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# The Effects of Gender on Driving Under the Influence of Alcohol Sentencing Disaprities in Pennsylvania

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THE EFFECTS OF GENDER ON DRIVING UNDER THE INFLUENCE OF  
ALCOHOL SENTENCING DISPARITIES IN PENNSYLVANIA

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Criminal Justice

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by  
Dianna Ramona Hurst  
June 2016

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June 2016

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## ABSTRACT

Differential sentencing has been a reoccurring issue in the judicial system for decades. Sentencing disparity occurs when similar offenders receive different sentences, or when different offenders receive the same sentence. Prior studies find a sex effect, where women tend to be treated more leniently than men. Sentencing discrepancies are evident in crimes that are considered to be gendered. Certain types of crimes are more likely to be committed by females and receive more lenient sanctions than if a male were to commit these types of crimes. These crimes include shoplifting, petty theft, and forgery. On the contrary, certain types of crimes are more likely to be committed by males and receive more harsh sentences than if a female were to commit them. These crimes include aggravated assault, burglary, and homicide. Driving under the influence of alcohol was chosen to study here because in instances of DUI, individuals are initially apprehended due to perceived behaviors behind the wheel, and officers are unaware if the driver is male or female. This study examines whether discrepancies exist in DUI case sentencing in the state of Pennsylvania. The bivariate analyses performed found significant associations between variables. The ANOVA depicted significant findings among men and women. Overall, women were more likely to be treated more leniently than similarly situated men. The cross tabulations also depicted significant findings for the effects of the mitigating and aggravating circumstances on the different types of sanctions. The presence of aggravating circumstances was associated with

more severe types of sanctions, whereas the presence of mitigating circumstances was associated with less severe sanctions. The multivariate logistic regression models show that women were nine times more likely than men to receive a license suspension, and .3 times less likely to receive a jail sentence. These findings suggest that the Pennsylvania sentencing guidelines are not preventing disparities like they are supposed to. This indicates that legislative reform needs to occur in order to prevent disparities among individuals.

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# CHAPTER ONE

## INTRODUCTION

### The Problem

Gender effects within the criminal justice system are widely discussed in recent literature. A recurring topic of interest is the presence of disparities in sentencing outcomes. Typically, male defendants tend to be sentenced more harshly than similarly situated female defendants. For example, Mustard (2011) found that male defendants are sentenced to five months longer in prison than similarly situated female defendants. Rodriguez, Curry, and Lee (2006) examined whether these discrepancies applied to only certain types of crime or all offenses. They questioned whether the association between gender and sentencing is stronger for minor nonviolent offending and weaker for serious violent crime.

Contributing to this line of research, this study tests whether this biased treatment exists for sentencing in cases involving Driving Under the Influence of alcohol (DUI). DUI was chosen for analysis because it is one of the most gender-neutral crimes in the penal code. Offenders are pulled over due to perceived behaviors behind the wheel and officers are unaware of the gender of the driver until apprehended. It is also an offense that continues to remain a nationwide issue despite preventive measures.

According to the National Highway Traffic Safety Administration (2005) 14,409 people died in alcohol-related traffic collisions on an average of one every 36 minutes. This resulted in the classification of DUI as the most lethal crime in the United States. An examination of the most recent statistics indicate that over the span of one year (2012-2013) fatalities in alcohol related DUI traffic collisions decreased by 2.5% (National Highway Traffic Safety Administration, 2014). Even though data depicts a steady decline in deaths due to alcohol related traffic collisions, driving while under the influence of alcohol remains a national problem.

To determine the relationship between gender and DUI sentencing ten hypotheses were tested:

1. Females will receive more lenient (less severe) sentencing than males, irrespective of the presence of aggravating or mitigating circumstances.
  - 1a. Females will receive a more lenient sentencing than males irrespective of BAC level.
  - 1b. Females will receive a more lenient sentencing than males irrespective of any harm resulting in the DUI.
  - 1c. Females will receive a more lenient sentencing than males irrespective of any prior offenses committed prior to the DUI.
2. Mitigating factors will be associated with less severe sentences, such as lower fines, shorter probationary periods, and shorter jail time.

- 2a. Individuals with no prior offenses will be sentenced to less severe sanctions.
- 2b. Individuals with a BAC level less than .08 will be sentenced to less severe sanctions.
- 3. Aggravating factors will be associated with more severe case outcomes, such as higher fines, longer probationary periods, and longer jail time.
  - 3a. Individuals with a prior history of offenses will be sentenced to more severe sanctions.
  - 3b. Individuals that caused some type of harm as a result of their DUI will receive more severe sanctions.

The first hypothesis is tested using an analysis of variance (ANOVA) and logistic regression, and the bivariate hypotheses listed above are tested with cross tabulations. We would expect to find no statistically significant differences between the two groups, because this indicates that judges are not exercising unwarranted bias in their sentencing processes.

### Outline

To provide a context for this study, the following chapter provides a discussion about DUI and the dangers behind it. 125,000 people die every year due to DUI related traffic collisions (Webster, Oser, Mateyoke-Cline, Havens, & Leukefeld, 2009). It also describes the various sentencing theories that researchers believe contribute to judge's sentencing practices. These theories

suggest that variables such as gender, familial status, and familial dependency influence judge's sentencing decisions.

Chapter 3 describes the methods used to select the sample and the protocol used to extract relevant case information. An analysis of variance (ANOVA), Cross tabulations, and Logistical regression will be used to determine the relationships between variables. Description of the selected methods of statistical analysis is also provided.

Chapter 4 reports the results of the ANOVA, Cross tabulations, and Logistical Regression used to test the hypotheses. Of the nine different ANOVA's were conducted to observe bivariate-level gender differences, and two significant relationships were found. The nine Cross tabulations used to determine whether aggravating and mitigating circumstances were associated with sentencing outcomes revealed five statistically significant relationships. The Logistical Regression models revealed gender disparities for two sentencing outcomes—license suspension and jail time. Tables of descriptive statistics are also provided.

Chapter 5 discusses the results of the study in detail. Overall, the study found disparities between the treatment of women and men in the Criminal Justice system. Women were treated more leniently than men, and received less severe sanctions than similarly situated men. Several limitations of the study are

discussed, such as the lack of data available. And several suggestions for future research are made as well, such as extending the years of analysis and juvenile DUI.

## CHAPTER TWO

### THE EFFECTS OF GENDER ON DRIVING UNDER THE INFLUENCE OF ALCOHOL SENTENCING DISPARITIES IN PENNSYLVANIA

#### Driving Under the Influence

Driving under the influence of alcohol is a dangerous behavior because it can lead to the harm and death of both the victim and the offender. A quarter of a million people are injured in alcohol related crashes each year (Webster et al.,2009). Statistical studies show that the arrest rate for DUI has steadily declined over the last ten years. This is not necessarily a good statistic, considering the fact that the prevalence of DUI consistently remains high. The number of arrests for DUI represents only a fraction of the total number of DUI episodes that occur every year (LaBrie, Kidman, Albanese, Peller, & Shaffer, 2007). A roadside survey conducted by Beitel, Sharp, and Glauz (2000) concluded that even with heavy surveillance a driver with a blood alcohol concentration over the legal limit had a 1 in a 100 chance of getting arrested. Similarly, Zador, Krawchuk, and Moore (1997) concluded that only 1 out of 88 cases of drunk driving with a BAC over the legal limit would result in an arrest. The fact that only a fraction of apprehended individuals will be arrested depicts discrepancies and flaws in DUI laws.

All jurisdictions impose similar sanctions for DUI; discrepancies lie in severity of the punishment. The two most common types of sanctions for DUI are

jail time and fines (Guenzburger & Atkinson, 2012). Alternatives to incarceration exist, however they tend to be not as common as the two listed above. Below we consider these approaches to dealing with DUI in more detail, evaluating sanctions based on their potential to reduce recidivism amongst offenders.

### Incarceration.

Most people tend to think that incarceration will reduce incidences of DUI, when studies have shown recidivism rates do not decrease after jail sentences. For example, Tashima and Marelich (1989) analyzed the relationships between six different DUI sanctions for first time DUI offenders and subsequent DUI recidivism rates. They discovered that first time offenders only sentenced to a jail term had the highest rates of DUI recidivism and DUI related traffic collisions: recidivism amongst jailed offenders was twice as much as those offenders sentenced to other sanctions (Tashima & Marelich, 1989). This finding suggests that incarceration is not only ineffective as a form of punishment, but as a crime deterrent as well. Moreover, Carlisle (2003) finds that repeat DUI offenders are not affected by jail sentences (Carlisle, 2003). Length of jail sentence has known to have a negative effect on offenders as well. Longer jail sentences have depicted negative effects on reducing recidivism rates of repeat offenders.

Some legislatures believe that mandated jail sentences for first time offenders provide the necessary deterrent effects. Even though these mandated jail sentences tend to be short in nature, it is believed that the swiftness, certainty, and severity of the punishment can reduce inadmissible behavior

(Ross, McCleary, & LaFree, 1990). However, Helander (2002) argues that imposing minimum sentences of incarceration are costly to the public and ineffective in reducing recidivism and alcohol-related traffic collisions.

### Staggered Sentencing.

Minnesota State Legislature enacted a sentencing model called “Staggered Sentencing” that has effectively reduced DUI recidivism rates by 49.9% (Carlisle, 2003). Staggered Sentencing divides a repeat offender’s jail sentence into three parts, set three years apart. The first part of the sentence is served immediately after conviction, followed by a probationary period. The second and third portion of the sentence can be forgiven by the judge if the offender can prove that they have maintained sobriety (Carlisle, 2003). If sobriety is not maintained, the offender will serve the second part of the sentence. Once the second part is served a second probationary period will begin, and the final portion of the sentence can be forgiven if they prove they maintained sobriety. This model has several policy implications, including reductions in fiscal costs on governments in the state, public safety enhancement, and a reduction in recidivism rates.

### Alternatives to Incarceration

There are several alternative sanctions to incarceration that are recommended. These alternatives include work programs, community service, and house arrest/electronic monitoring. Different sanctions have various effects on individuals, and produce various results. Researchers contend that if a



sanction does not reduce recidivism among an individual, it is not due to the sanction itself. Rather, characteristics of the individual determine whether or not the sanction is effective. Nichols, Weinstein, Ellingstad, and Struckman-Johnson (1978) found that DUI education programs only benefit offenders with minor alcohol problems, not offenders with severe alcohol abuse problems. Because of this, most DUI programs in North America assign offenders convicted of DUI to either a DUI education program or intensive alcohol treatment programs (Wells-Parker, Anderson, McMillen, & Landrum, 1989).

#### Crime Prevention Approaches to Drunk Driving

Several key prevention strategies that are implemented include: license revocation for offenders who either fail a chemical test or refuse on, checkpoints, reducing the per se BAC limit to .08, eliminating the per se limit of .02 for minors to a zero tolerance policy (Dejong & Hingson, 1998). Many of these programs are effective in reducing the number of first time offenders, but not in eliminating the problem of the repeat offender. In part, this is because many prevention programs assume constant surveillance by law enforcement. This is a flawed assumption due to the size of road systems and the paucity of officers available to patrol public roads in rural areas (Carlisle, 2003). Law enforcement agencies implement DUI checkpoints and saturation patrols to control the problem of driving drunk. The two major purposes of checkpoints are: to catch drunk drivers and to increase the risk of apprehension by those who might decide to drive drunk (Dejong & Hingson, 1998). Checkpoints depict a maximum deterrent effect

if they are scheduled frequently and randomly. They are properly executed when every driver, or systematically chosen drivers, are stopped and interviewed (Dejong & Hingson, 1998). Due to the large number of drivers that pass through a check point at any given time and the resulting effect it has on traffic flow, it is impossible for officers to interview every single driver. Saturation patrols are another example of DUI preventive measures. Saturation patrols are a type of directed patrol where specialized teams patrol areas where DUI is most likely to occur (Carlisle, 2003).

Studies that analyze DUI sanctions only examine the effectiveness of jail time, which has been proven ineffective multiple times. Future DUI studies need to not only examine the effectiveness of other available sanctions, but how often individuals are sentenced these sanctions. As previously mentioned, sanctions other than jail time are available to individuals, they are just not as commonly appointed. Since these sanctions are not as common as jail time, it is hard to measure the effectiveness of probation or ignition interlock in regards to reducing recidivism among DUI offenders. Although this study will not measure the effectiveness of other available DUI sanctions, it will measure how often these sanctions were appointed to individuals. Sanctions examined in this study include: jail, probation, license suspension, fines/restitution, and alternative sanctions. Since there are so many different types of alternative sanctions (i.e., alcohol education classes, electronic home monitoring) one category was created to consolidate them into one group.

## Gender Discrepancies

Ethnicity, gender, and SES are significant variables in which society is differentiated and stratified. The stratification of individuals into different socially constructed groups, such as class, can lead to the unequal treatment of members in a specific group. A long-standing empirical debate in the Criminal Justice field focuses on the differential treatment of individuals of different genders and ethnicities (Curry, Lee, & Rodriguez, 2004). Differential treatment in the courts results in sentencing discrepancies among similarly situated offenders.

The examination of sentencing discrepancies is key when determining whether or not the judicial system is just. The question we want to ask is whether the courts sentence an individual based off of unbiased decisions or exogenous variables. One characteristic thought to induce unfair sentencing is gender. Evidence suggests that a “sex effect” exists, wherein women receive more lenient treatment than their male counterparts in the Criminal Justice system (Freiburger, 2011). Are the courts considered “fair” if sentencing decisions are based off of variables such as gender and familial status? Though much research has been published as to the existence of this “sex effect,” little research attempts to examine the interrelationship between gender and other variables such as age, ethnicity, and offense type.

Inconsistent sentencing outcomes raise concerns about both disparity and discrimination. Though these terms tend to be utilized synonymously, they are two different concepts. “Disparity” refers to differential treatment or outcomes

that do not result from conscious bias or prejudice (Spohn, 2009). For example, the fact that more men than women apply to become police officers depicts a disparity, not discrimination. The difference lies solely on gender; it is not a difference resulting from a prejudice against women. "Discrimination" refers to the intentional variation in the treatment of individuals based on extraneous criteria such as gender, race, or SES (Spohn, 2009). For example, if a university only accepted white, middle class applicants into their freshman class, this is an act of discrimination, not disparity.

In regards to the sentencing process, disparity exists when similar offenders (similar in offense type, age, gender, ethnicity, SES) receive different sentences or when different offenders receive the same sentence (Spohn, 2009). For example, two men are charged with the same crime, yet one receives a more lenient sentence than the other. Another example would be two individuals with two completely different criminal histories receiving the same sentence for a crime committed. Discrimination exists when legally irrelevant characteristics of an individual affect the sentence given once all relevant variables are considered (Spohn, 2009). This occurs when, for example, African American and Hispanic offenders are sentenced more harshly than comparable White offenders, when males receive more punitive sentences than similarly situated females, or when poorer offenders receive harsher sentences than middle class or upper class offenders for similar offenses (Spohn, 2009).

## Focal Concerns

Steffensmeier, Ulmer, and Kramer (1998) postulate that three focal concerns influence judge's decisions in regards to reaching sentencing decisions. This perspective contends that judges consider blameworthiness, protection of the community, and practical constraints and consequences when determining a sentence (Freiburger, 2011).

### Blameworthiness

The first, blameworthiness, is when judges consider offense type, offense severity, and the offender's criminal history. This concern is correlated with the retributive side of punishment, that the punishment fit the crime, also known as "just deserts" (Steffensmeier et al., 1998). Offense severity is measured in terms of the amount of harm caused by the offense. Since women are seen as the "weaker" sex it is often considered that they meant no harm when they committed the crime; they simply made a mistake. This is taken into consideration when determining a sentence (Steffensmeier et al., 1998).

### Protection of the Community

The second concern, protection of the community, attempts to distinguish between the need to incapacitate an individual or deter possible offenders (Steffensmeier et al., 1998). Factors such as employment status, offense severity, and type of offense are considered when determining a sentence (Freiburger, 2011). Judges protect the public and prevent recidivism by examining variables of the nature of the offense (Steffensmeier et al., 1998).

Mitigating factors such as use of weapon, employment status, prior record, and familial history are taken into consideration when considering the possibility of recidivism. If the judge deems these variables in a favorable light towards the offender, the possibility of a reduced or minimal sentence is more likely. Since women are more likely not to have a prior record and more likely to be the main caretaker of a family, lenient sentences are more likely to be granted to females rather than men (Freiburger, 2011).

### Practical Constraints and Consequences

The third and final concern is practical constraints and consequences, which consists of organizational and individual concerns. Examples of organizational concerns include maintaining a steady flow of cases, the financial cost of supporting an individual in the system, and prison overcrowding (Steffensmeier et al., 1998). Examples of individual concerns include physical and mental health condition, and the separation of an individual from their family (Steffensmeier et al., 1998). Another variable that is considered is the social cost of incarcerating this individual. Since the care of dependent children is a part of these social costs, this contributes to disparities in gender because childcare is associated with females more than it is males (Freiburger, 2011).

Two of the three focal concerns listed above cannot be tested due to the limited amount of case outcome data. Blameworthiness is hard to measure because it is simply based off of the discretion of the judge. Public data on case outcomes typically does not include the personal assumptions of the presiding

judge. Likewise, practical constraints and consequences cannot be measured as well due to limited case data. The third focal concern, protection of the community, is the only concern that can be measured. Data such as use of a weapon, and offense severity are usually recorded in public case outcomes.

### Differential Treatment Theories

Studies depict a common finding of a persistent “sex effect,” where women tend to be treated more lenient than men (Daly, 1987a). These studies argue that female offenders are treated more leniently than male offenders because of both physical and emotional characteristics as well as socially constructed gender roles (Curry, Lee, & Rodriguez, 2004). Several theories have been developed to explain these differences.

#### Court Paternalism

The most frequently used theory in literature is called “Court Paternalism.” This theory suggests that societal stereotypes regarding gender lead to biased treatment of females (Curry et al., 2004). Daly (1987b) argues that since women are seen as the “weaker sex” both judges and court officials attempt to protect them from the stigma of being arrested or the dangers of jail. Since women are both emotionally and physically weak compared to men, they need protection from the justice system rather than punishment (Curry et al., 2004). Males in the

criminal justice system consider a severe sanction as “harming” to a woman; since they do not want to induce any harm, sentence severity is reduced.

### Locus of Social Control

A second theory that attempts to explain this differential treatment is “Locus of Social Control.” Daly (1987a) proposes social control as an “inverse relationship between informal (family/kin ties) and formal (state) control” (p.153). The more tied a person is to others (i.e. family) the more social control they have. The greater the informal social control one has the greater the probability of future law-abiding behavior, and required formal social control (especially penal sanctions) is minimized (Daly, 1987b). Since women tend to have more informal social control in their lives, they are subject to a lower degree of formal social control. Generally, women tend to have a higher level of informal social control because they are more likely to be financially dependent on a spouse or the government compared to men (Daly, 1987b). Conversely, Harris (1977) concludes that these sentencing discrepancies between men and women are not due to dependency on others, but to sustain a woman’s familial labor at home. Daly (1987a) contends that the differences between a woman’s care of others and a man’s economic support for families evoke different concerns for court officials.

### Familial Paternalism

By conducting qualitative interviews with court officials, Daly (1987b) proposed familial paternalism as another explanation for discrepancies found



between male and female sentencing. This theory indicates that lenient sentences are granted to those with families, due to the social cost on society and social concerns. During these interviews judges consistently brought up the concept of “familied” and “nonfamilied” individuals. “Familied” individuals are those that are the sole economic provider of children or a family, whereas “nonfamilied” individuals have no economic ties or responsibilities towards children or a family.

A common theme found among all the judges interviewed is that greater leniency is given towards “familied” individuals (Daly, 1987b). Leniency towards these “familied” individuals is argued on the basis that they are more stable in their daily lives due to their familial responsibilities, and they have so much more to lose if they were to get into trouble for a second time. They are also considered more in tune with society and social order because their day-to-day lives are consumed with taking care of others (Daly, 1987a). The threat of incarceration, losing your job, and losing your kids is considered a deterrent in itself. Another concern judges brought up is the social cost associated with incarcerating a “familied” individual. Daly (1987a) contends that one of the court’s greatest concerns is the consequences of breaking up families or jeopardizing the family unit. Incarcerating the individual whose role is the caretaker is not only considered burdensome, but costly for the state, since the state would have to provide financial assistance and step in as the caretaker (Freiburger, 2010). Since women are more likely to execute this role, their removal from a family

setting is viewed as the most costly. Several judges concluded that by leniently sentencing females, they were not only protecting the family unit, but also reducing the costs that society would have to pay (Freiburger, 2011). Another aspect judges consider while sentencing is the psychological effect the removal of parental care would have on the children (Daly, 1987a). Judges want to avoid any type of psychological trauma that affects children when separated from their parents. Daly (1987a) states that ideologically the reasoning behind the court's sentencing decision is "(1) in the interests of maintaining social order, one should not break up families; and (2) in the interests of justice, one should not punish the guilty (the defendant), but protect the innocent (family members dependent on a defendant)" (p. 155).

### Attribution Theory

Bridge and Steen (1998) employ Attribution Theory to explain that the perceptions of court officials contribute to discrepancies in legal dispositions. Everett and Wotjkiewicz state "those evaluating situations perceive casual forces to be either internal (within the individual) or external (within the environment) when constructing causal explanations for events"(p. 192). In simpler terms, either something inside the individual caused them to commit the event or an environmental factor caused the even to happen. Bridges and Steen (1998) examined these perceptions in juvenile probation officers. Perceptions as to whether the crime was caused by internal or external factors causes

discrepancies in recommended punishments in the juvenile court process (Everett & Wojtkiewicz, 2002).

Bridges and Steen (1998) found that juvenile probation officers are more likely to attribute deviant behavior in African Americans to negative personality traits and deviant behavior of Whites to negative environmental influences. Adverse perceptions about African American juveniles result in preconceived expectations of higher chances of recidivism, which in turn results in longer more harsh sentences. This suggests that information regarding both the case and the offender that is relevant to the possibility of recidivism affects sentence severity. With the data provided to create the data set only one of the four theories is testable. Locus of Social Control is not testable because the data does not provide the amount of social ties the offender has or the extent of these ties. Familial Paternalism is unable to be tested because we do not know which offenders are the caretakers of a family. It could be tested if we assumed all females in the final sample were caretakers of a family; however, that fails to consider the fact that some males of the sample could be caretakers as well. Attribution theory cannot be tested in this study because the motive of each individual is not provided. If the motive was available we would be able to determine if the commission of crime was due to environmental or internal factors, and compare the sentence given with the cause of crime. Only one of the four theories listed above is directly testable with case outcome data that is publicly available. Court Paternalism is more readily testable because

it is based on the bias of a judge. If a female is sentenced more leniently than a matched male we could conclude that Court Paternalism is practiced among judges.

### Crime

Though the results of many studies depict females benefiting from sentencing decisions based off of gender, Rodriguez, Curry and Lee (2006) examine whether this “sex-effect” is applicable to all or only a handful of crimes. They questioned whether the association between gender and sentencing is stronger for minor nonviolent offending and weaker for serious violent crime. Rodriguez et al. (2006) suggest that since female criminality violates societal gender roles, these individuals are treated similarly to men. This assumption contends that lenient sentencing is depicted towards female offenders whose crimes are archetypal of gender roles, such as check forgery and shoplifting (Rodriguez et al., 2006). Women that commit crimes that men tend to commit more, which include any that involve violence will most likely not receive lenient sentencing. This is attributed to the fact that they are not only breaking the law, but because they are violating societal gender roles. Mustard’s (2001) analyses of convicted federal offenders depict the opposite of Rodriguez et al.’s theory. Mustard (2001) found that the association between gender and sentencing was strongest for drug trafficking and bank robbery. Respectively, females were sentenced to 11 fewer months in prison than males; however sentencing

discrepancies were smaller for larceny and fraud violations (Mustard, 2001).

These results suggest large gender differences for violent crime, and insignificant differences for stereotypical feminine crimes of larceny and fraud.

### The Present Study

Adding to the extant literature on gender disparity, this study tests whether this biased treatment exists for sentencing in cases involving Driving Under the Influence of alcohol (DUI). DUI was chosen for analysis because it is one of the most gender-neutral crimes in the penal code. Offenders are pulled over due to perceived behaviors behind the wheel and officers are unaware of the gender of the driver until apprehended. It is also an offense that continues to remain a nationwide issue despite preventive measures.

To determine the relationship between gender and DUI sentencing ten hypotheses were tested:

1. Females will receive more lenient (less severe) sentencing than males, irrespective of the presence of aggravating or mitigating circumstances.
  - 1a. Females will receive a more lenient sentencing than males irrespective of BAC level.
  - 1b. Females will receive a more lenient sentencing than males irrespective of any harm resulting in the DUI.

- 1c. Females will receive a more lenient sentencing than males irrespective of any prior offenses committed prior to the DUI.
2. Mitigating factors will be associated with less severe sentences, such as lower fines, shorter probationary periods, and shorter jail time.
  - 2a. Individuals with no prior offenses will be sentenced to less severe sanctions.
  - 2b. Individuals with a BAC level less than .08 will be sentenced to less severe sanctions.
3. Aggravating factors will be associated with more severe case outcomes, such as higher fines, longer probationary periods, and longer jail time.
  - 3a. Individuals with a prior history of offenses will be sentenced to more severe sanctions.
  - 3b. Individuals that caused some type of harm as a result of their DUI will receive more severe sanctions.

The following chapter describes the methods used to build a dataset that would permit testing these hypotheses. First, a justification is provided for the selection of the study location and crime. Then, the variables are described before a detailed account of the sample selection process is presented. Finally, Chapter 3 reports the analytic plan.

## CHAPTER THREE

### METHODOLOGY

#### Site Location

This study examines DUI cases reported in the state of Pennsylvania between the years of 2010-2015. DUI was chosen for the analysis because it is one of the most gender-neutral crimes in the penal code. Crimes such as shoplifting and burglary tend to be gendered in nature as such women are more likely to be arrested for shoplifting and men are more likely to be arrested for burglary. In instances of DUI, individuals are initially apprehended due to perceived behaviors behind the wheel, and officers are unaware of the gender of the driver.

In all states it is against the law to operate a vehicle with a blood alcohol content of .08 or higher. If arrested and convicted, judges use a set of DUI specific sentencing guidelines, and sometimes even the mitigating and aggravating circumstances are outlined. Penalties tend to increase as the number of prior convictions increase. Where states differ is in how they assess the severity of a DUI. Although the circumstances are different for each case, the guidelines tend to be unanimous in their penalties. All states incorporate some type of monetary fine and jail sentence if convicted of a DUI charge. These

penalties tend to increase as the number of prior convictions increase as well. However, discrepancies lie from state as to what constitutes the severity of a DUI.

California was the initial intended study area. After reviewing the state DUI laws it was found that a plea sentence of “wet reckless” exists within the law. This plea reduces the charge to a case of reckless driving including alcohol (Driving Laws, 2015a). Circumstances of a wet reckless plea include no prior record, no traffic collision as a result of the reckless driving, and when the BAC level of an individual is borderline .08 (Driving Laws, 2015). If an individual receives a drunk driving conviction subsequent to a wet reckless plea, the plea is considered a second DUI conviction, and penalties for a second offense are applied (Driving Laws, 2015a). Due to the use of the wet reckless plea, it was not feasible to study DUI in California. The use of this plea radically reduced number and altered the nature of cases available from LexisNexis.

After careful exploration of all states, Pennsylvania was chosen as the study site for two reasons. First, their DUI laws are well defined with clear sentencing guidelines that should prevent biased sentencing. The second reason why it was chosen is because it has the largest number of prosecuted DUI cases in the United States.

The state of Pennsylvania organizes their DUI penalties into three tiers: as each tier progresses, punishment severity increases as well. Each tier is based on BAC level. The first, and lowest tier, involves offenses wherein drivers had a



BAC level of .08 to .099%. The second, and middle tier, pertains to BAC levels of .10 to .159%. The third, and highest tier, involves BAC levels of .16% and higher or the possession of a controlled substance.

### Mitigating and Aggravating Factors

Pennsylvania also considers the presence of mitigating and aggravating factors while determining a sentence. Mitigating factors are those that reduce the sentence because they can possibly explain or excuse the behavior (Driving Laws, 2015b). Examples of these factors include barely reaching the .08 BAC threshold or the individual had no prior convictions on their record. These types of factors influence prosecutors to impose a lenient sentence rather than a maximum sentence (Driving Laws, 2015b). On the contrary, the presence of aggravating factors increases the likelihood of a prosecutor imposing a maximum sentence on an individual. Examples of aggravating factors include prior DUI convictions, causing personal injury to another person as a result of the DUI, and a DUI arrest while a child is present (Driving Laws, 2015b).

### Data Set

Case information was obtained from the LexisNexis Academic website. The initial data set was formed by conducting an advanced search of all DUI cases occurring in the state of Pennsylvania between the dates of January 1, 2010, through August 1, 2015. This search protocol generated 806 cases, however, a handful of these DUI cases were drug related offenses. Drug offenses were excluded from this study.

Case Matching Criteria. Since the purpose of the study is to determine if any sentencing disparities exist among gender, all female cases will be used in the data set. A comparison group of male offenders will be chosen based off of three matching criteria:

1. Blood Alcohol Content level (BAC)
2. Prior DUI offenses
3. Amount of harm caused by the offense

To complete the matching process an initial data file was generated with minimal case details including: case name, case number, date, name of offender, gender of offender, harm, BAC level, and prior history. Gender of offender was coded with an “0” for male, and an “1” for female. If any of the offenders received a higher charge than “DUI” it was recorded (i.e. vehicular manslaughter). Any type of harm committed as a result of the offense was documented (i.e. traffic collision, death). If the offender submitted to any chemical testing their BAC level was recorded. If the offender refused any chemical testing it was coded as “BAC refusal.” If the offender had a criminal history the variable was coded with a “1.” If available, the number of prior convictions was recorded as well. Excluding DUI drug-related offenses reduced the sampling frame from 806 cases to 730 cases. The variable “Harm” was recoded with numerical values. If no harm was committed the case was assigned a “0,” if some type of harm was committed a “1” was assigned. The variable “BAC level” was also recoded with numeric

values. Provided BAC percentages were organized into three levels, each level was systematized using the same criteria the state of Pennsylvania utilizes to determine penalty severity. A reported BAC percentage between .08-.099 comprises the state of Pennsylvania's first penalty tier. Since none of the cases reported a BAC between .08 and .099, a "Level 1" was assigned to individuals that refused any type of chemical testing. A BAC percentage between .10-.159 was coded with "Level 2." A BAC percentage between .16 and over was coded with "Level 3." "BAC refusal" remained constant for any offenders that refused chemical testing. Prior offense history was recoded with a numeric value. If the offender had no prior offenses a "0" was assigned, if the offender had one prior offense a "1" was assigned, and so on. The recoded data set of 730 DUI alcohol related cases is the pool from which the final sample was picked.

#### Matching Process.

Before the matching process began each offender was assigned a research identification number and cases were organized into a Pivot Table. The purpose of a Pivot Table is to sort cases by matching criteria. All cases involving female were selected for use in the study. Then, cases involving male defendants were randomly selected. To ensure the two groups were equivalent, matching involve three criteria: prior offenses (two categories), harm caused (two categories), and BAC level (four categories). By organizing cases with the pivot table it was possible to identify groups for all permutations of the three variables. For example, 55 females and 352 males had a BAC level 1, had no prior

offenses, and had no harm as a result of the offense. Since we are matching all female cases with a similarly situated male offender, we included all females and randomly select 55 males from the 352 that have the same criteria. Considering all variations of the characteristics of female offenders, nine groups were formed.

The total number of female cases for each criteria is the number of male cases selected from each of the corresponding groups. Corresponding male cases were chosen using random sampling without replacement. Cases were chosen by their I.D. number using a table of random numbers found online. If a number from the table had already been selected for a particular group, the next number on the table was chosen. This process was repeated until the designated amount of cases stated in the Pivot Table had been chosen. Once all the cases had been chosen they were added to a spreadsheet with all the corresponding female cases.

### Sample Description

Additional cleaning revealed that 14 female participants were incorrectly coded as being female and had to be removed from the final sample. Since these participants were matched with similarly situated men, 14 men were removed as well. There were 148 individuals in the final sample, 74 females and 74 males.

Table 1 provides descriptive statistics of the dependent variables.

Table 1. Descriptive Statistics of Dependent Variables by Gender.

Variable	Women (N=74)	Percent	Men (N=74)	Percent
BAC				
Level 1	56	76%	56	76%

Level 2	2	3%	2	3%
Level 3	16	22%	16	22%
Harm				
Yes	3	4%	5	7%
Prior				
Yes	10	14%	10	14%
Jail				
Yes	37	50%	57	77%
Probation				
Yes	20	27%	16	22%
License Suspension				
Yes	14	19%	5	7%
Fines				
Yes	9	12%	16	22%
Restitution				
Yes	3	4%	5	7%

Of the 74 females, 50% (n=37) received a jail sentence, 27% (n=20) received a probation sentence, and 34% (n=25) received a license suspension. Of the 74 males, 77% (n=57) received a jail sentence, 22% (n=16) received a probation sentence, and 7% (n=5) received a license suspension.

#### Analytic Plan

A Logistic Regression, Analysis of Variance, and Cross tabulations were used to test ten hypotheses.

1. Females will receive more lenient (less severe) sentencing than males, irrespective of the presence of aggravating or mitigating circumstances.
  - 1a. Females will receive a more lenient sentencing than males irrespective of BAC level.
  - 1b. Females will receive a more lenient sentencing than males irrespective of any harm resulting in the DUI.
  - 1c. Females will receive a more lenient sentencing than males irrespective of any prior offenses committed prior to the DUI.
2. Mitigating factors will be associated with less severe sentences, such as lower fines, shorter probationary periods, and shorter jail time.
  - 2a. Individuals with no prior offenses will be sentenced to less severe sanctions.
  - 2b. Individuals with a BAC level less than .08 will be sentenced to less severe sanctions.
3. Aggravating factors will be associated with more severe case outcomes, such as higher fines, longer probationary periods, and longer jail time.
  - 3a. Individuals with a prior history of offenses will be sentenced to more severe sanctions.
  - 3b. Individuals that caused some type of harm as a result of their DUI will receive more severe sanctions.

Analysis of variance, also referred to as an ANOVA, is considered an advanced form a t statistic. A researcher utilizes a t statistic when they wish to

examine the mean scores of a variable between two groups. Each t statistic is always accompanied by a statistical level of significance, which allows the researcher to determine whether or not the finding between the two groups is significant. For a two-tailed test, a significance level under .05 is significant. If the t statistic is higher than 1.96 then the relationship is considered significant (Bachman & Paternoster, 2009). A significant finding would mean that the findings between the two variables did not occur by chance.

An ANOVA will be used to compare the sentences between males and females. A t statistic lower than 1.96 would be ideal; meaning there were no statistical differences found between males and females. This would indicate that there were very little to no discrepancies between male and female sentencing. If little to no differences were found between male and female sentencing this would mean that legislation is effective in preventing unwarranted disparities against individual characteristics. A t statistic of 1.96 or higher would mean that significant differences were found among the groups. This would mean that discrepancies in sentencing exist in the data. It would also indicate that legislation not eliminating disparities.

A logistical regression model is similar to that of a multivariate regression model with the exception of the dichotomized dependent variable. A researcher utilizes a logistical regression model when they wish to examine the linear relationship between a dependent variable with two categories, and more than one independent variable that determines an outcome. In regards to the study,

gender (male, female) is our primary independent variable and the various sanctions are the dichotomized dependent variables.

The statistical output we examine in this type of analysis is the beta coefficient and significance level. The beta coefficient depicts the association of the independent variable (gender) on the dependent variable (sanctions, and the significance level determines if this relationship is significant (Tibbetts, 2015). An ANOVA and Logistical regression will be used to test hypotheses 1-1c:

1. Females will receive more lenient (less severe) sentencing than males, irrespective of the presence of aggravating or mitigating circumstances.
  - 1a. Females will receive a more lenient sentencing than males irrespective of BAC level.
  - 1b. Females will receive a more lenient sentencing than males irrespective of any harm resulting in the DUI.
  - 1c. Females will receive a more lenient sentencing than males irrespective of any prior offenses committed prior to the DUI.

Cross tabulations will test the bivariate associations between the mitigating and aggravating circumstances on the different type of sanctions. A researcher utilizes a cross tabulation when they wish to examine whether one variable is related to another. A cross tabulation produces percentages in their relation to other variables. The measure of association selected to capture the strength of the relation between variables is the Gamma, which measures the strength and association between two variables. In order to determine if this relationship is



significant the significance level will also be examined. Cross tabulations will be used to test hypotheses 2-3b:

2. Mitigating factors will be associated with less severe sentences, such as lower fines, shorter probationary periods, and shorter jail time.
  - 2a. Individuals with no prior offenses will be sentenced to less severe sanctions.
  - 2b. Individuals with a BAC level less than .08 will be sentenced to less severe sanctions.
3. Aggravating factors will be associated with more severe case outcomes, such as higher fines, longer probationary periods, and longer jail time.
  - 3a. Individuals with a prior history of offenses will be sentenced to more severe sanctions.
  - 3b. Individuals that caused some type of harm as a result of their DUI will receive more severe sanctions.

## CHAPTER FOUR

### RESULTS

A one-way ANOVA was conducted to determine the relationship between gender and type of sentence received. Table 2 depicts the means and standard deviations of the female sample on each dependent variable.

Table 2. The Effects of Gender on the Dependent Variables.

	Mean	SE	SD	F	Sig
License Suspension				135.442	.000
Female	.2838	.0614	.4762		
Male	.054	.0265	.02277		
Jail				30.134	.000
Female	-.2703	.0765	.5034		
Male	.770	.0492	.4235		
Jail Length				1.865	.174
Female	-1.1892	.2628	1.4763		
Male	2.419	.1990	1.7122		
Probation				2.338	.128
Female	.0541	.0709	.4471		
Male	.216	.0482	.4145		
Probation Length				.000	.984
Female	.0270	.1849	1.1243		
Male	.527	.1308	1.1253		
Fine				.662	.417
Female	-.0270	.0665	.3943		
Male	.216	.0482	.4145		
Restitution				2.122	.147
Female	-.270	.0374	.1986		
Male	.068	.0294	.2527		

Alternative				1.240	.267
Female	-.405	.0728	.4320		
Male	.284	.0528	.4539		
BAC				.000	1.00
Female	.0000	.1366	.8307		
Male	1.459	.0966	.8307		
Prior History				.000	1.00
Female	.00000	.05659	.34420		
Male	.203	.0745	.6406		
Harm				2.122	.147
Female	-.0270	.0374	.1986		
Male	.068	.0294	.2527		

Nine different Cross tabulations show the effect of mitigating and aggravating factors on sentencing outcomes. Of the four different mitigating and aggravating circumstances, three were found to be significant. Tables 3-7 report the significant relationship between these variables and sentencing severity.

As depicted in Table 3, a significant negative relationship was found between prior history and license suspension. Prior history had a negative effect on license suspension. Individuals with no prior history of offenses were more likely to receive a license suspension. Those who had a prior history were more likely to receive another type of sanction rather than license suspension.

Table 3. The Effects of Prior History on License Suspension.

License Suspension

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		No	Yes	Gamma	Sig.
Prior History				-6.84	.013
No	Count	100	28		
	% within	84%	96.6%		
Yes	Count	19	1		
	% within	16%	3.4%		
N		119	29		

Table 4 depicts a significant relationship between the effects of BAC on jail. Individuals who refused any type of chemical testing were least likely to receive a jail sentence than those who did not refuse any testing. Individuals with BAC levels higher than .10 were more likely to receive a jail sentence than those who refused a chemical test.

Table 4. The Effects of Blood Alcohol Content on Jail.

		Jail		Gamma	Sig.
		No	Yes		
BAC Level				.572	.001
<i>Refusal</i>	Count	48	64		
	% within	88.9%	68.1%		
2	Count	1	3		
	% within	1.9%	3.2%		
3	Count	5	27		
	% within	3.4%	18.2%		

<i>N</i>	54	94
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As shown in Table 5, a significant relationship was found between the effects of harm on jail. All of the individuals who caused some type of harm as a result of their DUI received a jail sentence. Those that did not cause any harm as a result of their DUI were least likely to receive a jail sentence.

Table 5. The Effects of Harm on Jail.

		Jail		Gamma	Sig.
		No	Yes		
Harm				1.00	.003
No	Count	54	86		
	% within	100%	91.5%		
Yes	Count	0	8		
	% within	0	8.5%		
<i>N</i>		54	94		

As depicted in Table 6, a negative significant relationship was found between the effects of harm on license suspension. Harm had a negative effect on license suspension. All of the individuals who caused some type of harm as a result of their DUI were more likely to not receive a license suspension.

Table 6. The Effects of Harm on License Suspension.

		License Suspension		Gamma	Sig.
		No	Yes		
Harm				-1.00	.006
No	Count	111	29		
	% within	93.3%	100%		
Yes	Count	8	0		
	% within	6.7%	0		
N		119	29		

Table 7 depicts a negative significant relationship between the effects of harm on alternative sanctions. Harm had a negative effect on alternative sanctions. Those individuals that caused some type of harm as a result of their DUI were more likely to not receive an alternative sanction as a sentence. Those that did not cause any harm were more likely to receive an alternative sanction.

Table 7. The Effects of Harm on Alternative Sanctions.

		Alternative Sanctions		Gamma	Sig.
		No	Yes		
Harm				-1.00	.004
No	Count	101	39		
	% within	92.7%	100%		
Yes	Count	8	0		
	% within	7.3%	0		

N	109	39
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Nine different analyses were conducted to determine the relationship of gender on the dependent variables. The ANOVA reveals that there was a significant relationship for gender on license suspension ( $F=135.442$ ,  $p<.05$ ) and for gender on jail ( $F=30.134$ ,  $p<.05$ ). These were the only two variables that had a significant relationship with gender. Thus, a logistical regression was performed to analyze whether a gendered effect existed for these two significant dependent variables controlling for mitigating and aggravating circumstances. The logistical regression is shown in Table 8. Based on the regression, women are 9 times more likely to receive a license suspension than men are, and women are .3 times less likely to get a jail sentence than men are.

Table 8. Logistic Regression Models

Variable	License Susp.				Jail			
	b	S.E.	Exp(b)	R <sup>2</sup>	b	S.E.	Exp(b)	R <sup>2</sup>
Gender	2.228*	.578	9.284	.284	-1.266*	.379	.282	.231
Number of priors	-1.860	1.072	3.009		.689	.583	1.992	
Harm	-19.60	13312.441	.000		20.156	13744.217	5672966176.6	

	0					
BAC level	-.199	.309	.820	.639	.270	1.895

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Summary of Hypotheses Tests

Statistical analyses of the different variables depicted in the hypotheses resulted in significant findings for all the hypotheses with the exception of one. In regards to gender, the ANOVA and Multivariate regression depicted significant results between gender and type of sentence received. These findings support hypotheses 1-1c.

The Cross tabulations depicted that significant results were found among BAC level, prior history, and harm. It was found that BAC level had a significant effect on jail sentence. These findings support hypotheses 2-2b. Harm depicted a significant relationship with three different sanctions: jail, license suspension, and alternative sanctions. These findings support hypotheses 3-3b.



## CHAPTER FIVE

### DISCUSSION

The purpose of this research was to determine if there was a direct relationship between gender and type of sentence one received. More specifically, if women were treated more leniently than men under similar, if not the same, circumstances. Some prior studies find “sex effect,” in which women are treated more leniently than similarly situated men (e.g., Freiburger, 2011). In continuance of this line of inquiry, the present study used a sample of women and men matched using three criteria: BAC level, harm, and prior history. These criteria were selected because they are the mitigating and aggravating circumstances outlined in the sentencing guidelines for the state of Pennsylvania. The guidelines assert that the presence and level of severity of these variables increases the likelihood of a less lenient sentence. This chapter provides a summary of the major findings and a discussion of study limitations, before considering what implications can be drawn from this research in respect to sentencing guidelines and directions for future research.

#### Summary of Findings

This study found that gender alone had a significant effect on the type of sentence one received. Overall, women were more likely to receive more lenient sentencing than similarly situated males in the state of Pennsylvania. The sentencing guidelines state that the presence of aggravating circumstances (harm caused, prior history) will likely increase the severity of sanctions. Contrary to this expectation, women were more likely to receive just a license suspension as their sanction, irrespective of the presence of aggravating circumstances. The presence of mitigating circumstances, which the guidelines state are barely hitting the .08 BAC minimum, or having a clean driving record, are expected to decrease the severity of the sentence. Again, the results showed gender disparity: men were more likely to receive a jail sentence irrespective of the presence of mitigating circumstances. No other significant relationships were found between gender and the other four types of sanctions.

BAC level, harm, and prior history were also examined. The cross tabulation analysis revealed that in regards to prior history, those who did have a history of offenses were least likely to receive a license suspension. In regards to BAC level, those that refused any type of chemical testing were least likely to receive a jail sentence. The higher the BAC level of the individual, the more likely they are to receive a jail sentence.

Harm produced the largest number of significant results with three different types of sanctions: jail, license suspension, and alternative sanctions. In

regards to jail, those individuals that caused some type of harm as a result of their DUI were more likely to receive a jail sentence than those that did not. In regards to license suspension, those that caused harm were least likely to get a license suspension, and more likely a more severe punishment. In regards to alternative sanctions, those who caused some type of harm as a result of their DUI were least likely to receive some type of alternative sanction.

Since there are no current published studies on the sentencing outcomes of DUI cases, it is not possible to assess how these findings fit within the context of the crime-specific literature. However, these results that can be compared to prior research are those on gender. Even though we cannot determine the motive behind the sentencing decisions, we can determine that the results support the varying differential treatment theories. Each of these theories attempts to explain why judges sentence female offenders more leniently than similarly situated men. Since this study found that women were sentenced significantly more lenient than men, these results can be taken to support the findings of Daly (1987a;1987b), Freiburger, (2010;2011), Spohn, (2009), Curry et al. (2004), and Steffensmeier et al.(1998). All these studies found significant results in regards to differential treatment between women and men. Of the three differential treatment theories, the only one that was able to be tested was Court Paternalism. Daly (1987b) argues that since judges view women as the weaker sex they are more likely to treat them more leniently. Even though the biases of judges are unknown we can assume that they practiced this discretion. Because

women were treated more leniently than men the court paternalism theory was supported in this study.

These results propose several issues. First and foremost, the question of whether or not the justice system is truly fair arises. What differentiates this study from previously conducted studies is the fact that women were matched with men based off of three different variables that are presumed to affect the severity of the sentence. The other studies utilized a pre-existing data set of offenders that does not necessarily guarantee offenders were similarly matched. The matching process ensures that offenders are equally matched with another offender that committed the same crime under almost identical circumstances. If the justice system was consistent in sentencing outcomes, offenders that are similar, if not exactly situated, would receive the same exact sentence for the same crime committed regardless of their gender. The results of the study suggest otherwise. The fact that women were treated differently than similarly situated men suggests sentencing disparity exists despite detailed sentencing guidelines.

Even though sentencing guidelines vary from state and crime, the Pennsylvania guidelines for DUI are specific in the type and severity of the sanction. For example, the guidelines state that a mandatory sanction for anyone charged and found guilty of DUI is a license suspension. Over 80% (n=120) of the final sample did not receive a license suspension. Another mandated sanction if convicted and charged of DUI is fines. Though fines vary by BAC level and prior history, the guidelines state that all individuals are required to pay the

courts a monetary fee. About 20% (n=30) of the final sample received a fee as part of their sanction. Even though judges have discretion, they are advised to set the minimum and maximum sentence based off of the state guidelines. The results of this study suggest that the sentencing guidelines are not being consistently applied when judges sentence offenders. Before discussing what this means for sentencing guidelines it is important consider the limitations of the present study.

### Discussion of Limitations

The first limitation of the study is the fact that the data set was created by using court cases obtained through LexisNexis. The reason why this was considered a limitation is due to the fact that not all relevant information is made public. An example of this would be the sanctioned amount of court fees or restitution fees an offender was sentenced to pay. In almost all of the cases in which the offender was fined the amount was not reported. These details would provide another avenue for examining sentencing discrepancies. The sentencing guidelines state specific amounts for DUI charges that vary by severity of the offense--the more severe the DUI the higher the fee. If the fee amounts were readily available we would be able to determine if the guidelines were consulted, and where the discrepancies lay. If more data, such as ethnicity, whether the offender is the caretaker of children or family members, and age, were readily available on LexisNexis a more thorough analysis could be made. Gender,

ethnic, and familial theories postulated by Daly (1987a,1987b), and (Steffensmeier et al., 1998)could be tested.

A second limitation to the study is the fact that reported BAC percentages were not coded in accordance with the Pennsylvania State DUI penalty tiers. The tiers are used to help determine the type and severity of the sentence an offender should receive. The first tier includes BAC percentages that range from the minimum of .08 to .099. Out of all the offenders that submitted to any type of chemical testing none of the percentages fell within this range. Since this was considered the lowest tier, the offenses were also considered the least severe. Thus, the results cannot be construed to reflect differential treatment at the lowest DUI level.

A third limitation is the fact that the results are only generalizable to the state of Pennsylvania. For greater generalizability replications of this study could incorporate several other states. The results found from that study can be generalized to that particular region rather than just a particular state.

Another limitation that arose during the initial phase of analysis was the 5-year time span the study examined. One of the most important aspects of building the data set was getting as many female offenders as possible. The current study examined all female DUI cases occurring in the state of Pennsylvania from 2010-2015. The initial cleaning of data yielded 732 DUI cases from which the final sample was chosen. Of these 732 cases, 88 were female offenders. The final cleaning of the data resulted in 14 females being removed

from the final sample due to various reasons. Since 14 women were removed, 14 similarly situated men were removed as well. Even though the final sample of 148 is somewhat substantial, a larger sample size would have been preferred. In order to achieve a larger sample size the analysis could have incorporated cases occurring from 2005-2015. While this would certainly increase the number of female offenders and the sample size overall, it may have introduced a history effect.

A fourth limitation to the study concerns the distribution of the dependent variables utilized in the logistic regression model. Not all of the dependent variables fulfilled the expected 30/70 split between the values of 0 and 1. For example, in the license suspension logistic regression, a little over 80% of the population received a license suspension (valued at 1). This distribution is not ideal because almost all of the population received a license suspension, only 20% of the population did not. However, a better distribution was observed for the jail logistic regression model where 63% of the population went to jail. This is considered a better distribution (valued at 0) because the percentage of the population that went to jail versus those that did not is more evenly distributed.

### Implications

Despite the above noted limitations to this research, the results clearly indicate that sentencing discrepancies exist among Pennsylvania state judges with regard to DUI cases. While the reason for the departures is not known, due

to the lack of case details, it appears that judges are using their own discretion when considering the punishment for each individual. Supporting previously discussed research, women were treated more leniently than men irrespective of the presence of aggravating or mitigating factors. This indicates that to a certain extent the justice system is not fair-- two people commit a DUI under the exact circumstances and one individual receives a more lenient sentence simply based off of their gender. It is plausible that judges are considering mitigating circumstances that are not specified in the sentencing guidelines.

The Pennsylvania guidelines were first enacted in 1982, and amended in 1988 (Pennsylvania Commission on Sentencing, 2016). They were created in order to establish consistent and fair sentencing policies for crimes committed. The last time the guidelines were amended in regards to updating DUI sanctions was in 2005, when rehabilitative programs and boot camp sanctions were added (Pennsylvania Commission on Sentencing, 2016). The only other research that addresses sentencing disparities in the state of Pennsylvania was done in 1999 by Gorton and Boies. They examined whether the sentencing guidelines reduced sentencing disparities on felony charges based off of demographic characteristics of the offender. Gorton and Boies (1999) found that during the first year of implementation of the sentencing guidelines no differential treatment was found among felony sentencing accounts. Even though this study examined racial characteristics, it can be compared to the present study because both



examine the issue of sentencing disparities. The results of Gorton and Boies (1999) are significant because they contradict the results of the present study.

When the guidelines were first implemented they were effective in depicting any type of disparity in sentencing outcomes. The present study found that the current sentencing guidelines do not eliminate the possibility of differential treatment. Several conclusions can be made from the differential findings. First, it is possible that years of amendments could have had a detrimental effect on the strength of the guidelines. Instead of having a positive effect on the guidelines it had a negative effect. It is plausible that the amendments made to the guidelines created the possibility of existing disparities in sentencing decisions. Second, it is also possible that the existence of sentencing disparities occur because of the type of crime. Gorton and Boies (1999) examined felony cases, whereas the present study examined DUI cases, which depending on the circumstances range from misdemeanor to felony. The sentencing guidelines could only prevent disparities for more serious offenses, whereas the judges are able to use their discretion for the less serious offenses.

#### Sentencing Guidelines.

Every state has set sentencing guidelines that present a uniform policy as to how individuals should be sentenced for an offense committed. The guidelines are designed to outline the appropriate and uniform sentence of an offense based on distinctive variables of the individual and crime. These variables include seriousness of the offense and prior history. They are intended to give

judges fair and consistent ranges of sentences when considering appropriate sanctions. They are also intended to limit the amount of disparity between sentences given to different individuals for similar offenses.

The United States sentencing guidelines were established in 1987 shortly after several states adopted their own. Over the years several reforms and amendments have been made to federal and state guidelines, each with the purpose of incorporating different types of sanctions for different crimes committed. The guidelines were created with the intention of being mandated, but after several reforms they were considered “advisory” rather than mandatory.

Recent research conducted on the Federal sentencing guidelines has found that disparities are still occurring despite attempts at reducing them. Wingerden, Wilsem, and Johnson (2014) found that characteristics of the crime, along with characteristics of the individual, continue to affect the type of sentence one receives. The continuing problem may be associated with the advisory nature of the guidelines.

Judges are encouraged to abide by the guidelines when considering a sentence; however, judiciary discretion is used more often than not. The use of judicial discretion is what leads to sentencing disparities. Ideally a judge would sentence the same sanction for any number of individuals if the evidential and situational circumstances were similar, if not the same. In order to help eliminate sentencing disparities and the unequal treatment of women and men in the judicial system the sentencing guidelines should be mandatory rather than

advisory. The mandating of the guidelines can eliminate disparities by sentencing offenders that all commit the same crime the same sanction, regardless of personal characteristics of the offender.

In regards to jail time, similarly situated men were more likely to receive a jail sentence, whereas women were more likely to receive a license suspension. This finding is concerning for several reasons. First, disparity exists. Second, people are receiving a jail sentence when it has been shown to be an ineffective form of punishment for a DUI. For example, Tashima and Marelich (1989) found that for first time offenders a jail sentence was the least effective in preventing recidivism. Those who received a jail sentence were more likely to drink and drive again rather than those who received another type of sentence (Tashima & Marelich, 1989). One of the reasons why jail time is not an effective sanction for drinking this type of offense is because drinking and driving is an addictive behavior, and needs a different type of sanction that treats the addiction to alcohol. In order to reduce the probability of recidivism among DUI offenders is to sentence some type of alternative sentencing rather than jail time. Some types of alternative sanctions include mandatory AA classes, ignition interlock devices, and some type of community service. When considering sentences for specific crimes, judges should focus on sanctions that are going to aid in the rehabilitation of the offender, rather than a sanction that is going to be swift and severe. Considering the rehabilitation of an offender can possibly prevent the likelihood of recidivism in the future.

In order to successfully do this the sentencing guidelines should be adjusted to incorporate certain risk factors that mandate alternative types of sanctions with more severe forms. Steffensmeier et al. (1998) addresses these risk factors in the protection of the community focal concern. If an individual is seen as a threat not only to the community (by possibly committing another DUI/offense and harming others) but to themselves (recidivating) some type of rehabilitative alternative sanction should be appointed in conjunction with a punitive/more severe sanction. If the risk factors aren't present in the case or individual, the appointing of a severe sanction is not necessary. Overall, alternative sanctions should be sentenced more frequently due to the fact that studies prove more severe sanctions are least likely to reduce DUI recidivism.

#### Suggestions for Future Research

The results reached in this study have repercussions for future research and policy makers. First and foremost, more studies need to be conducted that test the differential treatment theories and focal concerns in regards to gender. Most of the theories previously discussed, such as Locus of social control and familial paternalism, are based on the discretion of the judge. The only way to measure the thought processes of the judge when considering the characteristics of an offender would be to interview several different judges. The only time this method has been utilized was in 1987(a) by Daly. Daly (1987a) compiled data on court based biases by interviewing judges and asking them what variables they consider when comprising a sentence. Since this study was conducted over 20

years ago it would be beneficial to conduct a similar study with practicing judges. A second suggestion would be to examine ethnicity in regards to sentencing discrepancies for DUI offenders. It is well known that ethnicity is influential in sentencing outcomes for varying offenses, it would be interesting to see if it was the same for DUI. Third, it would be interesting to see if the same discrepancies exist among juvenile offenders. Even though numerous issues arise when it comes to conducting studies on juveniles, it would be interesting to see if judges exercise the same discretion on kids as they do women. A third suggestion would be to analyze what sanctions work and don't work in regards to DUI recidivism. In the current study many individuals received a license suspension or jail time; few received an alternative sanction. Instead of sentencing individuals to jail judges should mandate some type of rehabilitation, whether AA classes or actual treatment. Many judges fail to realize that people who tend to recidivate have an alcohol addiction, and addicts need treatment not jail sentences. A fourth suggestion would be to analyze DUI rates in different regions of the U.S. Since crime rates vary by region, it would be interesting to see which region has the highest rate of DUI and compare their rate to their sentencing guidelines.

An initial issue that arose at the beginning of the study was the "wet reckless" policy in the state of California. This policy states that first time DUI offenders can have the offense expunged from their record. This poses several issues. First, data on DUI cases in the state becomes limited. Many cases are not available because so many people utilize this policy. Second, sentencing

guidelines for the state become controversial because if the offender were to recidivate, on paper it would be considered their first DUI. The fact that the “wet reckless” reduces the gravity of a DUI could possibly lead individuals to drink and drive again. Future research should examine whether the “wet reckless” policy is effective in reducing recidivism in the state of California. Since this policy reduces the severity of a first time DUI, it is possible that it has no effect on individuals and only encourages them to drink and get behind the wheel again. Research should also focus on whether states that implement this policy have a higher rate of first time DUI’s than those states that do not implement the policy.

### Conclusion

A majority of the conclusions reached in this study can be compared to past research conducted on gender and sentencing disparities. All of the literature examining gender and disparities has found that women are treated more leniently than men, which the current study has found as well. Even though very few studies have been conducted that examine this gender disparity for varying offenses, none have been conducted that examine disparities for DUI offenses.

The findings of this study can be used as a stepping stone not only for future studies on gender disparities, but for DUI studies as well. The examination of the effect of DUI sanctions on recidivism is needed in order to prevent this offense from reoccurring. Even though we cannot stop people from drinking and

getting behind the wheel, certain sanctions can provide rehabilitation and prevent offenders from drinking and driving in the future.

APPENDIX A  
PENNSYLVANIA SENTENCING GUIDELINES



## Pennsylvania Sentencing Guidelines

Penalties for DUI are broken down by the BAC level. Those who refuse a chemical test or are found to be under the influence of a controlled substance will face the highest BAC penalties. The courts also have the option of adding 150 hours community service to any and all DUI or test refusal charges.

General Impairment BAC .08%-0.099%	
<b>1<sup>st</sup> offense</b>	<ul style="list-style-type: none"> <li>• 6 months probation</li> <li>• \$300 fine</li> <li>• Mandatory alcohol highway safety school</li> <li>• Alcohol &amp; drug treatment</li> </ul>
<b>2<sup>nd</sup> offense</b>	<ul style="list-style-type: none"> <li>• 1 year license suspension</li> <li>• 5 days-6 months jail</li> <li>• \$300-\$2,500 fine</li> <li>• Mandatory alcohol highway safety school</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>
<b>3<sup>rd</sup> offense</b>	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> degree misdemeanor charge</li> <li>• 1 year license suspension</li> <li>• 10 days-2 years prison</li> <li>• \$500-\$5,000 fine</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>
High BAC 0.10% to 0.1559%	
<b>1<sup>st</sup> offense</b>	<ul style="list-style-type: none"> <li>• 1 year license suspension</li> <li>• 48 hours-6 months prison</li> <li>• \$500-\$5,000 fine</li> <li>• Mandatory alcohol highway safety school</li> <li>• Alcohol &amp; drug treatment</li> </ul>

<b>2<sup>nd</sup> offense</b>	<ul style="list-style-type: none"> <li>• 1 year license suspension</li> <li>• 30days-6 months prison</li> <li>• \$750-\$5,000 fine</li> <li>• Mandatory alcohol highway safety school</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>
<b>3<sup>rd</sup> offense</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> degree misdemeanor charge</li> <li>• 18 months license suspension</li> <li>• 90 days-5 years prison</li> <li>• \$1,500-\$10,000 fine</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>
<b>4<sup>th</sup> offense (and subsequent)</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> degree misdemeanor charge</li> <li>• 72 hours-6 months prison</li> <li>• \$1,000-\$5,000 fine</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>
Highest BAC 0.16% and over OR Controlled Substance	
<b>1<sup>st</sup> offense</b>	<ul style="list-style-type: none"> <li>• 1 year license suspension</li> <li>• 72 hours-6 months prison</li> <li>• \$1,000- \$5,000 fine</li> <li>• Mandatory alcohol highway safety school</li> <li>• Alcohol &amp; drug treatment</li> </ul>
<b>2<sup>nd</sup> offense</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> degree misdemeanor charge</li> <li>• 18 month license suspension</li> <li>• 90 days-5 years prison</li> <li>• \$1,500-\$10,000 fine</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>
<b>3<sup>rd</sup> offense (and subsequent)</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> degree misdemeanor charge</li> <li>• 18 month license suspension</li> <li>• 1-5 years prison</li> <li>• \$2,500-\$10,000 fine</li> <li>• Alcohol &amp; drug treatment</li> <li>• 1 year ignition interlock system</li> </ul>

## REFERENCES

- Austin, W., & Williams, T.A. (1977). A survey of judge's responses to simulated legal cases: Research note on sentencing disparity. *The Journal of Criminal Law & Criminology*, 68(2), 306-310.
- Bachman, R., & Paternoster, R. (2009). *Statistical methods*. New York: McGraw Hill.
- Beitel, G., Sharp, M., & Glauz, W. (2000). Probability of arrest while driving under the influence of alcohol. *Injury Prevention*, 6(2), 158-161.
- Bridges, G.S., & Steen, S. (1998). Racial disparities in official assessments of juvenile offenders: Attributional stereotypes as mediating mechanisms. *American Sociological Review*, 63(4), 554-570.  
doi: 139.182.75.138
- Carlisle, A. (2003). Staggered sentencing for repeat DWI offenders: A new weapon in the war against drunk driving. *Hamline Journal of Public Law & Policy*, 25(1), 97-113.
- Curry, T.R., Lee, G., & Rodriguez, S.F. (2004). Does victim gender increase sentence severity? Further explorations of gender dynamics and sentencing outcomes. *Crime & Delinquency*, 50(3), 319-343.
- Daly, K. (1987a). Discrimination in the criminal courts: Family, gender, and the

- problem of equal treatment. *Social Forces*, 66(1), 152-175.
- Daly, K. (1987b). Structure and practice of familial-based justice in a criminal court. *Law & Society Review*, 21(2), 267-290.
- Dejong, W., & Hingson, R. (1998). Strategies to reduce driving under the Influence of alcohol. *Public Health*, 19, 359-378.
- DUI & DWI in Pennsylvania. (2016). Department of Motor Vehicles. Retrieved April 30, 2016, from <http://www.dmv.org/pa-pennsylvania/automotive-law/dui.php>
- Driving Laws. (2015a). California Drunk Driving Fines & Penalties. Retrieved August 6, 2015, from <http://dui.drivinglaws.org/California.php>
- Driving Laws. (2015b). Pennsylvania DUI Laws, Fines, and Penalties. Retrieved August 6, 2015, from <http://dui.drivinglaws.org/pa-dui.php>
- Everett, R.S., & Wojtkiewicz, R.A. (2002). Difference, disparity, and race/ethnic bias in federal sentencing. *Journal of Quantitative Criminology*, 18(2), 189-211.  
doi:0748-4518/02/0600-0189/0
- Fischman, J.B., and Schanzenbach, M.M. (2012). Racial disparities, judicial discretion, and the United States sentencing guidelines. *Public Law and Legal Theory Research Paper Series*, 2, 1-38.

- Freiburger, T. L. (2010). The effects of gender, family status, and race on sentencing Decisions. *Behavioral Sciences & The Law*, 28(3), 378-395.  
doi:10.1007/s11211-011-0133-8
- Freiburger, T.L. (2011). The impact of gender, offense type, and familial role on the decision to incarcerate. *Social Justice Research*, 24(2), 143-167.  
doi:10.1007/s11211-011-0133-8
- Gorton, J., & Boies, J.L. (1999). Sentencing guidelines and racial disparity across time: Pennsylvania prison sentences in 1977, 1983, and 1993. *Social Science Quarterly*, 80(1), 78713-7819.
- Guenzburger, G.V., & Atkinson, D.B. (2012). *Differences between jail sentences and jail terms actually served among DUI offenders in selected California counties* (Report No. 239). Sacramento: California Department of Motor Vehicles.
- Helander, C.J. (2002). *DUI countermeasures in California: What works and what doesn't, with recommendations for legislative reform* (Report No. 197). Sacramento: California Department of Motor Vehicles.
- La Brie, R.A., Kidman, R.C, Albanese, M., Peller, A.J., & Shaffer, H.J. (2007). Criminality and continued DUI offense: Criminal typologies and recidivism among

- repeat offenders. *Behavioral Sciences and the Law*, 25, 603-614.
- Mustard, D.B. (2001). Racial, ethnic, and gender disparities in sentencing: Evidence from the U.S. federal courts. *Journal of Law and Economics*, 44, 285-314.
- Early Edition: Traffic Safety facts 2004. Retrieved September 30, 2015, from <http://www-nrd.Nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAAnn/TSF2004EE.pdf>
- National Highway Traffic Safety Administration. (2014). Early Edition: Traffic Safety Facts 2013. Retrieved September 30, 2015, from <http://www-nrd.nhtsa.dot.gov/Pubs/812102.pdf>
- Nichols, J.L., Weinstein, E.B., Ellingstad, V.S., & Struckman-Johnson, D.L.(1978). The specific deterrent effect of ASAP education and rehabilitation programs. *Journal of Safety Research*, 10, 177-187.
- Nutting, A.W. (2013). The *Booker* decision and discrimination in federal criminal sentences. *Economic Inquiry*, 51(1), 637-652.doi: 10.1111/j.1465-7295.2011.00449x
- Sentencing: Do effects vary across violent, property, and drug offenses? *Social Science Quarterly (Wiley-Blackwell)*, 87(2), 318-339.doi:10.1111/j.1540-6237.2006.00383.x

Pennsylvania Commission on Sentencing. (2016). About the commission. Retrieved May 14, 2016, from

<http://pcs.la.psu.edu/>

Ross, H.L., McCleary, R., & LaFree, G. (1990). Can

mandatory jail laws deter drunk driving? The Arizona case. *The Journal of Criminal Law & Criminology*, 81(1), 156-170.

Schanzembach, M.M. (2004). Racial and gender disparities in

prison sentences: The effect of district-level judicial demographics. *American Law & Economics*, 4, 1-51.

Shatz, S. F., & Shatz, N. R. (2012). Chivalry is not dead:

Murder, gender, and the death penalty. *Berkeley J. Gender L. & Just.*27, 64-373. doi:10.1111/j.1460-2466.

Spohn, C. (2009). *How do judges decide? The search for*

*fairness and justice in Punishment*. Tempe, AZ: Sage Publications.

Steffensmeier, D. and Demuth, S. (2000). Ethnicity and

sentencing outcomes in U.S. federal courts: Who is punished more harshly? *American Sociological Review* ,65(5), 705-729.

Steffensmeier, D., & Demuth, S. (2006). Does gender modify

the effects of race-ethnicity on criminal sanctioning? Sentences for male and female, White, Black, and Hispanic defendants. *Journal Of*

*Quantitative Criminology*, 22(3), 241-261. doi:10.1007/s10940-006-9010-2.

Steffensmeier, D., Ulmer, J., & Kramer, J. (1998). The interaction of race, gender, and age in criminal sentencing: The punishment cost of being young, Black, and Male. *Criminology*, 36(4), 763-797.

Tashima, H.N., & Marelich, W.D. (1989). *A comparison of the relative effectiveness of alternative sanctions for DUI offenders* (Report No. 122). Sacramento: California Department of Motor Vehicles.

Tibbetts, S. (2015). Module 10, CJUS 606 Course, Blackboard; CSUSB.

Webster, J.M., Oser, C.B., Mateyoke-Scriver, A., Cline, V.D., Havens, J.R., & Leukefeld, C.G. (2009). Drug use and criminal activity among rural probationers with DUI histories. *International Journal of Offender Therapy and Comparative Criminology*, 53(6), 717-730.

Wells-Parker, E., Anderson, B.J., McMillen, D.L., & Landrum, J.W. (1989). Interactions among DUI offender characteristics and traditional intervention modalities: A long-term recidivism follow-up. *British Journal of Addiction*, 84, 381-390.

Wingerden, S.V., Wilsen, J.V., & Johnson, B.D. (2014). Offender's personal



circumstances and punishment:

Toward a more refined model for the explanation of sentencing disparities. *Justice Quarterly*, 1, 100-133.

doi:10.1080/07418825.2014.902091

Yang, C. (2013). Free at Last? Judicial Discretion and

Racial disparities in federal sentencing. *Law and Economics*, 661, 1-62.

Zador, P., Krawchuk, S., & Moore, B.A. (1997). Drinking and

driving tips, stops, by police, and arrests: Analysis of the 1995 National Survey of Drinking and Driving Attitudes and Behavior. Rockville, MD  
NHTSA.