) and improved (to 77%) when the acculturation variable was added. In the second model, acculturation was the only

TABLE 2. Odds ratios (ORs), confidence intervals (CIs) and model-fit statistics for predicting self-reported repeat DUI convictions

| Predictor variables | Self-report repeat DUI conviction | |
|---------------------------------|--------------------------------------|------------------------|
| | Model 1 OR (CI) | Model 2 OR (CI) |
| Age | 1.01 (0.97-1.05) | 1.01 (0.96-1.05) |
| Marital status | 0.44* (0.19-1.02) | 0.59 (0.26-1.34) |
| Education | 0.90 (0.80-1.01) | 0.99 (0.86-1.14) |
| Alcohol problems | 0.99 (0.88-1.11) | 0.99 (0.88-1.11) |
| Social desirability | 1.12 (0.97-1.28) | 1.04 (0.90-1.20) |
| Acculturation | — | 0.62* (0.41-0.95) |
| Likelihood ratio, χ^2 (df) | 17.40 [†] (5) | 32.11 [†] (6) |
| c statistic | 0.71 | 0.77 |

Note: DUI = driving under the influence.

* $p < .05$; [†] $p < .01$.

variable that was significantly related to conviction in that a unit increase in acculturation decreased the odds of reporting a conviction by 38%.

Discussion

Findings from this study suggest that less-acculturated Hispanic DUI offenders are more likely to report conviction for a new DUI offense, after taking into account other relevant risk factors such as age, marital status, education, and drinking severity. Preliminary analyses revealed that stressful life events, another potential risk factor for drinking and driving, was not related to reports of DUI conviction. Further, the relationship between acculturation and DUI reconviction remained significant even after controlling for social desirability effects, a potential bias of self-report measures. Moreover, in this sample of Hispanics that was composed predominantly of Mexican Americans, prior reports of an association between acculturation and drinking problems have been noted (e.g., Caetano and Clark, 1998; Caetano and McGrath, 2005), but the lack of acculturation is shown to present a unique source of risk for DUI recidivism that exceeds that explained by other factors such as alcohol problems. These findings are noteworthy in that prior research has not examined the relation of acculturation to re-arrests and convictions among a population of multiple DUI offenders.

Acculturation among Hispanics has been linked with drinking and other negative health outcomes. However, previous studies have reported contradictory findings on the role acculturation plays in DUI. In the present study, a stronger relationship was observed between self-reports of DUI conviction and acculturation than between administrative arrest records and acculturation. It is important to note that our assessment of acculturation emphasized language, a commonly used indicator of acculturation, instead of other domains of acculturation such as values, behaviors, and at-

titudes. The acculturation measure used in this study was unidimensional in that it assessed adaptation to U.S. culture in contrast to bidimensional measures that assess both adjustment to the host culture and the maintenance of characteristics of the country of origin.

The study results suggest that greater familiarity and preference for English among our study sample may have a larger influence on the judicial process than arrests. Although the source of this discrepancy cannot be identified in this study, greater acculturation may be associated with more effective strategies within the criminal justice system for avoiding re-conviction. Another possible explanation for these findings is that the acculturation variable may be associated with a self-report bias that was not adequately captured by the social desirability measure used in the study. These potential explanations cannot be distinguished from one another with the available data.

The results from the current study are methodologically limited in a number of ways. First, our research design does not allow us to make strong causal inferences about the relationship between variables. Although our measure of acculturation predicted later DUI reconvictions, we cannot rule out that some third factor accounts for this association. Second, our data were mainly derived from self-reports. Our findings were stronger for the self-reported dependent measure, DUI conviction. It would be useful to validate these findings in future research using administrative data. Prior research suggests that there are differences among the various Hispanic subgroups, specifically Cuban Americans and Puerto Ricans (Caetano, 1988, 1999; Nielsen, 2000). Unfortunately, our sample did not provide enough variation across different nationalities to study this. Indeed, our sample was largely Mexican Americans from a single courthouse in an urban setting. Consequently, our results may not be representative of Hispanics in general or Mexican Americans in particular. Further research needs to be conducted to confirm these results among a larger Hispanic sample, particularly with different groups, such as Central and South American in addition to Cuban and Puerto Rican members. Moreover, our results largely represent Hispanic men because only 6% of the study population were women. A larger study sample of re-offending women would be needed to make conclusions about drinking behaviors and their relationship with arrest and DUI convictions. Finally, given that the study's results are from a large metropolitan setting, they may not be generalizable to rural settings in which enforcement behaviors may be different.

If our findings accurately reflect an association between acculturation and reconviction rates among Hispanics, it is important to consider ways to address acculturation in the judicial process. When arrested for a DUI offense, persons who are less acculturated may be at a disadvantage because they have fewer resources to navigate the judicial process. If those convicted of a DUI are referred for treatment,

providing care that is linguistically and culturally responsive is appropriate. Others have noted that Hispanics arrested for DUI are more likely to have drunk at home or a friend's home rather than a bar (Caetano and Rasperry, 2002; Padilla and Morrissey, 1993). Thus, interventions that focus on family and social networks rather than on individually based treatment may be more effective (Galvan and Caetano, 2003). In addition, many individuals who drive under the influence, especially the less acculturated ones, are not alcohol-dependent; therefore, strategies to reduce drinking and driving among social or moderate drinkers is an important target in decreasing the overall number of DUI arrests and convictions.

This study represents an examination of the re-offense behaviors among Hispanics with multiple DUI offenses in Los Angeles County, the most populous county in the United States. Hispanics are disproportionately represented in vehicle crash fatalities and DUI arrestees across the country (Ross et al., 1991). Further examination of the factors that influence repeat DUI behaviors is needed because 35%-40% of all drinking drivers who are fatally injured are estimated to have a least one prior DUI offense (Cherpitel and Bond, 2003). Researchers have noted that, among Mexican Americans, a DUI conviction is not necessarily a detriment to subsequent DUI convictions (Cherpitel and Bond, 2003), indicating the need to better understand the factors that influence recidivism in this group. Our findings suggest that, among a largely Mexican American sample, the less acculturated members may be more likely to continue to re-offend as compared with those who are more acculturated. Efforts to reduce multiple DUI offenses may need to consider ways to target those who are less acculturated.

Acknowledgments

We thank the following for their assistance with this study: the RAND Survey Research Group, Barbara Raymond, Yang Lu, John MacDonald, the Los Angeles County Department of Probation, the Los Angeles County Public Defender, the Superior Courts of the State of California, and Judge Steven Sanora of the Rio Hondo Municipal Court.

References

- AMERICAN PSYCHIATRIC ASSOCIATION. Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), Washington, DC, 1994.
- BUREAU OF THE CENSUS. Census 2000, Washington, DC: Bureau of the Census (available at: <http://www.census.gov/main/www/cen2000.html>).
- CAETANO, R. Alcohol use among Hispanic groups in the United States. *Amer. J. Drug Alcohol Abuse* **14**: 293-308, 1988.
- CAETANO, R. The identification of alcohol dependence criteria in the general population. *Addiction* **94**: 255-267, 1999.
- CAETANO, R. AND CLARK, C.L. Trends in alcohol-related problems among whites, blacks, and Hispanics: 1984-1995. *Alcsm Clin. Exp. Res.* **22**: 534-538, 1998.
- CAETANO, R. AND CLARK, C.L. Hispanics, blacks and whites driving under the influence of alcohol: Results from the 1995 National Alcohol Survey. *Accid. Anal. Prev.* **32**: 57-64, 2000.
- CAETANO, R. AND McGRATH, C. Driving under the influence (DUI) among U.S. ethnic groups. *Accid. Anal. Prev.* **37**: 217-224, 2005.
- CAETANO, R. AND RASPBERRY, K. Drinking and DSM-IV alcohol and drug dependence among white and Mexican-American DUI offenders. *J. Stud. Alcohol* **61**: 420-426, 2000.
- CAETANO, R. AND RASPBERRY, K. DUI-arrest characteristics among white and Mexican American DUI offenders mandated to treatment. *J. Stud. Alcohol* **62**: 750-753, 2002.
- CALIFORNIA OFFICE OF TRAFFIC SAFETY. OTS Collision Rankings, 2003, Sacramento, CA: California Office of Traffic Safety (available at: <http://www.ots.ca.gov/grants/rankingsEx.asp>)
- CHANG, I., LAPHAM, S.C., AND BARTON, K.J. Drinking environment and sociodemographic factors among DWI offenders. *J. Stud. Alcohol* **57**: 659-669, 1996.
- CHERPITEL, C.J. AND BOND, J. DUI recidivism: A comparison of Mexican Americans and whites in a Northern California county. *Addict. Behav.* **28**: 963-969, 2003.
- CHERPITEL, C.J. AND TAM, T.W. Variables associated with DUI offender status among whites and Mexican Americans. *J. Stud. Alcohol* **61**: 698-703, 2000.
- DENNIS, M.L., TITUS, J., WHITE, M., UNSICKER, J., AND HODKINS, D. Global Appraisal of Individual Needs (GAIN): Administration Guide for the GAIN and Related Measures, Bloomington, IL: Chestnut Health Systems, 2002 (available at: www.chestnut.org/li/gain/gadm1299.pdf).
- FERGUSON, S.A., BURNS, M.M., FIORENTINO, D., WILLIAMS, A.F., AND GARCIA, J. Drinking and driving among Mexican Americans and non-Hispanic white males in Long Beach, California. *Accid. Anal. Prev.* **34**: 429-437, 2002.
- FINCH, B.K. AND VEGA, W.A. Acculturation stress, social support, and self-rated health among Latinos in California. *J. Immigrat. Hlth* **5**: 109-117, 2003.
- GALVAN, F.H. AND CAETANO, R. Alcohol use and related problems among ethnic minorities in the United States. *Alcohol Res. Hlth* **27**: 87-94, 2003.
- HARRISON, P.A. AND HOFFMAN, N.G. Substance Use Disorders Diagnostic Schedule (SUDDS), St. Paul, MN: Norman G. Hoffman, 1987.
- HAYS, R.D., HAYASHI, T., AND STEWART, A.L. A five-item measure of socially desirable response set. *Educ. Psychol. Meas.* **49**: 629-636, 1989.
- HOLMES, T.H. AND RAHE, R.H. The Social Readjustment Rating Scale. *J. Psychosom. Res.* **11**: 213-218, 1967.
- LITTLE, R.J.A. AND RUBIN, D.B. Statistical Analysis with Missing Data, New York: John Wiley & Sons, 1987.
- LOCKYER, B. Reports on Arrests for Driving Under the Influence in California, 1997, Sacramento, CA: California Department of Justice (available at: <http://caag.state.ca.us>).
- LOS ANGELES DEPARTMENT OF HEALTH SERVICES. Los Angeles County Health Survey 2002-2003, Los Angeles, CA: Office of Health Assessment and Epidemiology, Los Angeles Department of Health Services (available at: http://www.lapublichealth.org/ha/survey/ha03adtopics_alcohol.htm).
- MACDONALD, J.M., MORRAL, A.R., RAYMOND, B., AND EIBNER, C. The efficacy of the Rio Hondo DUI Court: A 2-year field experiment. *Eval. Rev.*, in press.
- MARIN, G., SABOGAL, F., MARIN, B.V., OTERO-SABOGAL, R., AND PEREZ-STABLE, E.J. Development of a short acculturation scale for Hispanics. *Hisp. J. Behav. Sci.* **9**: 183-205, 1987.
- MORGAN, K.O. (Ed.). City Crime Rankings: Crime in Metropolitan America, 11th Edition, Lawrence, KS: Morgan Quitno Press, 2004.
- NIELSEN, A.L. Examining drinking patterns and problems among Hispanic groups: Results from a national survey. *J. Stud. Alcohol* **61**: 301-310, 2000.
- PADILLA, A.M. AND MORRISSEY, L. Place of last drink by repeat DUI offenders: A retrospective study of gender and ethnic group differences. *Hispanic J. Behav. Sci.* **15**: 357-372, 1993.

- ROSS, H.L., HOWARD, J.M., GANIKOS, M.L., AND TAYLOR, E.D. Drunk driving among American blacks and Hispanics. *Accid. Anal. Prev.* **23**: 1-11, 1991.
- SCHELL, T.L., CHAN, K.S., AND MORRAL, A.M. Predicting DUI recidivism risk: Sensation seeking, alcohol expectancies and driving style. *Drug Alcohol Depend.*, in press.
- SINGH, G.K. AND SIAHPUSH, M. All-cause and cause-specific mortality of immigrants and native born in the United States. *Amer. J. Publ. Hlth* **91**: 392-399, 2001.
- TASHIMA, H.N. AND HELANDER, C.J. Annual Report of the California DUI Management Information System, Sacramento, CA: California Department of Motor Vehicles, 1997.
- VENEZIANO, C. AND VENEZIANO, L. Psychological characteristics of persons convicted of driving while intoxicated. *Psychol. Rep.* **70** (3 Pt 2): 1123-1130, 1992.
- VOAS, R.B., TIPPETTS, A.S., AND FISHER, D.A. Ethnicity and alcohol-related fatalities: 1990 to 1994, Report Number DOT HS 809 068, Washington, DC: National Highway Traffic Safety Administration, 2000 (available at: <http://www.nhtsa.dot.gov/people/injury/alcohol/ethnicity/ethnicity.html>).
- VOAS, R.B., WELLS, J.K., LESTINA, D.C., AND GREENE, M.A. Drinking and driving in the US: The 1996 National Roadside Survey, NHTSA Traffic Task No. 152, Arlington, VA: Insurance Institute for Highway Safety, 1997.
- ZANE, N. AND MAK, W. Major approaches to the measurement of acculturation among ethnic minority populations: A content analyses and alternative empirical strategy. In: CHUN, K.M., ORGANISTA, P.B., AND MARIN, G. (Eds.) *Acculturation: Advances in Theory, Measurement, and Applied Research*, Washington, DC: American Psychological Assn, 2003, pp. 39-60.