

DWI Recidivism: Risk Implications for Community Supervision

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[Risk Assessments and Community Corrections](#)

[Current Research on Predicting DWI Recidivism](#)

[DWI Recidivism and Criminological Theory](#)

[Finding the Differences between Single and Multiple DWI Offenders](#)

[DWI-Recidivism \(DWI-R\) Risk Assessment Tool](#)

[Practice and Policy Implications](#)

[For More Information](#)

[Project Disclaimer](#)

DRUNK DRIVING IS a serious problem for the U.S. Alcohol-related fatal driving crashes cause approximately 17,000 deaths each year in the United States. Several policies and practices have been implemented across jurisdictions to address drunken driving, including increasing the minimum drinking age and lowering illegal thresholds for blood alcohol concentration (BAC). States and local jurisdictions have also administered fines, incarceration, substance abuse treatment, electronic monitoring, and other tactics to individuals convicted of driving while intoxicated (DWI); yet drunk driving incidents continue to go undetected and arrests, injuries, and fatalities prevail (LaBrie, Kidman, Albanese, Peller, & Shaffer, 2007; Wagenaar, Maldonado-Molina, Erikson, Ma, Tobler, & Komro, 2007).

Justice officials seek the most accurate ways to predict the future behavior of the nearly 1.5 million DWI arrestees each year. The community corrections field needs assistance to assess and classify DWI offenders. Effective strategies rely upon risk assessment tools with high levels of predictive accuracy to classify offenders based upon their likelihood to reoffend (Andrews et al., 1990). The risk assessment literature is filled with general offender tools, such as the Level of Service Inventory-Revised (LSI-R), COMPASS, the Wisconsin, and many others (Andrews, Bonta, & Wormith, 2006; Bonta, 2002; Lowenkamp & Latessa, 2004; Taxman & Thanner, 2006), but little in the way of tools to predict DWI recidivism. There are also several screening tools to measure the level of alcohol abuse or addiction of offenders, such as Alcohol Severity Use Survey (ASUS) and the Michigan Alcohol Screening Tool.

DWI recidivism is not caused by alcoholism or addiction. Rather, it is caused by the decisions of high-risk drivers—individuals who lack appropriate levels of restraint or self-control to resist the impulsivity of driving drunk (Keane, Maxim, and Teevan, 1993). Drunk driving is rooted in complex processes of social learning and psychological factors that promote antisocial attitudes, desires, motives, and rationalizations acceptable of law violations (e.g., Akers, 1998; Andrews & Bonta, 2003; Brauer, 2009; Burgess & Akers, 1966). This perspective suggests similar pathways to chronic criminal lifestyles, including drunken driving, exist and are rooted in social-psychological characteristics (Gottfredson & Hirschi, 1990; Jessor, Donovan, & Costa, 1991),

and these characteristics supersede the specific technical aspects of any criminal activity (e.g., substance abuse disorders).

Estimates suggest the majority of all DWI episodes are committed by a small group of chronic offenders (see Anderson, Snow, & Wells-Parker, 2000; Cavaiola, Strohmetz, & Abreo, 2007; Cavaiola, Strohmetz, Wolf, & Lavender, 2003; Chang, Lapham, & Wanberg, 2001; Chang, Lapham, Baca, & Davis, 2001; Jewell, Hupp, & Segrist, 2008; McMillen, Adams, Wells-Parker, Pang, & Anderson, 1992). Further analysis of these numbers reveals about 3-5 percent of drivers account for about 80 percent of the drunken driving episodes (Beirness, Simpson, & Desmond, 2002; 2003), and the remaining 20 percent of DWI episodes are accounted for by the remaining 185 million drivers in the United States. Identifying this small cadre of persistent drunken drivers is essential to develop effective intervention strategies.

With funding by U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA), the American Probation and Parole Association (APPA) is working to develop a DWI risk assessment tool and training curriculum for community corrections professionals. This article provides an overview of the development of a pilot risk assessment tool to classify DWI offenders on community supervision. Before describing this tool, we briefly discuss our theoretical perspective regarding DWI recidivism. Next, we describe the methods used to develop the pilot risk assessment tool and the key findings of the statistical analysis of the nearly 4,000 DWI offenders in our sample. This analysis relies on statistical techniques to identify differences according to the number of prior DWIs relative to individuals without multiple DWIs on a series of demographic characteristics, the LSI-R, and the ASUS. Finally, we mention the future steps of this project and directions for policy and practice on the DWI risk assessment tool.

[back to top](#)

Risk Assessments and Community Corrections

Risk assessments are not new to community corrections. In fact, Burgess (1928) developed a risk assessment for the Illinois Parole Board in the late 1920s to separate offenders into separate categories according to their expected probability to reoffend. Risk assessments are predictive instruments used to classify offenders according to their likelihood of recidivism. Supervising officers routinely make predictions regarding the likelihood of offenders committing new crimes, failing treatments, or being revoked for technical violations. A risk factor is any offender characteristic related to the occurrence of one of several outcomes. Two general types of risk factors are used to predict future criminal behavior: static and dynamic. Static risk factors are those individual traits that do not change or change only in a single direction and include criminal history, gender, race, age, and other historical characteristics. Dynamic risk factors—referred to as criminogenic needs—are offender traits that do change and include an individual's associates, attitudes, and values toward criminality (Andrews & Bonta, 2003; Gendreau, 1996).

For the purposes of the risk assessment tool, "risk" is defined as the probability of an individual convicted of one DWI being convicted of a subsequent DWI. Accurately classifying offenders according to their relative likelihood of being convicted for a subsequent DWI has several implications for organizational resources. Generally, higher-risk offenders need more officer attention and agency resources than lower-risk offenders. Research suggests that treatment programs incorporating both high- and low-risk offenders together can have a negative effect on low-risk offenders and less of an impact on high-risk offenders (Andrews et al., 1990; Lowenkamp & Latessa, 2004).

Six assumptions guided the risk assessment development process. These assumptions include the following:

- Risk for drunk driving can be predicted.
- Efforts to predict risk should be guided by research and evidence-based practices.
- Policies and practices developed from risk assessment research will further reduce the extent of future drunk driving.
- Predicting risk will not eliminate drunk driving completely, but it will help to reduce it.

- Community-based corrections professionals are in a prime position to reduce drunk driving.
- Policymakers will continue to play an important role in controlling drunk driving.

[back to top](#)

Current Research on Predicting DWI Recidivism

Several screening instruments exist to measure the likelihood of substance abuse disorders and drinking problems. Some of these instruments attempt to predict subsequent DWI behavior, although such a task is difficult due to the improbability of determining the "true" occurrence of drinking and driving behavior for an individual. Researchers continue to examine the differences between first-time DWI offenders and multiple DWI offenders. One assumed difference between the two groups is that multiple DWI offenders have higher levels of alcohol consumption. Cavaiola and associates (2003), however, found this assumption to be untrue, as the offenders within the two groups did not differ on BAC at the time of their most recent arrests. With regard to other possible differences, the authors also considered psychological scales measuring depression, mania, and psychopathic traits to compare the two groups; yet, they did not find any significant differences.

In a follow-up study, Cavaiola and associates (2007) sought to isolate the characteristics of multiple DWI offenders who were followed over a 12-year period. The authors analyzed 77 first-time DWI offenders of whom 38 percent were convicted of a subsequent DWI. Once again, significant differences were not found across BAC levels at the time of arrest in self-reported alcohol use disorders or alcoholism potential. In other studies, however, multiple DWI offenders have been found to have higher BAC levels at the time of arrest (Chang, Gregory, & Lapham, 2002). Differences among these groups were found in their level of honesty or deception on the screening instruments, as multiple DWI offenders were more likely to be dishonest than first-time DWI offenders in the sample. In addition, multiple DWI offenders were found to have significantly more driving infractions than first-time DWI offenders.

Other research has determined differences in demographic factors among first-time DWI offenders and multiple DWI offenders. C'de Baca, Miller, and Lapham (2001) found multiple DWI offenders to be younger (i.e., less than 29 years old), single, male, less educated (i.e., less than 12 years of school), and Hispanic. Chang and associates (2002) found age and education to be among the best predictors for recidivism. More specifically, offenders who were younger (i.e., between 16 and 25) and less educated (i.e., having less than or equal to 12 years of school) were more likely to be convicted for a subsequent DWI.

Overall, present substance abuse screening methods cannot accurately predict DWI recidivism (Chang et al., 2002). Criminological theory may fill this void in the DWI risk assessment literature by clarifying the differences between multiple DWI offenders and those with limited DWI involvement.

[back to top](#)

DWI Recidivism and Criminological Theory

Criminologists have routinely found that the bulk of criminal acts are committed by a small cadre of persistent, chronic, or career criminals. These individuals tend to be resistant to behavior-changing efforts and demonstrate disregard for formal or informal social control interventions; instead of aging out of criminal and antisocial behaviors, they become entrenched in their criminality throughout much of their life course. Wolfgang, Figlio, and Sellin associates (1972) were among the first criminologists to discover this finding. In their study, they found about 6 percent of the subjects (n=10,000) were responsible for slightly over half of all crimes committed by the sample. Other criminologists began to study this seemingly persistent and general group of career criminals (Blumstein et al., 1986). Central to this typological research is Moffitt's (1993) classification of offenders as life-course persistent and adolescence-limited. Her research focuses on childhood experiences and risk factors (e.g., hostile temperament, low IQ, and poor self-control) that contribute to later extended patterns of criminality and deviance, or the lack thereof. Moffitt (1993) defines life-course persistent offenders as individuals who

exhibit antisocial personality characteristics and thus engage in criminality throughout their lives. Those individuals who appear to become temporarily involved in crime, leading them to have shorter criminal careers, Moffitt (1993) defines as adolescence-limited offenders.

Surprisingly, there is little discussion of this phenomenon in the more recent risk assessment literature. Instead, there is an emphasis on the stability of offending, with change only considered as criminogenic needs to be addressed by treatment. It seems that even static features of individuals' lives provide temporary predictors of future behavior that must be considered within larger statistical models that control for age and the related life course trajectories and transitions (Sampson & Laub, 1993).

In one of the most extensive criminological studies, Sampson and Laub (1993; Laub & Sampson, 2003) report longitudinal analysis of the offending patterns of delinquent males from ages 7 to 70. The researchers conducted extensive follow-ups with the sample and found that offending peaked sometime around 15–17 years of age, declined in the early 20s, took a precipitous fall around age 37, and continued to decline for the rest of the life course. For the purposes of this article, the offenders' involvement with alcohol and drug offenses peaked around 19 years of age, remained high until offenders were in their late 40s, at which point the drug and alcohol involvement dropped drastically (Sampson & Laub, 2003). To further elaborate, they found that alcohol and drug offenses appear a bit later in life and offenders struggle with these behaviors for longer periods of their life, but eventually aging out often does occur.

There is a multitude of criminological data on social-psychological processes involved in general offending patterns that can be applied to recidivist DWI offending. Repeat DWI is a type of crime rooted in anti-social attitudes, values, and beliefs and learned throughout the life course. Despite the evidence that substance abuse rates do not vary among single and multiple DWI offenders, agencies have used longer, more nuanced substance abuse disorder screening instruments as a way to confront the challenges that multiple DWI offenders pose to the justice system. Furthermore, even if many multiple DWI offenders have substance abuse disorders, it is not justifiable to claim that substance abuse disorders cause DWI recidivism. The community corrections field is in need of a refined risk assessment instrument to more accurately predict DWI recidivism.

[back to top](#)

Finding the Differences between Single and Multiple DWI Offenders

We use statistical techniques to identify the most parsimonious set of items from the LSI-R (54 items) and the ASUS (94 items) on a sample of 3,884 convicted DWI offenders from a state located in the Southwest region of the United States. The LSI-R is one of the most popular general risk assessment tools used in the community corrections field today to measure risk of recidivism and develop case plans (Lowenkamp, Lovins, & Latessa, 2009), and the ASUS is a robust measure of substance use patterns and consequences. Our main interest is to determine the unique differences between single and multiple DWI offenders in order to develop a risk assessment tool to reliably predict DWI recidivism.

Nearly 70 percent of the sample were married, almost 60 percent indicated being employed, the majority (90 percent) were males, and about half of the sample was between 30 and 44 years old. The bulk of the sample described their race and ethnicity as White (63.7 percent), while the remaining subjects in the sample described themselves as Native American (15.1 percent), Black (12.2 percent), and Hispanic (9 percent). A large percentage of the sample lacked much formal education, with 40.2 percent having less than a high school education and another 38.2 percent have a GED or high school education. The data included three treatment indicators, which revealed that slightly more than half of the sample did not participate in any type of inpatient treatment, nearly 40 percent participated in outpatient treatment programs between one and two times, and 20.4 percent have experienced mental health treatment one or two times. Nearly 70 percent of the sample was previously arrested for alcohol or drugs, and almost half never participated in alcohol or drug education. The current DWI conviction was the first for almost half of the sample (47.1 percent), while 27.7 percent had one prior DWI and slightly more than 25 percent had more than two prior DWIs. About half of the sample was on probation in the

past, and about 30 percent were previously incarcerated at a prison facility.

With regard to the differences between the single and multiple DWI offenders in the sample, the multiple DWI offenders had more extensive legal histories than their counterparts. Multiple DWI offenders had been incarcerated more times and served more terms on probation than single DWI offenders. Additionally, multiple DWI offenders had more participation in outpatient treatment and mental health programs than single DWI offenders. Interestingly, there were no observed relationship differences between the groups according to attendance in alcohol or drug education programs, and nearly identical distribution of offenders with prior alcohol or drug arrests, with almost 94 percent of each group having at least one prior alcohol or drug arrest.

Differences between the two groups were also revealed with regard to the items on the LSI-R. In general, multiple DWI offenders, particularly those who had four or more prior DWI convictions (n=187), were more likely to have demonstrated patterns of difficulty following rules, and once they were punished for misconduct, they were more likely to continue with their law-violating behaviors. Education was also an important factor in differentiating between the various types of DWI offenders. Nearly 60 percent of the most chronic DWI offenders (n=187) did not finish the 12th grade, compared to nearly 50 percent of single DWI offenders (n=1,831). This difference is interesting, because not finishing high school is potentially related to several other important indicators attached to criminal offending. That is, not finishing high school not only prevents individuals from learning basic technical skills and knowledge needed to perform in the labor market, but it also suggests a lack of delayed gratification, work ethic, and dependability. Overall, our findings with regard to the LSI-R items start to paint a picture of the multiple DWI offender in our sample as a white male, between 30 and 44 years old, who is employed but has a low educational level; he has attended both outpatient and mental health treatment, has an early age of criminal onset as well as general offending, and has an overall unwillingness to change and a poor attitude about punishment.

The items on the ASUS also revealed interesting differences between single and multiple DWI offenders in the sample. With regard to drug and alcohol use, multiple DWI offenders (n=2,053) were more likely to use certain substances, particularly cigarettes, amphetamines, and tranquilizers, more times than single DWI offenders. Multiple DWI offenders also experienced less violent episodes (e.g., fist fights and brawls) than their counterparts. In relating this finding to the differences found with the LSI-R items, it seems that multiple DWI offenders may engage in less violence, but they still engage in a great deal of deviance and disregard for the law. Their attitudinal responses to various ASUS items support this assertion. In general, multiple DWI offenders indicated that it was okay to break the law if it does not hurt anyone. This may suggest that people with entrenched neutralization techniques are significantly more likely to be multiple DWI offenders. Multiple DWI offenders were also more likely to lie or not tell the truth about something, as compared to single DWI offenders. The ASUS provides us with several additional insights into the typology of multiple DWI offenders as possessing several signs of emotional instability. That is, this group was more likely to see and hear things not present, be mentally confused, nervous or anxious, and have drastic mood swings from happy to depression.

[back to top](#)

DWI-Recidivism (DWI-R) Risk Assessment Tool

Our analysis proved helpful in developing a risk assessment tool to predict DWI recidivism. First, it should be clear that the level of alcohol or drug use disorder is not the underlying characteristic shaping DWI recidivism patterns. Substance abuse disorders may undoubtedly be a contributing factor to DWI recidivism, but they are not the central factor explaining this phenomenon. Second, it should be noted that both the LSI-R or ASUS were not specifically designed to measure DWI recidivism, and this is in no way meant as a comment on the validity of these tools. Third, DWI recidivism is a separate phenomenon from general recidivism. Specific decisions are made by individuals in relation to drunken driving, and these decisions may be related to general forms of deviance, risky driving behaviors, and/or a lack of respect for the law. Finally, several statistical associations were found between the LSI-R and ASUS items that provide some help in developing a DWI risk assessment instrument.

The DWI-Recidivism (DWI-R) risk assessment tool is divided into seven domains. The first

domain is "mental health," which includes eight items; five of these are adjusted significant items from the analysis, with three additional items. Given that several of the LSI-R and ASUS mental health items were significantly related to multiple DWI offenders, these offenders may have significant mental health issues.

The second domain is "socio-personal responsibility." It is intended to uncover the level of personal and social responsibility of an individual. Six of the first seven items are drawn from the LSI-R and ASUS, with the other item used as another measure of employment. Four additional items are included to target issues related to the individual's position in the labor market.

The third domain is "risky substance use," which is intended to measure features that relate to an individual's level of risky drug and alcohol use. There were surprisingly few relationships between drug and alcohol use and DWI recidivism. This domain contains nine items.

The fourth domain is "criminal history." It is intended to measure an individual's past involvement with the criminal and juvenile justice system. This domain includes items to determine an individual's involvement with crime in the past, especially as a teenager, but also how the individual has dealt with his or her punishment.

The fifth domain is "desire for change," which includes four questions related to an individual's desire to change his or her drinking patterns. Deception will be an issue with all of the items, and such highly subjective items may have elevated deception that goes undetected. The analysis thus far suggests, however, that an individual's willingness to report a desire to change is a significant factor in reducing DWI recidivism.

The sixth domain is "internalized locus of responsibility and DWI." It is intended to measure the connection between an individual's internal responsibility and DWI recidivism. This domain has 10 items; the first four items relate to the offender's reasoning during his or her most recent drunken driving episode and the degree of significance the individual rates driving drunk, while the next six items relate to the individual's perception of the most negative aspects of drunken driving.

The seventh domain is "risky driving." It is intended to measure specific characteristics that relate to driving in general to test risky driver theories (i.e., multiple DWI offenders are risky drivers). This domain has seven items.

[back to top](#)

Practice and Policy Implications

In the near future, we will pilot the DWI-R in up to three jurisdictions with convicted DWI offenders on community supervision. Upon completion of the testing, the DWI-R will be modified as needed to develop the most reliable tool possible. In addition, it will be developed into a user-friendly tool that will be easy for virtually any community corrections professional to administer. Our goal is for the DWI-R to become an important assessment component for community corrections officers in reliably predicting and controlling DWI recidivism and provide guidance in allocating limited resources.

We anticipate that the DWI-R will provide the foundation for policymakers to call for widespread risk assessment of convicted DWI offenders. This would follow the pattern of other legislative remedies expanded to mandate that certain categories of offenders (e.g., sex offenders, domestic violence offenders) be reassessed for recidivating prior to placement on community supervision. The development of a risk assessment tool to predict DWI recidivism will provide the community corrections field with guidance needed to improve efforts to control habitual drunk driving.

[back to top](#)

For More Information

For more information on the DWI-R, contact Matthew DeMichele at the Justice Center for

[back to top](#)

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[back to top](#)

[References](#)

[Tables](#)

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[back to top](#)

DWI Recidivism: Risk Implications for Community Supervision

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[back to top](#)