

Drunk Driving: Why Current Programs and Sanctions Have Not Solved the Problem

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Drunk Driving: Why Current Programs and Sanctions Have Not Solved the Problem

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Abstract

Drunk Driving: Why Current Programs and Sanctions Have Not Solved the Problem

Jason A. Holtz

Under the Supervision of Dr. Susan Hilal

Statement of the Problem

Drunk driving has been a major social problem ever since the automobile came into popular use. The contribution of alcohol to increased risk of traffic accidents and their associated costs has been well established (Cavaiola & Wuth, 2002; MADD, 2008; National Highway Traffic Safety Administration [NHTSA], 2007; Quinlan, 2005; Taylor, 2002). Alcohol-related crashes in the United States cost the public an estimated \$114.3 billion in 2000, including \$51.1 billion in monetary costs and an estimated \$63.2 billion in quality of life losses. People other than the drinking driver paid \$71.6 billion of the alcohol-related crash bill, which is 63 percent of the total cost of these crashes (Taylor, 2002).

Method of Approach

This paper incorporates secondary research of peer reviewed articles from scholarly journals, concepts gathered from criminal justice textbooks and lectures and statistical data compiled from government and civilian entities. The literature compiled was utilized to show the history, development and the current magnitude of the problem. Previous evaluative studies are discussed in regards to current programs and sanctions.

Theoretical explanations are discussed as it relates to the causation of the offense and the effect of the sanction. After all of the research was integrated, the information obtained is utilized to make a summation of the current state of affairs and outlines future implications of change in current policy and for further research.

Results of the Study

The formal social control mechanisms instituted in the US have attempted to control drunk driving by utilizing the rational choice, or general deterrence theory. However, the attempt to control drunk driving by criminalizing it does not deal with the underlying causes of drunk driving. Coercive formal social controls are not designed to treat the underlying causes of social problems alone. This paper finds that alternative rehabilitative sanctions need to be implemented in conjunction with current sanctions and greater measures need to be taken to change the social acceptance of drunk driving.

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SECTION I. INTRODUCTION-DISCUSSION OF THE PROBLEM

Statement of the Problem

Drunk driving has been a major social problem ever since the automobile came into popular use. The contribution of alcohol to increased risk of traffic accidents and their associated costs has been well established (Cavaiola & Wuth, 2002; MADD, 2008; National Highway Traffic Safety Administration [NHTSA], 2007; Quinlan, 2005; Taylor, 2002). Alcohol-related crashes in the United States cost the public an estimated \$114.3 billion in 2000, including \$51.1 billion in monetary costs and an estimated \$63.2 billion in quality of life losses. People other than the drinking driver paid \$71.6 billion of the alcohol-related crash bill, which is 63 percent of the total cost of these crashes (Taylor, 2002).

Furthermore, in 2006, an estimated 17,602 people died in alcohol-related traffic crashes in the United States - an average of one every 30 minutes. These deaths constitute 41 percent of the 42,642 total traffic fatalities. Of these, an estimated 13,470 involved a driver with an illegal Blood Alcohol Content (BAC) (.08 or greater) (NHTSA, 2007). About three in every ten Americans will be involved in an alcohol-related crash at some time in their lives (NHTSA, 2001). In 2002, surveys estimated that Americans took over 159 million alcohol-impaired driving trips, compared with only 116 million in 1997 (Quinlan, 2005). The problem is clear, the current programs and sanctions in place are not accomplishing enough to reduce drunk driving and improve highway safety, which equates to lives lost or destroyed and resources (including time and money) wasted.

The current level of deterrence-based laws provides an opportunity to expand the criminological understanding of deterrence, specifically of the capabilities and limitations of the law as an instrument for social control. According to theoretical explanations, people will engage in criminal and deviant activities if they do not fear arrest and punishment. Social norms (informal social control mechanisms), laws, and their enforcement (formal social control mechanisms) are designed and implemented to produce and maintain the image that "negative" and disruptive behaviors will receive attention and punishment. Although specific individuals become the object of enforcement activities, general deterrence theory focuses on reducing the probability of deviance in the general population. General deterrence is a warning to potential offenders that they will be punished, and in doing so, serves as an example to discourage others (Cullen & Agnew, 2006; Paternoster & Bachman, 2001).

Significance of the Problem

Since 1982 there has been a dramatic decrease of alcohol related crashes resulting in injury or death (NHTSA, 2007). Proponents of general deterrence based sanctions view tougher penalties as the reason. Opponents could view advancements in vehicle engineering and emergency medical procedures as the cause. However, in the last ten years alcohol related crashes resulting in injury and death, per vehicular mile traveled, has remained unchanged (NHTSA, 2009). During the same time frame states across the nation have strengthened drunk driving laws in lowering the per se limit to .08, as well as toughening sanctions to include mandatory incarceration, increased monetary fines, longer license revocations and even vehicle seizure. Therefore it appears that current deterrent

based sanction have worked in the past, but has not had a significant affect on traffic safety as it relates to alcohol related crashes. Another indicator of the affect of deterrent based sanctions to address the problem is to review arrest rate statistics. During the last ten years, there have been approximately 1.4 million arrests for impaired driving every year, without significant change. The arrest rate equates to one for every 122 licensed drivers, again without significant fluctuation (FBI, 2009; NHTSA 1999-2008). However, this alone does not provide the full extent of the problem since it can be assumed that a lot more people drink and drive that are not caught, nor reported or accounted for through self-reporting measures.

The problem also has collateral implications on the American criminal justice system. Drunk driving offenders consists of a substantial portion of the criminal justice population. As previously stated, in the past ten years, over 1.4 million people have been arrested for impaired driving every year. This has produced a massive burden on a criminal justice system that is already overwhelmed (Dunlap, Mullins & Stein, 2007).

Method of Approach

The method of approach incorporates secondary research of peer reviewed articles from scholarly journals, concepts gathered from criminal justice textbooks, statistical data compiled from government and civilian entities. The literature compiled was utilized to show the history, development and the current magnitude of the problem. Previous evaluative studies are discussed in regards to current programs and sanctions. Theoretical explanations are discussed as it relates to the causation of the offense and the effect of the sanction. After all of the research was integrated, the information obtained

is utilized to make a summation of the current state of affairs and outlines future implications of change in current policy and for further research. For illustrative purposes, a special focus will be placed on the State of Wisconsin.

Limitations and Assumptions

There have been many policies, programs and enforcement tactics to combat the problem of drunk driving. This seminar paper does not include them all, but incorporates the most utilized and more renowned. For instance, license plate sanctions such as the “Whiskey” Plate in Minnesota is not covered in this paper because only three states in the nation utilize this program (Iowa, Minnesota & Ohio) (NHTSA, 2008). The assumption that a program or policy that is not addressed in this paper, should not take away from the program. Therein lies a limitation of this paper, for programs and policies not covered may in turn be a very viable response, perhaps a solution to the impaired driving problem.

SECTION II. LITERATURE REVIEW

The following review is divided into five sections. The first section covers associated legal definitions involving drunk driving. The second section looks at drunk driving enforcement from a historical aspect. For illustrative purposes, special emphasis will be placed on the State of Wisconsin. The third section is a historical review of the problem of drunk driving. The fourth section discusses the current scope of the problem of drunk driving. The final section looks at current policies and programs that have been employed as formal or informal social control mechanisms to address the problem.

Legal Definition

Drunk driving is called several things, such as Operating While Intoxicated (OWI), Driving While Intoxicated (DWI), and Driving Under the Influence of Alcohol or Other Drugs (DUI). This seminar paper utilizes the term *drunk driving* as it has become the most recognized and commonly understood definition. However, when citing reports or laws, the original terminology will be utilized.

Blood Alcohol Content (BAC) is the ratio of ethanol alcohol in the blood stream of the human body. This seminar paper utilizes NHTSA's definition of intoxication, "Drivers are considered to be alcohol-impaired when their blood alcohol concentration (BAC) is .08 grams per deciliter (g/dL) or higher" (NHTSA, 2009, p. 1). Alcohol related crashes are defined as a crash involving a driver with a BAC of .08 or higher.

The legal definition of drunk driving is driving or operating a motor vehicle while under the influence of an intoxicant, a controlled substance, or any combination of an intoxicant, or under the influence of any other drug to a degree which renders him or her

incapable of safely driving, or under the combined influence of an intoxicant and any other drug to a degree which renders him or her incapable of safely driving; or operating a motor vehicle with a BAC of .08 or higher. "Drive" means the exercise of physical control over the speed and direction of a motor vehicle while it is in motion. "Operate" means the physical manipulation or activation of any of the controls of a motor vehicle necessary to put it in motion.

Historical Aspect of Enforcement

The first sanctions against drunk driving were imposed by the railroad industry in the mid-1800s (Traffic Safety Center, 2003). In 1897, a 25-year-old London taxi driver named George Smith was the first person ever arrested for drunk driving after slamming his cab into a building. Smith later pled guilty and was fined 25 shillings. In the United States, the first laws against Drunk Driving went into effect in New York in 1910 (History Channel, 2009). Many states soon followed New York in enacting and reenacting drunk driving laws and sanctions. For illustrative purposes, the paper will specifically look at the drunk driving legislative history for the State of Wisconsin.

The first law against operating a vehicle while intoxicated in Wisconsin was enacted in the mid-1800's, long before automobiles were invented. In 1911, the first law in Wisconsin concerning driving a motor vehicle went into effect. In 1921, the law was changed, including sanctions of incarceration for first time offenders. There were no references to those who reoffended. A prohibitive BAC was first defined and enacted in Wisconsin in 1949; the law specified .15 as evidence of intoxication (Dieringer Research Group, 2001).

In 1969, the Implied Consent Law was enacted in Wisconsin, meaning every time one operates a motor vehicle they automatically consent to evidentiary chemical test when requested by a police officer. In 1973, the prohibitive BAC was reduced to .10. By 1973, the penalty for the first offense no longer allowed the option of jail time (Dieringer Research Group, 2001).

In 1983, a law changed the minimum legal drinking age from 18 to 19 and created an absolute sobriety provision for persons under the legal drinking age in Wisconsin. In 1985, when the legal drinking age was changed to 21, the absolute sobriety provision was left at age 19. In 1988, an automatic six-month Administrative Suspension went into effect; those who had a BAC higher than .10 were suspended 30 days after the chemical test (Dieringer Research Group, 2001).

In 1993, a Wisconsin law was enacted that created alternative penalties and treatment opportunities for repeat drunk driving offenders, including possible seizure of vehicles, and a prohibitive BAC of .08 for persons with two or more prior drunk driving offenses. In 1999, several substantive changes were implemented, including increased penalties for repeat offenders, lowered prohibited alcohol concentration for repeat offenders, such as creating a .02 prohibitive BAC after the third drunk driving offense, and expanded the ability for courts to use ignition interlock devices (Dieringer Research Group, 2001).

In 2005, Wisconsin was one of the last states in the nation to lower the prohibitive BAC to .08 for first offenders. However, if an individual is arrested with a BAC of .08 to .09, most of the sanctions are not applied. Presently, in Wisconsin, first offense drunk

driving is still a civil forfeiture. An individual is not charged with a felony until their fifth offense. Wisconsin is one of twelve states that prohibit sobriety check points.

Historical Review of the Problem

A national crusade against drunk driving arose in the 1980's. The catalyst was in May 1980, 13-year-old Cari Lightner was killed by a drunk driver as she walked on the sidewalk in her suburban Sacramento neighborhood. The driver, Clarence William Busch, did not stop, but when he was apprehended he was found to have a blood alcohol level of 0.20 percent and two previous drunk-driving convictions. He was, in fact, out on bail for a similar intoxicated hit-and-run. Cari Lightner left behind two sisters, one of them her twin. The Lightners' story was horrifying, but not unique as there are tens of thousands like hers. However, in this case, the girl's mother, Candace Lightner, used her grief to fuel a new grassroots organization dedicated to reshaping the public's perception of drunk driving by starting Mothers Against Drunk Drivers (MADD) (MADD, 2008a). Since 1980 (the year MADD was founded), alcohol-related traffic fatalities have decreased by about 44 percent, from over 30,000 to under 17,000 and MADD has helped save over 300,000 lives (MADD, 2008b; NHTSA, 2004).

In 1982, the problem received the highest level of recognition, when President Ronald Reagan appointed a thirty member Presidential Commission on Drunk Driving to conduct a national study of the problem. President Reagan called the problem an epidemic of drunk driving on the nation's roads. President Reagan stated, "Americans are outraged that such a slaughter of the innocent can take place on our highways. Our anger and frustration are matched only by the grief of those who have lost loved ones in

such accidents” (as cited in Cavaiola & Wuth, 2002, p.10). Spurred by this wave of public outrage, virtually every state enacted new laws and policies. The most important of these were deterrence oriented: to reduce drunk driving through tougher punishment, in the form of either mandatory imprisonment or longer sentences, or both. The law may affect social behavior in a variety of ways, but existing policy is founded predominantly on the theoretical proposition of general deterrence. According to this proposition, “undesirable behavior will be reduced to the extent that the relevant public perceives the threatened sanctions as certain, severe, and promptly imposed” (Ross, 1984, p. 25).

Current Scope of the Problem

The present scope of the problem is enormous. Alcohol-related crashes in the United States cost the public an estimated \$114.3 billion in 2000, including \$51.1 billion in monetary costs and an estimated \$63.2 billion in quality of life losses. People other than the drinking driver paid \$71.6 billion of the alcohol-related crash bill, which is 63 percent of the total cost of these crashes (Taylor, 2002). Currently, it is estimated that the cost to be in excess of \$100 billion (Marin Institute, 2009).

Furthermore, in 2006, an estimated 17,602 people died in alcohol-related traffic crashes—an average of one every 30 minutes. These deaths constitute 41 percent of the 42,642 total traffic fatalities. Of these, an estimated 13,470 involved a driver with an illegal BAC (.08 or greater) (NHTSA, 2007). About three in every ten Americans will be involved in an alcohol-related crash at some time in their lives (NHTSA, 2001). In 2002, surveys estimated that Americans took over 159 million alcohol-impaired driving trips, compared with only 116 million in 1997 (Quinlan, 2005).

An estimated 1,483,396 drivers were arrested for drunk driving in 2008 (FBI, 2009). However, the arrest rate only represents the drivers who were arrested, it does not depict the severity of the “big picture.” Furthermore, it can not compare individual states or measure the culture, or acceptance of alcohol. To gain a clearer picture of how individual states measure against one another, the following variables could be reviewed: binge/heavy drinking, underage drinking, alcohol-related fatalities, alcohol dependence, alcohol consumption per capita, and alcohol-related health costs.

The U.S. Centers for Disease Control (CDC) defines binge drinking as having five or more drinks per occasion for men and four or more drinks per occasion for women. Wisconsin and North Dakota led the nation with 23% of their adults engaging in binge drinking in 2007 at least once in the past month. The median was 15%, the range was between 8% and 23%. (CDC, 2010).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), in 2008, an estimated 10.1 million underage persons, aged 12 to 20 (26.4 percent of this age group) reported drinking alcohol in the past month in the United States. North Dakota and Wisconsin led the nation with having more than 33% engaging in consumption and over 25% engaging in binge drinking (SAMHSA, 2010).

According to NHTSA (2008), the percentage of fatalities in 2007 where the driver had a BAC of .08 or higher was 35% in the U.S. Only three states had a percentage higher than 40: North Dakota (47.7%), South Carolina (43.4%) and Wisconsin (41.4%).

According to SAMHSA (2010), in 2008, 22.2 million people over the age of 12 were classified with a substance dependence or abuse in the past year. Of these, 15.2 million people were dependent on or abused alcohol. The highest percentages of the

population who were in this category resided in Montana, North Dakota, South Dakota and Wisconsin (SAMHSA, 2010).

In United States, per capita alcohol consumption was two and one-half gallons per resident age 14 or older in 2007. Utah had the lowest per capita consumption rate of 1.34 gallons. New Hampshire had the highest per capita consumption rate of 4.22 gallons; Nevada was second with 3.61 gallons; Wisconsin was not far behind at 3.0 gallons per resident (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2009). It appears when gauging the drunk driving problem, arrest and fatality rates only depict the problem's surface; not the problem's foundation.

To address the drunk driving problem, the criminal justice system has implemented various policies and sanctions. These policies and sanctions can be bifurcated into two functions: formal control mechanisms and informal control mechanisms. The main formal control mechanisms that have been employed include, but not limited to: harsher sanctions, "crackdowns" and saturation enforcement, ignition interlock devices and the use of specialized drunk driving courts. Informal control mechanisms that have been implemented include, but not limited to: enhanced treatment programs in lieu of incarceration, public education through the media, and Victim Impact Panels.

Current Policies and Programs

Formal Control Mechanisms

The purpose of formal control mechanisms is to attain and maintain conformity with respect to the rules of its society. Laws that are instituted by lawmakers serve as the

foundation of formal social control to attain conformity. Police enforce the laws in an attempt to maintain conformity. The entire criminal justice system is the delivery mechanism of formal social control. The main formal controls as it deals with drunk driving include: mandatory harder sanctions, “crackdowns” and saturation patrols, ignition interlock devices and specialized courts.

Mandatory Harsher Sanctions

The courts could utilize the “if more is better, then even more is best” approach to sanctioning drunk drivers. Escalating the punishments of drunk drivers could be used to deter others from committing a similar offense. A heavier fine could be levied against the drunk driver. A longer jail term could be instituted. Driving privileges could be revoked for longer periods of time. However, current research has found no evidence to support more sanctions equating to a higher deterrence rate or a lower recidivism rate.

The National Institute of Justice in 1984, reviewed jail sentencing practices in several U.S. jurisdictions and concluded that implementation of mandatory jail sentences for drunk driving would be likely to produce the following results (Ross, 1992):

Drunk driving arrests would increase.

Court workloads would increase.

More defendants would challenge, postpone, or avoid compliance with court procedures and decisions.

Effects on subsequent recidivism rates would vary from one site to another.

Incarceration rates would increase.

Strains would be placed on the correctional system.

A variety of special programs and facilities would be required.

Traffic fatalities might decline, evidence was inconclusive.

According to Fradella (2000), virtually all of Ross' (1992) predictions came to fruition in Arizona with their mandatory minimum sentencing for DUI offenses was recodified in 1995. Coincidentally, the mandatory minimum sentencing platform took the place of the therapeutic offender diversion program. Although drivers in Arizona were aware of the state's mandatory jail term for first-time offenders, such awareness had no effect on driver's behaviors or on alcohol-related crashes (Fradella, 2000). The threat of incarceration may be symbolically important to some people, but not for everyone.

The Dieringer Research Group (2001) conducted a study on sanctions given by Wisconsin Courts and found that, "Jail terms without treatment or education, even long jail or prison sentences, are not effective by themselves in reducing repeat drunk drivers" (p. 5). The sanction of incarceration by itself, it is not for the most part effective, but it can be useful when combined with other sanctions, such as a sanction for an offender that violates conditions of supervision, when incarceration is combined with intensive supervision or to manipulate the offender to choose to participate in an education or treatment program in lieu of incarceration (Dieringer Research Group, 2001).

The age and medical conditions of repeat drunk drivers have been increasing. Some offenders who should be sentenced to periods of incarceration, cannot serve such sentence due to medical complications. Likewise, long-term incarceration for repeat offenders is not effective in changing the behaviors of the offender after release, but it does incapacitate them by getting the offender off the streets for the term of the sentence (Dieringer Research Group, 2001). Weinrath and Gartrell (2001) found similar results, in

that in that repeat offenders are generally sentenced to longer incarceration terms and are likely resistant to the deterrent effect of incarceration, given their persistent offending. This appears to be a counterintuitive effect to the deterrent effect of incarceration of repeat offenders. Furthermore, the financial cost of widespread long-term incarceration to the state is prohibitively high.

“Crackdowns” or Saturation Enforcement

Saturation patrols or “crackdowns” to detect/deter drunk driving is the leading enforcement tool when coupled with media publicity, backed by NHTSA. When law enforcement entities warn the public through media outlets of aggressive drunk driving enforcement, it breeds a perception of certain detection and arrest for drunk driving. Many studies have been accomplished to measure the effects of such campaigns.

One of the first and most famous drunk driving crackdowns involved the 1967 Road Safety Act in England (Ross, 1982). The law empowered police to require a breath of any driver and specified that refusal to submit to the test was punishable as an actual failure. It attempted to increase the certainty of apprehension, without changing the severity of punishment (Ross, 1982, 1984). Fatalities decreased initially, but slowly rose to its prior level within three years (Ross, 1984); this showed that the deterrent effect diminished over time. The British crackdown illustrates a phenomenon known as the “announcement effect.” The publicity surrounding the crackdown causes people to alter their behavior: people decide not to have “one more for the road,” or they ask for a ride home. This shows that the public perceive the threat of punishment and make rational decisions to alter their behavior. Conversely, Ross (1984) found that the actual risk of

arrest is low, because a single arrest for drunk driving consumes an average of two hours of an officer's time.

Sherman (1990) reviewed eighteen case studies of drunk driving crackdowns, fifteen appeared to demonstrate initial deterrent effects, including two examples of long-term effects. In most long-term crackdowns with apparent initial deterrence, however, the effects began to decay after a short period, sometimes despite continued dosage of police presence or even increased dosage of police sanctions (Sherman, 1990). Sherman's (1990) findings of initial decay and residual deterrence suggest that crackdowns might be more effective if they were limited in duration and rotated across different targets. "On the basis of present evidence, the value, if any, of enforcement crackdowns is limited to their duration" (Ross, 1984, p. 30).

Crackdowns are still utilized today as the answer to drunk driving detection in the form of saturations patrols and sobriety checkpoints. They have evolved to adapt to the findings of previous research. Previous research (Ross, 1982, 1984; Sherman, 1990) as found that the deterrence value lasts as long as the duration of the crackdown. While the majority of crackdowns occur during various holidays throughout the year, some jurisdictions conduct crackdowns everyday of the year. Whether the intermittent or omnipresent, the crackdown is overtly publicized throughout its duration. The highly publicized crackdown regarding enforcement, increases public awareness; which in turn, increases the perceived risk in an attempt to change drinking and driving behavior. The primary goal of the present crackdown is not for detection and prosecution as much as it is to support the general deterrence model (Stuster, 2006).

The present-day crackdown model has shown statistically significant results in respects to alcohol-related crashes within the affected jurisdiction (Stuster, 2006). Austin Police Department (Texas) implemented a full-time crackdown effort by having a specialized OWI Unit for omnipresence. Over a four-year period, Austin experienced a 16% decrease in alcohol-related crashes in comparison to a zero decrease throughout the rest of the state. Los Angeles County (California) experienced a 56% decrease in alcohol-related fatalities in comparison to a 3% decrease in the rest of the state (NHSTA, 2006).

Maricopa County (Arizona) conducts 30 large-scale crackdown operations annually. Utilizing 150 officers from twelve agencies, each one is highly publicized before, during and after the crackdown, including final arrest statistics, including the arrestee's name and respective booking photo. Over a three-year period, there was a 14% reduction in alcohol-related crashes, while the rest of the state experienced a 2% reduction (NHTSA, 2006).

It appears that the use of sustained, high publicized crackdowns, does have a positive affect on drunk driving. Jurisdictions should not rule-out them when addressing a drunk driving problem in their area.

Ignition Interlock

Ignition interlock devices (IID) require the driver to blow into a device that is connected to the vehicle's ignition. If the driver's blood alcohol concentration is above a set point, usually around .02, the vehicle will not start. Numerous studies (Beck, Rauch, Baker & Williams, 1999; Coben & Larkin, 1999; Beirness, 2001; Marques, Tippetts & Voas, 2003; Raub, Lucke & Wark, 2003; Fulkerson, 2009; NHTSA, 2009) have

demonstrated that IID's have had a positive impact on recidivism during the sanction period.

Research studies have demonstrated that IID's are effective for both first-time and recidivistic drunk driving offenders. Research studies in New Mexico (Roth, Voas, & Marques, 2007; Roth, 2008) pointed out that for people committing their first offense with IID's, the rate of recidivism was approximately 3.5 percent, meanwhile those without IID's had a statistically significantly higher recidivism (measured by re-arrest) rate of approximately seven percent.

Several research studies have been accomplished with repeat drunk driving offenders in regards to IID's. In one study of repeat drunk driving offenders in West Virginia (Tippetts & Voas, 1997), those with IID's had a recidivism rate of 1.6 percent, meanwhile those without had a statistically higher recidivism (measured by re-arrest) rate of 6.4 percent. Beck, et al. (1999) found similar results, with 2.4 percent in comparison to 6.7 percent respectively.

Raub et al., (2003) compared two similarly populated groups of repeat drunk driver offenders as they received their restrictively sanctioned operating permits. One group had IID installed in their vehicles, the second group did not. After one year, the IID group had a recidivism rate (measured by re-arrest) of 1.3 percent, while the non-IID group had a recidivism rate of 8.7 percent (Raub, et al., 2003). The authors also noted after the IID was removed from the vehicles, there was a swift restoration that was equivalent to the pre-IID recidivism rates.

Drivers that are sanctioned by the court to utilize the IID are usually financially tasked for the installation, leasing and maintenance of the system. The IID, installation

and monthly service can be very expensive; many repeat offenders are not financially capable and do not equip their vehicle with IID. Installation of an IID costs between \$100 and \$250; typical monthly costs (including installation insurance and basic fees) are estimated to run between \$65 and \$90 (Marques, 2008). Cost variations can be attributed to factors such as vendor competition, program size, and cost-of-living. Daily costs of an IID sanction are approximately \$2 to \$3 each day, far less than the costs of incarceration or electronic monitoring (Marques, 2008). Many states have implemented human service programs to address concerns that the cost of IID sanctions serves as a barrier to offender implementation. About 20 States have formulated methods to offset costs for indigent offenders (NHTSA, 2009). Research estimates of the IID benefit/cost suggest a \$3 benefit for first-time drunk driving offenders and a \$4 to \$7 benefit for other drunk driving offenders accruing for each dollar of program cost (Roth et al., 2007; NHSTA, 2009).

One of the advantages of interlocks over license revocation and vehicle confiscation is that it allows the offender and his family to continue to use the vehicle for legitimate purposes such as employment (Scott, Emerson, Antonacci & Plant, 2006; NHTSA, 2009). However, this sanction will be ineffective when a sanctioned driver has access to other vehicles that are not equipped with IID. This sanction should not be used as a standalone, it should be paired with intense treatment and intense supervision (Beck, et al, 1999; Dieringer, 2001; Scott, et al., 2006). Currently, the IID is failing as a sanction in the State of Wisconsin (Emmerson, 2009; Thorsen, 2009). It has become a popular sanction from judges, but is not followed up on to ensure compliance with the sanction. Likewise, there appears to be confusion with its implementation. To effectively change

the behavior of the subject, the IID sanction needs to be placed on the subject, not the subject's vehicle. Therefore, the IID restriction is in place no matter what vehicle the subject drives. Whereas, if the vehicle is sanctioned, it could be parked and replaced with a non-IID sanctioned vehicle.

Specialized Drunk Driving Courts

The epidemic-level occurrences of offenses committed while under the influence of alcohol, including drunk driving, has prompted several jurisdictions to develop specialized sobriety or impaired driving problem solving courts, most emulating the drug court model. Threats of punishment alone are not likely to change the behavior of individuals, and the philosophy of impaired driving courts is to treat the problem as well as punish the offender. Impaired driving courts were established to protect public safety and to reduce recidivism by addressing the principle causation of impaired driving - alcohol and substance abuse. The mission of sobriety and impaired courts is to make offenders accountable for their actions, bringing about a behavioral change that reduces recidivism, reduces the abuse of alcohol, and protects the public (Flango, 2004).

Specialized impaired driving courts, which are in effect specialized dockets in most states, are reputed to be better equipped to handle drunken driving cases, permitting swifter resolutions, reducing backlog, and improving outcomes. Judges also believe that the use of impaired driving courts should be expanded, allowing experienced judges to use treatment resources and to sentence, sanction, or reward offenders with greater consistency (Bouffard & Richardson, 2007)

Notwithstanding the amplified awareness to the development of and advocacy for these types of specialized, OWI courts, few evaluations exist to reveal whether OWI courts can be as effective as existing research has recommended that traditional drug courts have been (Bouffard & Richardson, 2007).

Crancer (2003) evaluated the effectiveness of the Kootenai County, Idaho DUI Court. Results from the Kootenai County DUI court evaluation reveal that only 30% of those who entered the program failed to successfully graduate from it. Furthermore, the Kootenai County evaluation reports that only 4% of graduates were re-arrested for a DUI, however the follow-up time period is not specified. This DUI recidivism rate is contrasted to a 14% recidivism rate among “100 persons who could have been eligible for the program” (Crancer, 2003, p. 5). However, Crancer’s evaluation did not include random sampling, statistical controls for individual differences.

Guerin and Pitts (2002) evaluated the Bernalillio County, New Mexico DWI/Drug Court. This evaluation compared the two-year DWI recidivism rates for three groups: (1) DWI/Drug Court graduates, (2) compared to offenders who had successfully completed a traditional probation sentence and (3) compared to offenders who had failed to successfully complete a traditional probation sentence. Results robustly illustrated that after a two-year follow-up period, 12.5% of the DWI/Drug Court graduates had a new DWI arrest, while successful traditional probationers had a 16.7% DWI recidivism rate, while unsuccessful traditional probationers had a 20.8% DWI recidivism rate (Guerin & Pitts, 2002). However, the evaluation did not conduct statistical analysis to determine the significance, or addressing controls for pre-existing group differences.

MacDonald, Morral, Raymond and Eibner (2007) found no evidence that a specialized DUI Court reduces recidivism, binge drinking, alcohol problems, life stress, treatment completion or jail time more than a normal court when they evaluated the Rio Hondo DUI Court; which is the only peer reviewed study to date. The authors recommended that the inconsistency of the threat of credible jail time in the traditional court model needs to be addressed.

Informal Control Mechanisms

The purpose of informal social control mechanisms is the same as formal social control mechanisms in attaining and maintaining conformity to the rules of its society. The main difference is the sanctions for one's actions are not carried out by the government, but internally through the belief mechanisms of society. These mechanisms can be more effective than formal social control mechanisms. The main mechanisms include: enhanced treatment programs, public education and awareness and Victim Impact Panels.

Enhanced Treatment Programs

When looking at viable solutions in dealing with drunk driving, the problem should be dissected into separate variables. The act of drunk driving has two integral parts: the action of driving and the condition of intoxication. Eliminate one variable, solves the problem of the whole. Since the deviant part of drunk driving is intoxication, sanctions need to address it. Most sanctions serve as a deterrent to address the behavioral

aspect, but not the physiological aspect. Treatment as a sanction, would address the physiological behavioral aspect of drunk driving.

Alcohol is the most frequently reported primary substance of abuse among all substance abuse treatment admissions (Dill & Wells-Parker, 2006). In Wisconsin, an Alcohol or Drug Assessment (AODA) is a mandated sanction for all impaired driving offenses. Drunk driving offenders who have been mandated to treatment by the courts participate in a wide variety of alcoholism treatment programs (Cavaiola & Wuth, 2002). Mandated interventions often include supervised probation and monitoring, including supportive contact assistance with problems that could contribute to the risk of impaired driving (Dill & Wells-Parker, 2006). Cavaiola and Wuth (2002) found that convicted offenders have a wide range of drinking problems, as well as other problems that contribute to crash risk, and frequently are at high risk of crashes even when not impaired. Research as shown a modest effect of reducing drunk driving crashes among offenders who are mandated for treatment and receive intervention (Dill & Wells-Parker, 2006). However, combining treatment sanctions with other formal sanctions (license revocation, IID, electronic monitoring) have produced more favorable results in reducing impaired driving and crashes among offenders who are known to be high-risk drivers even when not impaired (Dill & Wells-Parker, 2006; Cavaiola & Wuth, 2002).

Dill and Wells-Parker (2006) found that the treatment component that includes education through counseling and psychotherapy with support follow-up such as probation is the most effective strategy. Since most offenders lack informal social support networks, if family or friends were included, would make treatment more productive (Cavaiola & Wuth, 2002). Overall treatment effectiveness, usually measured

in recidivism, depends on the offender's levels of motivation and their hostility towards the mandated sanction of treatment (Dill & Wells-Parker, 2006).

Public Education and Awareness

It is difficult to change public attitudes and behaviors with respect to drinking and driving through public education campaigns, at least in the short-term (Scott, et al., 2006). This is especially true among those at highest risk for drunk driving. Media programs can help build public support for addressing the problem and can help publicize changes in drunk driving laws (Yanovitsky, 2002). When they are used, public education and awareness campaigns to discourage drunk driving should be tailored to particular segments of the population (Dieringer, 2001). Although young drivers are especially difficult to influence, such campaigns are more effective if they exploit the informal social control of peer pressure on the behavior of young drivers and emphasize the negative social consequences of drinking and driving rather than the health and legal risks (Elder, Nichols, Shults, Sleet, Barrios & Compton 2005). Programs that seek to correct young people's misconceptions about how much their peers drink (social norming) holds promise for reducing alcohol consumption (Scott, et al., 2006). Messages that focus on alternate forms of transportation, knowing when one has reached the point of intoxication, helping out friends who are too drunk to drive, and the provisions and enforcement of new drunk driving laws are most likely to be effective (Yanovitsky, 2002).

Teaching young people how to keep their peers from driving while intoxicated is effective as are school-based programs intended to deter students from riding with drunk

drivers (Elder, et al., 2005). Chen, Grube, Nygaard and Miller (2008) identified valuable social mechanisms within school-based intervention programs for drunk driving and riding with drunk drivers. Parents, peers, and law enforcement are all significant correlates of youth drunk driving beliefs and behaviors. Structured peer socialization in the school setting provides a conducive stage for drunk driving education (Chen, et al., 2008). Young people are more willing to intervene effectively to prevent their peers from driving while intoxicated than are adults (Scott, et al., 2006). One strategy should be to discuss mandatory license sanctions, for the independence that comes with their recent issuance of having a license is a viable leverage point.

Victim Impact Panels

Victim Impact Panels (VIPs) were introduced by MADD in 1982 and have since spread throughout the United States in an attempt to reduce drunk driving (Rojek, Coverdill & Fors, 2003). VIPs are designed to have an intense and emotional impact. Panel members are individuals who were seriously injured, or whose loved ones were killed, in a drunk driving crash; they describe to an audience of convicted drunk driving offenders the crash and how it changed their lives, with the goal of influencing them on an emotional level to change drinking-driving behavior (C' de Baca, Lapham, Liang & Skipper, 2001).

VIPs have shown to reduce recidivism rates of drunk driving for first offenders more than chronic offenders, however, the effect of VIPs dissipates over time (C' de Baca, et al., 2001; Polacsek, Rodgers, Woodall, Delaney, Wheeler & Rao, 2001; Rojek, et al., 2003). Overall, the empirical findings appear to depict that the current design and

utilization of VIP's may not have the intended effect on the offender; in some cases, attendance at a VIP may actually worsen the undesired behavior. C'deBaca, et al. (2001) provide a probable explanation for this finding:

VIPs are thought to influence DWI offenders on an emotional level, by means of confronting them with the consequences of drinking and driving... There is evidence that confrontational approaches are ineffective in the treatment of alcohol problems (Hodgson, 1994; Miller, et.al.1993, 1995) and conceivably could result in the opposite of the intended effect. VIP participation may exacerbate feelings of guilt and shame, which may in turn lead to increased alcohol use and, ultimately, re-offense. (p.620)

It appears that on the surface, the solution does not lie within an algebraic function. One can not simply make "X" (consequence) greater than "Y" (pleasure from committing the offense). There are too many extraneous causal variables in drunk driving. This paper will now discuss criminological theories to dissect in gaining insight to those causal variables.

SECTION III. THEORETICAL EXPLANATIONS OF CAUSATION

In trying to fix what is considered broken, one must strive to determine the cause of the deficiency that leads to the problem. Throughout the evolution of criminology, there have been countless theories formed and tested to explain the causation of delinquency. Though many of them can be utilized to address the problem of drunk driving, this paper will review the Classical, Individual Trait, Social Control and Social Learning Theories in application to address drunk driving.

Classical Theory Approach

The policy of general theory of deterrence by incorporating punishment has been a prevalent idea throughout history. People have been engrained to have faith that punishment would suppress crime, or any other wrong doing for that matter. Thus, the fundamental purpose of collaborating law and punishment was to make the threat of punishment all the more conceivable to the general population. In response to the cruel punitive procedures of the legal system, Cesare Beccaria (1738-1794) wrote *On Crimes and Punishments* (1764) suggesting penal reforms to rationally improve the judicial practices. The principal thought of his legal reform suggested that punishment should be proportionate to harm done; punishment should fit the crime, not the criminal, and punishment is a necessity in the prevention and control of crime. Decades later, Jeremy Bentham (1789) expanded Beccaria's work by adding the concept of "hedonistic calculus" as a fundamental principle of human rationality. He argued that a rational individual chooses to commit crime in their best interest by balancing the pleasures of the spoils and the consequences from doing so (Cullen & Agnew, 2006). Therefore, to deter

criminal activities, the criminal justice system needs to be structured in such a way that the risks of punishment would outweigh the benefits of crime.

If individuals always act rationally in their best interest, deterrence theory predicts that an individual who fears punishment the greatest but gains the least from crime is the most likely to be deterred from committing crime. There is one critical condition for the deterrence to be viable: the threat of punishment must be properly communicated to potential offenders so that they must take the risk of punishment into account when deciding whether to commit a crime or not. Unlike incapacitation, which does not depend on a person's awareness of punishment, general deterrence is all about how to influence the perception of punishment (Kleck, 2003). The application of criminal law as a form of punishment by the police and courts is designed to educate future offenders about the threat of sanctions to potential offenders. The problem is that people are often unaware of actual threats of punishment.

Furthermore, there are two ways in which deterrence is intended to operate. The first is general deterrence, where the punishment of offenders serves as an example to the general public whom has not yet committed a crime. The second way is specific deterrence, where the apprehended and punished offenders will refrain from repeating crimes if certainly caught and severely punished.

Stafford and Warr (1993) proposed a reconceptualization in general and specific deterrence models due to faulty logic, questioning a distinction between the two. In their reconceptualization, individuals base judgments about the certainty of legal sanctions, at least in part, on both their own and other's knowledge. Such knowledge consists of one of two varieties: knowledge in which an actor or someone known to the actor was

punished for a criminal act and knowledge in which the actor or known others avoided punishment for a criminal act. Although avoidance suggests that crime pays, punishment indicates that it does not (Stafford & Warr, 1993).

Stafford and Warr (1993) cites three advantages to their reconceptualization. First, it acknowledges the option that specific and general deterrence can function with a person or society. Secondly, it differentiates analytically between punishment avoidance and enduring punishment. Lastly, their reconceptualization could be considered as a bridge between general and specific deterrence and contemporary learning theories (Stafford & Warr, 1993).

Piquero and Pogarsky (2002) found strong supporting evidence in the four key constructs of Stafford and Warr (1993): personal punishment experience, personal punishment avoidance, vicarious punishment experience, and vicarious punishment avoidance. However, contrary to Stafford and Warr's (1993) reconceptualization and the overall logic of deterrence, Piquero and Pogarsky (2002) found that punishment experiences appear to encourage rather than discourage future offending. It should be noted, that all preliminary tests of the reconceptualization of the deterrence theory involved the offense of drunk driving with a college-aged sample (Piquero & Pogarsky, 2002); therefore lending to great bias since the acceptance of alcohol appears to be greatest within the sample.

Most of the past and present sanctions and policies to address drunk driving are rooted and founded on classical theory. Using the basic premises of certainty, severity and celerity in regards to how punishment deters an unwanted action, it appears one could formulate an opinion on its effectiveness. In the area of certainty, law enforcement

and policy makers appear to have adequately addressed this over recent years with an increase of publicized crackdowns, saturation patrols and sobriety checkpoints. In regards to severity, drunk driving laws and sanctions increasingly “get tougher” throughout our nation, but are they publicized enough for the general public to know? Though, as overwhelmed as the criminal justice system has gotten, are sanctions being carried out to the fullest? The area of swiftness would be directly dependent on the jurisdiction and how burdened the court was. In Wisconsin, the average length of court time in a non-specialized impaired driving court through the adjudication process exceeds one year (Thorsen, 2009). It appears that the foundational premise within the classical theories for deterrence are not being met in regards to addressing drunk driving, so why should this approach be the integral method in establishing policies and sanctions? Can you deter someone from doing something without addressing the cause of the unwanted action? One of the most widely accepted explanations of the failure of the classical deterrence theory to control drunk driving is that the largest proportions of drunk drivers are problem drinkers. According to Ross (1992):

Some research has found that drunk drivers are disproportionately likely to be problem drinkers and alcoholics, as well as young working-class men whose attitudes towards compliance with law in general may be casual. A traffic court judge added, “The major effect has been on people who don’t cause that many accidents anyway. For the real problem drinker, nothing deters. (Ross, 1992, p. 164)

Individual Trait Theory Approach

Criminology has been dominated by sociological explanations of crime and criminals. The domination of these sociological theories has, however, come at a price: biological and genetic explanations of deviant behavior have historically not been a popular viewpoint with the majority of criminology scholars. Part of the reason that genetic trait theories of crime have been marginalized is because they are viewed as deterministic, dangerous, and ideologically incorrect (Conklin, 2007). Perhaps the most troublesome hesitation, however, is that genetic forces will outperform environmental influences in the scientific study of offending. There is mounting evidence suggesting that most behaviors and personality traits are at least partly influenced by genetic factors (Cullen & Agnew, 2006). Additionally, a wealth of research investigating the causes of crime has shown empirically that certain dimensions of the social environment are particularly salient sources of variation in antisocial conduct (Paternoster & Bachman, 2001). Depending on the specific trait or behavior of interest, the relative effects of both genetic and environmental influences vary; sometimes genes are the dominant force and in other circumstances the environment is more potent. Genetic factors predict about half of the variance of personality traits, depending on the variety of environmental impacts (Ellis, 2005).

The human body is comprised with a massive amount of diverse neurotransmitters, each with their own inimitable purposeful properties; some excite, some inhibit, and still others' precise roles are unknown. Depending on the particular neurotransmitter that is released, the body may respond in several ways. Some neurotransmitters may cause fear, delight, or aggression, while the release of other

neurotransmitters, such as norepinephrine, is responsible for the body's "fight or flight" instincts (Eensoo, et al., 2004). However, two of the most studied and perhaps most important neurotransmitters are dopamine and serotonin in the role of offending (Conklin, 2007).

Social maladaptation and personality traits such as impulsivity, sensation seeking and uniformity avoidance have been correlated with low levels of monoamine oxidase (MAO) activity in platelets (Eensoo, et al., 2004). MAO is a gene that breaks down and clear away dopamine and serotonin in the brain. It is also a polymorphic gene that has been found to be important to maintaining homeostasis of neurotransmitters in the human body (Ellis, 2005).

There appears to be mounting evidence that suggests that the lower level of MAO activity in the platelets, is a genetic predictor for drunk driving (Eensoo, et al., 2004). Eensoo et al. (2004), found that drunk drivers had a higher dysfunctional impulsivity. Dysfunctional impulsivity, which appeared to be the best predictor of drunk driving, is a feature of cognitive style, supporting sudden and careless action in complex situations, where this form of information processing leads to errors and inaccuracy (Eensoo, et al., 2004).

It appears that the genetic trait theory of drunk driving causation is in its infancy. As the evolution of the biosocial perspective grows it will further our understanding of impulsivity offenses like drunk driving. With the recent mapping of the human genome, and the almost daily advancements in the knowledge and understanding about the function of certain genes, it appears there will be more individual trait explanations to drunk driving in the future.

Social Control Theory Perspective of Causation

In their general theory of crime, Gottfredson and Hirschi (1990) describe the propensity of low self-control persons to exhibit a higher propensity for delinquency and analogous behavior relative to persons with higher levels of self-control (Cullen & Agnew, 2006). Gottfredson and Hirschi (1990) concluded that inadequate parental management results in low self-control, and therefore influences an individual's choices when confronted with an opportunity for immediate gain through little investment. Gottfredson and Hirschi (1990) propose that the level of self-control a person possesses is the outcome of the child-rearing practices of their parents. According to Winfree et al. (2007), citing Gottfredson and Hirschi, "For a child to become adequately socialized, three elements must be present: the parent or guardian must (1) monitor the child, (2) recognize inappropriate behavior, and (3) punish it" (p. 329). Low self-control persons seek a wider variety of behavior, including delinquency, such as drunk driving, since such activities hold the promise of immediate pleasure for minimal effort (Winfree, et al., 2007). Through this lens, drunk driving is seen as an impulsive act, a desire that is acted upon without extensive thought about potential consequences. Given that drunk driving happens when a person is impaired, the theory of impulsive action appears to be a viable explanation of drunk driving.

A study of the drinking and driving behavior of adults conducted by Keane, Maxim, and Teevan (1993) found substantial support for the self-control theory. They reported that there was a significant relationship between low self-control and driving under the influence of alcohol for both men and women. This study developed a measure

of 'self-control' and 'high-risk behavior.' Drivers were asked in the survey, "Out of 100 legally impaired drivers on the road, how many do you think will be stopped by the police?" (p. 34). Apparently, if the driver many would be stopped but drove drunk anyway, then they were conscious of the danger but failed to exercise the necessary self-control. Also, drivers were questioned as to whether anyone had attempted to discourage them from driving. Similarly, if they had been discouraged to drive and drove with a prohibited alcohol concentration anyway, then this can be viewed as a deficiency to conform to informal and formal social control. Keane, et al., (1993) concluded that the self-control theory of crime adequately explained drunk driving. Furthermore, drivers wearing seatbelts had significantly lower alcohol levels than those who did not. Drivers who had been discouraged to drive, were more aware of their intoxication but drove anyway. Drivers who believed that police would stop more drunk drivers actually drank more than those who believed police would stop fewer (Keane, et al., 1993).

There does not appear to be a single cause for the offense of drunk driving. Therefore, it can be surmised that there can not be a single solution. For example, a mandatory harsh sanction does not address one's predisposition in MAO activity in their platelets, nor their serotonin and dopamine levels. Likewise, a higher financial fine does not change inadequacies of one's upbringing. In striving to attain a solution to the problem of drunk driving specific target based sanctions should be tailored to the cause of the individual offender.

SECTION IV. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

The problem of drunk driving has statistically remained unchanged over the last ten years. Every year, over 1.4 million people are arrested for drunk driving. With all of the recent reductions of manpower in law enforcement throughout the nation the number arrests have remained unchanged. Though, getting “tough” by way of increased sanctions appeared to have made initial statistical strides, they also appear to have reached a stalemate. Drunk driving is not a choice that is made with a clear mind. The decision is made in a haze of alcohol or drugs. First and foremost, there needs to be a change in behavior toward alcohol consumption.

Attaining behavioral changes

Drunk driving laws and sanctions are relatively uniform throughout the U.S. Every state has a per se prohibitive alcohol concentration of .08 when operating a motor vehicle. However, statistics of drunk driving and other alcohol-related parameters are not uniform. Furthermore, some states such as Wisconsin and North Dakota skew most of the statistics because of customs, cultures and social norms that accept alcohol and sometimes promote it as a rite of passage. States like Wisconsin and North Dakota inversely show the importance and effectiveness of informal social controls. Drinking is a learned behavior, now is the time to break the cycle. More resources need to be expended in reforming public opinion and expectations regarding drunk driving. Drunk driving is certainly illegal in every state in U.S., but it needs to be considered repulsive and offensive in every state. Drunk driving laws can continue to get more strict and harsh, but without informal social controls they are just laws without a conscience.

Policy implications

The formal social control mechanisms instituted by the US have attempted to control drunk driving by utilizing the rational choice, or general deterrence theory. These mechanisms have reduced drunk driving over the last 25 years. However, the attempt to control drunk driving by criminalizing it does not deal with the underlying causes of drunk driving. Coercive formal social controls are not designed to treat the underlying causes of social problems alone.

One of the most widely accepted explanations of the failure of rational choice theory to control drunk driving is that the offense is usually committed in an impulsive manner. When an individual is impaired, they can not fully rationalize the rewards and consequences of their actions. Therefore, current policies to control and deter drunk driving are not addressed by the causal perspectives of this paper. The policy implication is evident, policymakers need to utilize a broader theoretical scope in evaluating the intended effectiveness of sanctions to properly control drunk driving.

Unless some form of informal social control mechanisms is applied to drunk drivers with drinking problems, after being released from incarceration, the underlying problems that caused the offense are likely to reemerge, causing them to recidivate. According to Ross (1992), informal sanctions have a greater deterrent effect on drunk driving than the threat of formal sanctions. Thus the internalization of the social norm not to drink and drive through the socialization process would be a necessary component for informal and internal social controls to be an effective deterrent to drunk driving. Virtually the only way to accomplish this is to teach this social norm within the family unit, in the school, in the community, and, further, be shared within society. If a person

grew up during when drunk driving was not considered to be a seriously deviant act, or even considered normal, they would not be deterred because it has been engrained in them.

While all sanctions have some potential for reducing drunk driving and alcohol-related crashes, some have more potential than others. While it is desirable and beneficial to modify the behavior of the small proportion of drinking drivers who are caught, the most important function a drunk driving sanction can have is to effectively deter the many drinking drivers who will never be apprehended. Significant public information efforts would be directed toward keeping the public aware of sanctioning efforts and of the certainty of their application. The single most important feature of an effective program for drunk driving offenders is the inclusion of a variety of sanction options, matching the offender to their most conducive sanction to eliminate recidivistic offenses.

There are several causes to the problem. This paper discussed three theoretical explanations. The classical theory has been utilized for over the last century to develop and implements law and their respective sanctions. The current laws and sanctions have not worked over the last ten years as over 1.4 million people are arrested annually for drunk driving; the current aggregate cost for drunk driving is over \$100 billion; and the fatality rate has been constant with vehicle miles traveled. The current laws and sanctions do not address the cause of the problem and have been utilized as a reactive consequence, rather than a proactive preventative measure. To deter individuals from committing the offense of drunk driving, education, public awareness and social rejection of alcohol need to be implicated in policy. To address convicted offenders, a tailored sanction program based on the theoretical explanation of their individualized causation.

For example, if the individual was found to have an internalized psychological or chemical predisposition for drunk driving, a sanction program of somatic and psychological treatment should be utilized in lieu of incarceration to proactively prevent recidivism. Studies have shown (Pogarsky & Piquero, 2003) that incarceration as punishment will increase the likelihood of being incarcerated again. In this regards, it appears that the negative attributes of incarceration, such as being cut off from family ties, education, separated from positive influences, employment opportunities, depression and bad self-esteem encourages reoffending.

To prevent relapse or recidivism during the sanction process, mandatory IID should be implemented into policy. Studies (Beck, et al., 1999; Coben & Larkin, 1999; Beirness, 2001; Dieringer, 2001; Marques, et al., 2003; Raub, et al., 2003; Fulkerson, 2009; NHTSA, 2009) have demonstrated that IID's have had a positive impact on recidivism during the sanction period. The IID should be utilized in more than revocation or suspension as a license sanction. Mandatory suspension or revocation as a license sanction widens the net and creates a downward spiral into future license violations, since the individual has obligations such as employment or family.

Suggested Future Research

While much research on sanctions has already been conducted, several issues deserve additional research attention. These include the deterrent effect of swiftness in applying sanctions; hard suspensions compared with soft suspensions; mandatory minimum fines and fines based on the income level of the offender; alternatives to jail such as special facilities, house arrest, or community service; adding assessment and

treatment to incarceration for multiple offenders; reintegrative shaming; administrative licensing laws; and the effect of license plate and vehicle confiscation in reducing the number of offenders who drive while their licenses are suspended or revoked. Great progress has been made over the last 25 years in the response to the problem of drunk driving, there is still work to be accomplished as long as are slaughtered on our nation's highways.

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