



Characteristics of DUI recidivists: A 12-year follow-up study of first time DUI offenders

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Abstract

77 individuals convicted of a drinking and driving (DUI) offense were screened for recidivism approximately 12 years following their first offense. At the time of the initial DUI conviction, participants were administered the MAST and the MMPI-2. Participants' drinking history and driving history and arrest at the time of screening and at a 12-year follow-up were also reviewed. The results indicate that, among DUI recidivists, on average 6 years elapsed between their first and second DUI offenses. Driving history prior to the first DUI offense was predictive of later recidivism. The only significant finding from the MAST and MMPI results was that repeat offenders tended to have higher scores on the L and K validity scales of the MMPI. These results are discussed in the context of Jessor's Problem-Behavior Theory and as well their clinical implications for screening and treatment decisions involving first time DUI offenders.

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The study of individuals convicted of driving while under the influence of alcohol (DUI) has been an area of particular importance to researchers because of the potential to identify offenders at risk for committing subsequent DUI offenses. Repeat offenders are over-represented in traffic accidents (Fell, 1993) with 1 out of 8 intoxicated drivers involved in fatal crashes having had a DUI conviction within the 3 years prior to the crash (Fell, 1995). Although many first time DUI offenders will not be re-arrested, estimates of recidivism from several states range from 21% to 47% (Fell, 1995). These are considered to be conservative estimates as they do not include individuals who drink and drive but are not subsequently

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re-arrested. Therefore, identifying first time DUI offenders who may be at risk for a second alcohol-related driving offense affords an opportunity to direct treatment interventions to this targeted population as a preventative measure.

In most states, individuals convicted of a DUI offense are required to undergo drug and alcohol screening program. Usually, first time offenders deemed to be at low risk for recidivism are required to participate in an alcohol and driving educational program while those assessed as being at a higher risk are referred for more intensive and lengthier education/treatment programs. One of the oft-cited difficulties in screening DUI offenders is their unwillingness to truthfully answer direct questions about their alcohol and drug use because of their understanding that such answers may lead to court mandated treatment (Vingilis, 1983). As a result, researchers have examined other variables that might effectively identify those individuals at risk for subsequent DUI offenses. Several studies have identified characteristics other than self-admitted alcohol and/or drug use that consistently emerge. For example, it has been found that repeat offenders tend to score higher than non-repeaters on scales measuring sensation seeking, hostility, depression, and psychopathic deviance and lower on scales measuring assertiveness and emotional adjustment (McMillen, Adams, Wells-Parker, & Anderson, 1992; McMillen, Pang, Wells-Parker, & Anderson, 1992). Nochajski, Wieczorek, & Miller (1996) found that individuals who re-offended within a 12-month period after their first DUI offense were characterized by sensation seeking, impulsivity and general deviance. Age, gender, marital status, race/ethnicity and blood alcohol level concentration at the time of arrest have also been found to differentiate DUI recidivists. Generally, DUI recidivists tend to be younger, unmarried, non-Hispanic white males, who consume more alcohol as reflected by higher blood alcohol levels at the time of their first DUI arrest (e.g., Donovan & Marlatt, 1983; Donovan, Umlauf, Quiesser, & Salzberg, 1986; McMillen, Pang, et al., 1992; Nochajski, Miller, & Parks, 1994; Reynolds, Kunce, & Cope, 1991). There also appears to be an overlap in psychosocial traits between individuals with DUI offenses and those individuals who have poor driving records, i.e., those who are considered to be “at risk” drivers (McDonald & Pederson, 1990; McMillen, Adams, et al., 1992; McMillen, Pang, et al., 1992).

Several studies have attempted to predict recidivism utilizing a combination of four or five psychometric and demographic variables, employing statistical procedures such as multiple regression, discriminant function analysis, and logistical regression. For example, C’de Baca, Miller, and Lapham (2001) identified five risk factors, which were able to identify offenders who were at high risk for recidivism. These factors included age (<29 years old), years of education (<12 years of education), blood alcohol concentration (BAC) at time of arrest (.20 or greater), and scores on the receptive area of the Alcohol Use Inventory (raw score of 7 or higher) and the MacAndrews Alcoholism Scale (MAC) of the MMPI-2 (raw score of 23 or greater). Nochajski and Wieczorek (1998) found that using “non-obvious” items from the RIA Self Inventory (RIASI) was superior in predicting recidivism when compared with the MAST, which is based on obvious indicators of alcoholism.

In studying recidivism and potential risk factors, many of the aforementioned studies had utilized various follow-up time frames. For example, Nochajski and his colleagues were interested in “rapid recidivism” and used a 12-month follow-up (Nochajski et al., 1994) and in another study, a 12- and 24-month follow up period (Nochajski, Wieczorek, & Miller, 1996). C’de Baca et al. (2001), and Peck, Arstein-Kerslake, and Helander (1994) used a 4-year follow-up time period. The current study utilized a 12-year follow-up period, to investigate possible predictors of DUI recidivism. One of the main questions addressed in this study is whether there are any indicators at the time of the first DUI arrest that might identify those individuals who are more likely to become a repeat offender.

1. Method

1.1. Participants

This sample is based on 77 first time offenders who received a DUI conviction between 1990 and 1992 and who resided in Monmouth County, a socioeconomically diverse population area of New Jersey. The mean age at the time of the first DUI offense was 29.6 years (S.D.=8.1) These individuals were part of an earlier study comparing DUI offenders with nonoffenders (Cavaiola, Strohmets, Lavender, & Wolf, 2003). There were 64 males and 13 females in this sample who were randomly chosen from a population of approximately 2000 first time DUI offenders in Monmouth County, a county which usually ranks around 9th or 10th among the 21 counties within New Jersey for DUI convictions.

1.2. Procedure

The screening process for this sample differed from the usual state screening protocol in that, in addition to the routine demographic questionnaire and a drinking and driving questionnaire, they were also administered the Michigan Alcoholism Screening Test (MAST) (Selzer, 1971; Selzer, Vinokur, & Wilson, 1977) and Minnesota Multiphasic Personality Inventory-2 (MMPI-2) (Hathaway & McKinley, 1989; Graham, 1990) at the time of their first DUI offense. The MAST is a 24-item inventory consisting of ‘yes’ ‘no’ questions pertaining to an individual’s drinking behavior. The MAST is considered a “direct” measure in that the items are obvious inquiries into one’s drinking behavior, e.g. “Have you ever been arrested for things done while drinking?” The MMPI-2 is a 567 item, True–False, personality assessment inventory which assesses, general psychopathology (e.g. mood, anxiety and thought disorders) as well as physical health, political and social attitudes. One of the advantages of the MMPI-2 over the MAST is that it contains validity scales which help to ascertain any test-taking distortion. The L (or Lie Scale), the F and K scales all measure test taking distortions and can be interpreted singularly or in combination. The MMPI-2 also contains a scale which measures substance use disorder potentiality known as the MacAndrews Scale (MAC-R) (MacAndrew, 1965). This is considered an “indirect” measure of potentiality and therefore is less prone to test taking distortion. Blood alcohol content (BAC, a measure of alcohol levels in the bloodstream at the time of arrest) data were gathered from police reports of the arresting officer. After a minimum 12-year time span from the time of their first offense, driving records were obtained for the entire group of first time offenders. The driving records contained information regarding participants’ history of moving violations, traffic accidents, as well as any subsequent drinking and driving offenses (both driving under the influence and refusal to take a chemical screening test, e.g. a breath alcohol test).

2. Results

Of the 77 individuals convicted for the first time with a DWI offense between 1990 and 1992, 29 (38%) were subsequently re-arrested for a second DWI offense. The mean length of time between the first and second DWI offense was 6 years (S.D.=4.6). There was no gender difference with respect to likelihood of being a repeat offender, $\chi^2(1, N=77)=1.42, p=.23, \phi=.14$. Neither was there a difference in age between repeat offenders and one-time only offenders at the time of the first offense, $M_s=29.4$ years vs. 29.7 years, $t(75)=.14, p=.89$ (2-tailed), effect size $r=.02$.

One of the questions to be addressed in this study is whether or not there are any indicators at the time of the first DWI arrest that might identify those individuals who are more likely to become a repeat offender. Independent *t*-tests were used to make these comparisons.

There were very little differences between one-time only offenders and repeat offenders with respect to the circumstances surrounding their first DWI offense (see Table 1). For example, there was no significant difference in the blood alcohol level at the time of the first DWI offense between the one-time only and the re-offender, $t(75)=1.53$, $p=.13$ (2-tailed), effect size $r=.17$. Similarly, there were few differences between these two groups with respect to the other measures administered at the time of the original DWI offense. For example, these two groups did not differ with respect to self-reported alcoholism symptoms as assessed by the MAST ($t(75)=.82$, $p=.42$ (2-tailed), effect size $r=.09$) and alcoholism potentiality as measured by the MAC-R ($t(75)=.02$, $p=.99$ (2-tailed), effect size $r=.002$).

The only differences that emerged with respect to these two groups involved their scores on the MMPI validity scales administered at the time of the initial DWI offense (see Table 1). The mean score on the L scale was significantly higher for the re-offender group than for the one-time only group ($M_s=56.2$ vs. 51.0 , $t(75)=2.13$, $p=.036$ (2-tailed), effect size $r=.24$). A high score on the L scale indicates a tendency to present oneself in a more favorable manner (i.e. “fake good”). The difference between the two groups approached significance with respect to their scores on the K scale with the re-offender group tending to have a higher score compared to the one-time only group ($t(75)=1.92$, $p=.058$ (2-tailed), effect size $r=.22$). A high score on this scale suggests defensiveness on the person’s part. There was no difference between the two groups on the F Scale, a measure of one’s “fake bad” tendency ($t(75)=.87$, $p=.39$ (2-tailed), effect size $r=.10$). There were no other differences between the two groups on the Clinical Scales of the MMPI. Collectively, this suggests that while there may be no differences between repeat offenders and one-time only offenders with respect to self-reported alcoholism symptoms and alcoholism potentiality as well as other psychopathology, the results from the MMPI validity scales suggest that the two groups may try to present themselves differently during the screening process that routinely occurs after a DWI conviction.

Despite the lack of differences in these areas, interesting differences did emerge with respect to driving history in general (see Table 2). Individuals in the repeat offender group were more likely to have had their driving license revoked by the state *prior* to their first DWI conviction, $\chi^2(1, N=77)=12.2$, $p=.0005$, $\phi=.40$. They were also more likely to have their driving license revoked again *after* the first DWI offense for reasons unrelated to the DWI conviction, $\chi^2(1, N=77)=4.05$, $p=.04$, $\phi=.23$. Similarly, after the first DWI offense, the repeat offenders were more likely to have been convicted for reckless and careless driving

Table 1
Mean group comparisons (and standard deviations) at the time of the initial DWI offense

	One-time only offenders $n=48$	Repeat offender $n=29$
Blood alcohol level at arrest	.164 (.036)	.18 (.03)
MAST	5.15 (6.48)	4.07 (3.63)
MAC-R	24.06 (6.58)	24.03 (3.63)
MMPI L scale	51.02 (9.96)	56.21 (10.92)*
MMPI K scale	54.23 (9.69)	58.24 (7.35)**
MMPI F scale	47.60 (10.97)	45.52 (8.65)

* $p<.05$.

** $p<.06$.

Table 2
Driving history differences between the two groups

	One-time only offenders <i>n</i> =48	Repeat offenders <i>n</i> =29
Before the initial DUI offense		
Revoked driving license	6%	38%
After the initial DUI offense		
Reckless/careless offense	17%	45%
Revoked driving license	23%	45%
Had at least one accident	29%	55%

($\chi^2(1, N=77)=7.23, p=.007, \phi=.31$) and to have had at least one accident ($\chi^2(1, N=77)=5.14, p=.023, \phi=.26$) as compared to the one-time only DWI group. In conclusion, what most strongly differentiated between those individuals who had another DUI offense during the 12–14 years after their initial DUI conviction was their driving history, not self-reported alcoholism symptoms or alcoholism potentiality.

3. Discussion

What makes the current study unique from previous longitudinal follow up studies of first time DUI offenders is that there were no robust differences between repeat offenders and non-repeaters with regards to differentiating psychological characteristics. For example, [McMillen, Adams, et al. \(1992\)](#), [McMillen, Pang, et al. \(1992\)](#) found that multiple offenders were significantly different from first offenders on characteristics such as hostility, sensation-seeking, psychopathic deviance, mania and depression. Self-reported alcohol consumption also tended to be higher among multiple offenders. In the current study, it is possible that given the obvious nature of the MAST and the significant validity differences found on the MMPI-2, that this accounts for why significant results were not obtained between the non-recidivists and the recidivists on the clinical scales of the MMPI-2. So, while it appears more definitive that DUI offenders differ significantly from non-offenders on various measures of psychopathology (e.g. [Cavaiola et al., 2003](#); [McMillen, Adams, et al., 1992](#); [McMillen, Pang, et al., 1992](#)) those differences between non-recidivist DUI offenders and recidivist offenders are more ambiguous. Perhaps [Perrine \(1990\)](#) best summarized these findings by noting that “most first offenders are problem drinkers who have simply not yet been caught for their second DUI offense.”

The notion that DUI recidivists would have had significantly greater blood alcohol levels at the time of their first DUI however this was not supported by the data. [Wieczorek, Miller, and Nochajski \(1992\)](#) also found a non-significant relationship between blood alcohol content and a diagnosis of alcohol dependence and alcohol abuse in a group of first time DUI offenders. These findings along with the current results cast doubt on the utility of the BAC for screening purposes. This should not be interpreted to mean that high blood alcohol levels at the time of the arrest do not have clinical utility. Rather, it is recommended that BAC be interpreted cautiously or in conjunction with other predictors of potential DUI recidivism.

Not unlike [Peck et al. \(1994\)](#), the major finding of the current study is that a poor driving record prior to and following the initial DUI offense was predictive of recidivism. The results are supportive of Jessor’s Problem-Behavior Theory. [Jessor \(1987\)](#) suggested that drinking and driving is often found to be one of many “problem behaviors” (defined as any behavior that departs from social or legal norms). Such problem behaviors might include other drug use, other legal transgressions, and financial

or occupational irresponsibility. In the current study, reckless driving behaviors, including driving while intoxicated, may be more a reflection of a poor decision-making lifestyle rather than merely of alcohol abuse per se. From a clinical standpoint, these findings should be taken into account when making determinations as to the type and duration of any alcohol education and/or treatment programs that are mandated.

Although the current study is limited by sample size, there are important implications for counselors working with first time DUI offenders. Given the propensity towards non-disclosure on pencil and paper measure, and the questionable utility of BACs, screeners may pay more attention to the offender's prior driving record, especially with respect to prior suspensions and reckless/careless driving offenses. It also appears that when utilizing measures such as the MMPI-2, special attention should be given to those who respond falsely or who lack insight into their behavior as they may be at higher risk for recidivism. Finally, given that the average length of time for being re-arrested was 6 years, it is important that consideration be given to instituting follow-up sessions for DUI offenders over the long term rather than grouping the treatment sessions in the months subsequent to the DUI conviction as most states currently require. Such long term follow up sessions may be more effective at reducing DUI recidivism than treatment provided only in the immediate aftermath of the initial DUI offense.

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