2007

Effects of Individual Characteristics on Plea Negotiations Under Sentencing Guidelines

Erika Davis Frenzel
Indiana University of Pennsylvania - Main Campus

Jeremy Ball
Boise State University

Effects of Individual Characteristics on Plea Negotiations under Sentencing Guidelines

Erika Davis Frenzel, Ph.D.[1]
Department of Criminology
Indiana University of Pennsylvania

Jeremy D. Ball, J.D., Ph.D.
Department of Criminal Justice Administration
Boise State University

Abstract:

Research conducted on the decision points between arrest and sentencing is scarce. The current study attempts to fill this gap by focusing on plea negotiations, examining the effects of individual characteristics on plea bargaining decisions by using two dependent variables – a two-category dependent variable analyzing negotiated pleas vs. non-negotiated pleas and a three-category dependent variable analyzing negotiated pleas, non-negotiated pleas, and bench/jury trial convictions. The results from the multinomial logistic regression indicate that individual characteristics are predictors of negotiated guilty pleas compared to a trial conviction. Black offenders were more likely than white offenders to have their case go to trial rather than straight pleading or negotiating a guilty plea.

DISPARITIES IN CHARGE BARGAINING: TESTING AN INTEGRATED THEORY
> Discretionary power . . . places the prosecutor in a position of influence perhaps unmatched in the entire system of criminal justice. (Gottfredson & Gottfredson, 1988, p. 113).

INTRODUCTION

Scholars agree that the American prosecutor possesses a great amount of discretion (see Albonetti, 1987; Kersetter, 1990; Thomas & Fitch, 1976). Scholars also agree that such discretion has the potential to result in discrimination in the form of unwarranted disparity (Walker, Spohn, & DeLone, 2000). American prosecutors use their discretion to make initial charging decisions, to seek the death penalty, and to negotiate plea agreements.

One of the most profound and frequently studied issues in the American criminal justice system is racial discrimination. Research indicated that Black offenders were disproportionately represented in prison populations (see Blumstein, Cohen, Martin, & Tonry, 1983; Walker, et al., 2000). Although Black citizens represent 13% of the U.S. population, they represent 45% of the incarcerated population in state and federal prisons (Harrison & Beck, 2003). Wilmot and Spohn (2004) suggested that "charging and plea bargaining decisions – which determine the charge of conviction – assume a pivotal role in the process" (p. 326).

Research conducted on the decision points between arrest and sentencing is scarce. As Albonetti (1990) noted, "by focusing largely on outcome decisions (bail and sentencing), research has failed to examine race differences in actual *processing,* namely, whether the case went to trial or was pled guilty" (p. 320). There is a need for research to examine earlier decision points such as initial charging and plea negotiations. Few studies have examined unwarranted disparity in plea bargaining decisions, and most of the existing studies on plea bargaining are

---

[1] Please address any comments and questions to Erika Davis-Frenzel, Ph.D. at the following ADDRESS: Department of Criminology, Indiana University of Pennsylvania, McElhaney Hall, Room G-1, 441 North Walk , Indiana, PA 15705 PHONE: (724) 357-5976 E-MAIL: e.frenzel@iup.edu

qualitative in nature, explaining how plea negotiations are processed rather than the determinants of these decisions. The current research provides a quantitative approach to the examination of the effect of individual characteristics on the prosecutor's plea bargaining decisions in a sentencing guideline state.

SENTENCING GUIDELINES AND HYDRAULIC DISPLACEMENT OF DISCRETION

Court research on unwarranted disparities typically focus on charging or sentencing decisions (see Johnson, 2003; Spohn & Beichner, 2000; Spohn & Cederblom, 1991; Spohn & Holleran, 2000; Steffensmeier & Demuth, 2000). It has been well-documented that sentencing reforms have created a system that is more determinate and more punitive (Spohn, 2002; Spohn, 2000; Tonry, 1996). Prior to the 21st century, the United States Supreme Court has left sentencing relatively untouched, maintaining the sentencing authority with the judge – that is, until now.

The objective behind these sentencing reforms has been to limit judicial discretion and provide uniformity in sentencing decisions to avoid potential unwarranted disparate treatment. More recently, though, this objective has been challenged by the defendant's right to jury trial under the Sixth Amendment of the United States Constitution in landmark decisions such as *Apprendi v. New Jersey* (2000), *Blakely v. Washington* (2004), and *United States v. Booker* (2005).

One of the major goals of the sentencing reforms was to limit discretion. By requiring judges to follow structured sentencing procedures, reformers intended to restrict the discretion of judicial decision-making power (Spohn, 2000). By restraining judicial discretionary decision-making, reformers hoped to limit unwarranted disparity – especially with regards to individual offender characteristics. The creation of sentencing guidelines introduced a more uniform and, thereby, less individualized system of justice to combat potential problems of unwarranted disparity. "Sentencing guidelines . . . reflect a fundamental dilemma of formal social control – the balance between uniformity . . . and individualization" (Ulmer & Kramer, 1996, p. 383).

> The United States Supreme Court has virtually avoided questions about sentencing out of a reliance on the power of legislators and trial judges to change sentencing policy (Bibas, 2001). The Court addressed several constitutional issues regarding important rights in the trial court process. The Sixth Amendment right to jury trial, historically, had the most impact on judicial sentencing decisions. The Sixth Amendment states:
> In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence. (U.S. Constitution, Amendment VI).

Until recently, the Supreme Court did not address the constitutionality of sentencing reforms which were imposed to limit judicial discretion. The Supreme Court first addressed the constitutionality of sentencing guidelines in *Mistretta v. U.S.* (1989). This case, however, did not address individual liberties; it addressed the authority of the different branches to delegate certain powers. The Court in *Mistretta* decided that Congress' delegation of their law-making power to an independent agency did not violate the separation of powers clause of the U.S. Constitution. On its face, therefore, the Supreme Court in *Mistretta* decided that reliance on sentencing guidelines is an acceptable practice.

Approximately ten years later, though, sentencing decisions under the guise of sentencing reforms were under attack with the Supreme Court's decision in *Apprendi v. New Jersey* (2000). In this case, the defendant's sentence was enhanced beyond the original charge to which he pled guilty. Although the State argued that the facts supporting the enhancement penalty were merely "sentencing factors," the Court in *Apprendi* ruled that these facts were more akin to "element factors" – that is, factors attributed to the elements of the underlying crime – to which the Sixth Amendment right to jury trial attached.

In *Apprendi,* the Supreme Court addressed a mandatory penalty system, raising the declared sentence above the statutory maximum. Four years after *Apprendi*, the Supreme Court addressed the constitutionality of another sentencing reform practice – sentencing guidelines. The Supreme Court in *Blakely* used the ruling in *Apprendi* to

find that judicial upward departures from the prescribed guideline range maximum violated the defendant's right to a jury trial. The Court ruled that due to the presumptive nature of the guidelines, the "maximum" that triggered Sixth Amendment rights to jury trial was the maximum allowed by the statutory guidelines. In other words, the maximum of the range of sentence, given the defendant's prior criminal history and the current offense severity, was the ceiling beyond which a judge could not sentence above without a determination by the jury.[2]

The "elements rule" noted in *Apprendi* – and later adopted by *Blakely* – signified more limits placed on judicial discretion (Bibas, 2001). Some scholars suggested that this discretion will be displaced to other courtroom actors (Bensten, 2004; Bibas, 2001; Olson, 2002; Prieseter, 2004). Bibas (2001) noted that the potential for displaced discretion lied within the plea bargaining power of the prosecutor. Although the "elements rule" was intended to give notice to defendants about the facts that were against them, Bibas (2001) argued that prosecutors could circumvent this rule through plea negotiations.

Given the frequency of guilty pleas (see Bureau of Justice Statistics, June 2003) and the weighted evidence against the defendant with the advent of the "elements rule," it was no surprise that at least a few commentators were concerned with the displacement of discretion to prosecutors – a virtually unrestrained courtroom actor. Although the Supreme Court limited the discretion of the judge, it gave more authority to the prosecutor either through charging and/or plea bargaining practices.

EFFECT OF OFFENDER CHARACTERISTICS ON COURT PROCESSING

Research on prosecutor's plea bargaining decisions has not experienced the same vigor and attention as judicial sentencing decisions. "The plea bargaining discretion of the prosecutor looms so large that this position is increasingly recognized as the most powerful in the criminal justice system" (Bishop & Frazier, 1984, p. 387). Decisions by prosecutors can impact later decisions (e.g., bail and sentencing) by other members of the court (see Johnson, 2003; Kellough & Wortley, 2002; Wilmot & Spohn, 2004). Wooldredge and Thistlethwaite (2004) found that earlier decisions by the prosecutor resulted in more favorable dispositions at the charging stage yet less favorable at the conviction and/or sentencing stage. Therefore, it is important to address potential unwarranted disparities in these earlier decisions – that is, plea negotiations.

Research on plea negotiations has centered around two important decisions: the decision to plead guilty and the decision to reduce charges and/or counts. Most research has indicated that those defendants who took their cases to trial – that is, they did *not* plead guilty – received harsher sentences (see Brereton & Casper, 1981-1982; Britt, 2000). The most important influences on the likelihood of pleading guilty have been the severity of the current offense and the length and severity of the prior record (Meyer & Gray, 1997). Studies also found, however, that Black defendants and male defendants were the least likely to plead guilty (Albonetti, 1990; Kellough & Wortley, 2002; LaFree, 1985). A higher proportion of Black defendants and Hispanic defendants go to trial than the proportion of white defendants even though the majority of the cases conclude with a negotiated guilty plea (Johnson, 2003). Albonetti (1990) suggested that Black defendants, who were more likely to distrust the system, would have expressed this distrust by not pleading guilty and calling for a jury trial.

Race and ethnicity is not the only offender characteristic that affects guilty plea decisions. A few studies have acknowledged a relationship between sex of the offender and the likelihood of pleading guilty (Figuiera-McDonough, 1985; Johnson, 2003). Age of the offender has produced mixed results (Kellough & Wortley, 2002; LaFree, 1985). This review has made it clear, therefore, that some research imputed a significant relationship between offender characteristics and the decision to plead guilty
.

---

[2] In the most recent case to date, the United States Supreme Court similarly ruled in *U.S. v. Booker* (2005) for the Federal Sentencing Guidelines. The Court ruled that the remedy for such violation was to make the Federal Sentencing Guidelines merely voluntary. Since the current research is focused on a state guideline system, the focus is placed on *Blakely v. Washington* (2004).

Inexorably linked to defendants' decisions to plead guilty are the decisions to reduce the charges in order to secure those guilty pleas. With the advent of formalized sentencing procedures came greater discretion displaced to the prosecutor. Although there was an increase in the amount of charge reductions given, Wooldredge and Griffen (2005) found that not one particular racial and/or gender group benefited from the greater discretionary power given to prosecutors.

The decisions to reduce charges were heavily influenced by seriousness of the current offense and prior record (see McDonald, 1985; Meyer & Gray, 1997). Although the seriousness of the current offense and prior record were the most important influences in determining charge reductions, a substantial amount of research found that individual characteristics also influenced charge reductions (see Albonetti, 1992; Bernstein, Kick, Leung, & Schulz, 1977; Farnworth & Teske, 1995; Figueira-McDonough, 1985; LaFree, 1980; McDonald, 1985; Miethe & Moore, 1986; Voit, 1987).

The research on the effect of individual characteristics on the charge reduction decision has been mixed. Bernstein and her associates (1977) found that White defendants were more likely to receive favorable charge reductions compared to Black defendants. Albonetti (1992) found that younger defendants and male defendants were less likely to receive reduced charges than older defendants and female defendants, respectively. Farnworth and Teske (1995) suggested found that young, Black male defendants were less likely than other defendants to have their initial charges reduced (Farnworth & Teske, 1995). With these mixed results, it is important to clearly identify any potential unwarranted disparities in plea bargaining decisions based on legally-irrelevant offender characteristics.

THE CURRENT STUDY

Much of the research on the effect of individual characteristics on decisions in the courtroom has focused on sentencing decisions. Few researchers have examined the effect of these characteristics on prosecutorial decisions – especially, plea bargaining decisions. No research has examined potential disparities in plea bargaining decisions in a sentencing guideline state.

The sentencing literature has noted that young, Black (and Hispanic) male offenders have received the harshest penalties after controlling for legally relevant factors (see, Spohn & Holleran, 2000; Steffensmeier, et al., 1998). The few research studies examining the effect of individual characteristics on plea bargaining have seemed to suggest a similar relationship (see Ball, 2005). Despite the neglect of research on plea bargaining, it is important to address the potential relationship of individual characteristics to the plea bargaining decision.

DATA[3]

The current study is an analysis of secondary data collected by the Pennsylvania Commission on Sentencing, reflecting all felonies and misdemeanors that were sentenced during 1998 in the State of Pennsylvania. The current study addresses and merges two datasets: official offense data and official records data. The offense dataset includes information on the type and severity of the offense, official prior record score information, and information on the disposition and sentence for each offense. The records dataset includes demographic information and prior arrest and conviction information on each offender in a given judicial proceeding.

It is important to note that the two datasets include dissimilar units of analysis. The unit of analysis for the offense dataset is the offense. The unit of analysis for the records dataset is the judicial proceeding. Therefore, it is likely that one individual may have multiple offenses in a given judicial proceeding. In order to address the relationship between particular demographic variables – namely, race/ethnicity, sex, and age of the offender – and plea bargaining decisions, it is necessary to merge these two datasets. In order to accomplish this task, though, the

---

[3] Pennsylvania Commission on Sentencing. PENNSYLVANIA SETNENCING DATA, 1998 [Computer file]. ICPSR version. State College, PA: Pennsylvania Commission on Sentencing [producer], 2000. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2002.

offenses are aggregated to the individual judicial proceeding, calculating average scores across offenses in a particular judicial proceeding for a given variable. In order to address meaningful relationships and provide realistic boundaries to this research, the analyses are limited to felony judicial proceedings in one metropolitan county in Pennsylvania (N = 3,421).

METHODOLOGY

This study attempts to establish potential relationships between demographic characteristics of the individual offender and the plea bargaining decision in a sentencing guideline state. As stated earlier, sentencing guidelines were intended to restrict judicial discretion and, thereby, intended to restrict judicial sentencing disparity. However, the guidelines were not intended to limit prosecutorial discretion. With the latest decision in *Blakely*, discretion and potentially unwarranted disparity is a vitally important issue in the literature on court processing decisions. From previous research (see Ball, 2005), it is important to disentangle negotiated guilty pleas from straight guilty pleas. The current study, therefore, proposes the following hypotheses:

H_1:   Race/ethnicity, sex, and age of the offender will be significantly related to the likelihood of receiving a negotiated guilty plea (compared to non-negotiated guilty plea).

H_{1a} Black and Hispanic offenders will be less likely than White offenders to receive a negotiated guilty plea.

H_{1b} Male offenders will be less likely than female offenders to receive a negotiated guilty plea.

H_{1c} Younger offenders will be less likely than older offenders to receive a negotiated guilty plea.

It is also important to note the potential impact of individual characteristics on the decision to take one's case to trial. It has been argued that disparate treatment may not appear in the plea negotiation process but in the decision to take one's case to trial (Johnson, 2003). This study proposes the following hypotheses:

H_2:   Race/ethnicity, sex, and age of the offender will be significantly related to the likelihood of going to trial rather than pleading guilty.

H_{2a} Black and Hispanic offenders will be more likely than White offenders to have their case go to trial rather than pleading guilty – negotiated or not.

H_{2b} Male offenders will be more likely than female offenders to have their case go to trial rather than pleading guilty – negotiated or not.

H_{2c} Younger offenders will be more likely than older offenders to have their case go to trial rather than pleading guilty – negotiated or not.

VARIABLES

The dependent variable utilized for this study is case disposition. Case disposition is defined in two different ways to reflect the two tensions identified above. The first measure of the dependent variable addresses the dichotomy between negotiated guilty plea and straight guilty plea – or, non-negotiated guilty plea. The second measure addresses the tension between negotiated guilty plea, straight plea and conviction by trial. This second measure is intended to examine the potential differences in the effects of individual characteristics on plea bargaining and/or the decision to take a case to trial. The variables and their codes and frequencies are presented in Table 1 and Table 2.

[Insert Table1 and Table 2 here]

To obtain a dichotomous measure of negotiated guilty pleas, the original disposition variable was recoded where only guilty pleas were considered. The original data indicated whether the guilty plea was negotiated or not. To obtain a similar measure including trial convictions, the original disposition variable was recoded where guilty pleas (negotiated or not) and conviction by trial (bench or jury) were considered.

Since it was necessary to aggregate the data from offenses to individual judicial proceedings, the scores on particular variables were averaged across different offenses. There were a handful of judicial proceedings with multiple offenses where a mixture of offenses was negotiated guilty pleas, non-negotiated guilty pleas and/or trial convictions. Due to the aggregation process, these cases included non-whole integer values and, thus, could not be properly and adequately analyzed and interpreted. These cases are eliminated from the analyses.[4]

The project utilizes several independent variables to predict plea bargaining decisions. There are two general categories of independent variables outlined in this research: individual characteristics and case characteristics.[5] Individual characteristics include race/ethnicity, sex, age, and number of prior convictions. Race/ethnicity is defined as a dummy variable with "White" characterized as the reference category. Case characteristics include type of most serious current charge filed, most serious class of charge filed, whether the offense was completed or not, and number of charges filed.

One of the independent variables (i.e., class of charge) was impacted by the aggregation process. Since multiple offenses for a given judicial proceeding could produce multiple classes, a value of a particular class dummy variable could, again, be a non-whole integer value. Therefore, it was required to calculate the most serious class of offense – given multiple offenses in a single judicial proceeding – and create dummy variables for each class where unclassified felonies were characterized as the reference category.
Two variables – number of charges filed and prior convictions – indicate a skewed distribution, suggesting that a logged method maybe necessary. However, after careful examination of the regression analyses, it is determined that a logged value is no stronger of a prediction than the original continuous value. Therefore, the original measurement is used.

To measure the effect of individual demographic characteristics on plea bargaining decisions, the current study employs two logistic regression analyses. Logistic regression is used for analyses examining dependent variables that are categorical (see Aldrich & Nelson, 1984; Menard, 2002). The current project uses binary logistic regression for analyzing the effect of individual demographic characteristics on the likelihood of a negotiated guilty plea – a dichotomous dependent variable. This study also employs a multinomial logistic regression for analyzing the effect of these individual characteristics on case disposition: negotiated guilty plea, non-negotiated guilty plea and trial conviction.[6]

RESULTS AND FINDINGS

Table 1 presents the frequency distributions for the variables used for the binomial dependent variable – that is, negotiated guilty plea or not. The results show that the majority of case dispositions resulting in a guilty plea were negotiated guilty pleas (N = 2,268; 83.6%). The frequency distributions also indicate that the majority of the sample is Black (66.7%) and male (88.7%) with an average age of 28 years. Over one-third (37.0%) of the judicial proceedings resulted in a low severity of offense – Felony 3.

Table 2 presents frequency distributions for the variables used for the multinomial analyses – negotiated guilty plea, non-negotiated guilty plea, and trial conviction. Again, the majority of dispositions for this sample resulted in a negotiated guilty plea (68.8%) with 13.4% of dispositions ending in a non-negotiated guilty plea and 17.8% resulting in a trial conviction. Again, the majority of offenders in this sample were Black (68.2%) and male (89.6%) with an average age of 28 years. The majority of cases (35.5%) under this multinomial analysis resulted in a class Felony 3 charge as the most serious class of charge.

---

[4] For the "negotiated plea/non-negotiated plea" model, a total of 18 cases are eliminated. For the "negotiated plea/non-negotiated plea/trial conviction" model, a total of 29 cases are eliminated.
[5] There are no strength of evidence variables included in the original study. Past research that included strength of evidence as an important variable usually addressed initial screening and/or charging decisions. The current research is centered on *subsequent* plea bargaining decisions. It is presumed that the strength of evidence would have already been considered during the initial screening process.
[6] It can be rationalized that the three categories of negotiated plea, non-negotiated plea, and jury/bench trial could be ordinal. To determine if the dependent variable was ordered, an ordinal logistic regression was conducted. This data, however, failed the parallel slopes assumption. Thus, the three category dependent variable is not ordered but unordered. Multinomial logistic regression is the appropriate analysis for this dependent variable.

Binomial Logistic Regression

The results of the binomial logistic regression analysis are presented in Table 3. This model is statistically significant (p<.05) and provides 11.8% proportional reduction in error (Nagelkerke R^2 = 0.118). The results reveal that none of the individual demographic characteristics have a statistically significant effect on the likelihood of obtaining a negotiated guilty plea. In fact, there were only three statistically significant independent variables: Felony 1 (-2.294), prior convictions (-0.376), and property offense (0.833).

 [Insert Table 3 here]

The unstandardized coefficients of dichotomous independent variables can be interpreted by using the formula (e^b – 1) * 100. This formula provides the odds of being in a specific category relative to the probability of being in the omitted category. Three of the legally relevant variables – most serious class of offense, type of offense, and prior convictions – do affect the plea negotiation decision. Offenders who were charged with a Felony 1 – the most serious class – were significantly less likely to receive a negotiated guilty plea than those offenders who were charged with an unclassified felony (89.9 expected percentage change in the odds of negotiating a guilty plea relative to a non-negotiated guilty plea). Offenders who have more prior convictions are less likely to receive a negotiated guilty plea compared to offenders with less prior convictions (68.6 expected percentage change in the odds of negotiating a guilty plea relative to a non-negotiated guilty plea). Finally, offenders convicted of property offenses are more likely than other offenses to receive a negotiated plea (129 expected percentage change in the odds of negotiating a guilty plea relative to a non-negotiated guilty plea).

One can also classify which of the statistically significant independent variables are more important than the others by calculating the standardized effect ($b*\sigma_x$). The largest absolute value of the standardized effect is considered the most important factor relative to the other statistically significant variables. The largest standardized effect reported in Table 3 is Felony 1 charge (0.757). Property offense (0.410) and prior convictions (0.392) follow and are fairly close in ranking. Therefore, the most important variables are legally relevant characteristics – the most serious class of offense, type of offense, and prior convictions.

To understand the unstandardized effects in a meaningful way through comparisons of interesting cases, it is important to calculate predicted probabilities. Predicted probabilities were calculated by setting continuous independent variables at their mean and placing dichotomous independent variables at points of interest. Thus, predicted probabilities are calculated for offenders who committed a felony 1 offense, were 28.38 years of age, had 0.42 prior convictions, and had 1.41 charges brought against them. As can be seen in Table 4, there appears to be little difference in predicted probabilities across individual demographic characteristics
.
[Insert Table 4 here]

Multinomial Logistic Regression

Multinomial logistic regression was used to simultaneously analyze negotiated plea, non-negotiated plea, and bench/jury trial[7]. The reference category in the multinomial logistic regression was bench/jury trial; thus the likelihood of receiving a negotiated guilty plea and the likelihood of receiving a non-negotiated guilty plea are compared to the likelihood of receiving a bench/jury trial. The model was statistically significant with a pseudo R^2 of 0.176.

[Insert Table 5 here]

Some individual demographic characteristics are statistically significant in the likelihood of receiving a negotiated guilty plea compared to the likelihood of receiving a bench/jury trial and the likelihood of receiving a non-negotiated guilty plea compared to the likelihood of receiving a bench/jury trial. Male offenders (0.647) were more likely than female offenders to receive a negotiated guilty plea compared to a bench/jury trial conviction. Black offenders (-0.425) were less likely than white offenders to receive a negotiated guilty plea compared to a bench/jury trial conviction. These findings were similar comparing the non-negotiated guilty pleas to bench/jury trial convictions – male offenders (0.890) and Black offenders (-0.646).

---

[7] Due to the small number of jury trials (N=62), a four category dependent variable could not be used.

Of particular interest, legally relevant factors – type of offense (property 1.029) and prior number of convictions (-0.456) – are only significant when comparing the negotiated guilty plea decision to the bench/jury trial decision. Offenders convicted of property offenses were more likely than those convicted of other felonies to receive a negotiated guilty plea as opposed to receiving a bench/jury trial conviction. As the number of prior convictions decreases the likelihood of negotiating a guilty plea increases compared to having a bench/jury trial.

Standardized coefficients were calculated for statistically significant independent variables. The most important independent variables in predicting a negotiated guilty plea compared to a bench/jury trial conviction are the legally relevant variables of prior convictions (0.543) and property offense (0.473), followed by sex of the offender (.201) and race (Black) of the offender (0.200).

Predicted probabilities are calculated for the multinomial logistic regression similarly to the analyses in the binomial logistic regression. Because the multinomial logistic regression produced different samples due to the different selection criteria for guilty pleas and trial convictions, means of particular variables varied slightly. Predicted probabilities were calculated for offenders who committed a felony 1 offense, were 28.30 years of age, had 0.51 prior convictions, and had 1.42 charges brought against them. The results are summarized in Table 6. Female offenders, regardless of race, are more likely to go to trial rather than plead guilty – negotiated or not (approximately 10 percentage points less likely for each category). Black and Hispanic offenders are more likely to go to trial rather than plead guilty – negotiated or not.

[Insert Table 6 here]

DISCUSSION AND CONCLUSION

Prosecutors have a substantial amount of discretionary power which, left unchecked, can result in unwarranted disparity (Walker, et al., 2000). Since prosecutors have nearly unfettered discretion in making decisions about plea negotiations, there is the possibility that legally irrelevant individual demographic characteristics will influence decisions to offer plea negotiations.

The purpose of this research was to disentangle the negotiated guilty plea from a straight guilty plea (see Ball, 2005). The first hypothesis was that race/ethnicity, sex, and age of the offender will be significantly related to the likelihood of receiving a negotiated guilty plea. The current study did not find support for this hypothesis; none of the individual demographic characteristics were statistically significant. In fact, the results revealed that legally relevant variables (class of offense, type of offense, and number of prior convictions) were the only predictors of negotiated guilty plea decision.

It was also important to consider predictors of the negotiated guilty plea, non-negotiated guilty plea, and the bench/jury trial conviction decision and determine whether individual demographics influence these decisions. The second hypothesis was that race/ethnicity, sex, and age of the offender will be significantly related to the likelihood of going to trial rather than negotiating a plea or straight pleading. Using multinomial logistic regression, it was discovered that demographic characteristics were predictors of the decision to negotiate a guilty plea compared to the bench/jury trial conviction decision. The second hypothesis was partially supported. The results show that Black offenders were more likely than white offenders to have their case go to trial rather than straight pleading or negotiating a guilty plea. However, the second part of the second hypothesis – that is, male offenders were more likely than female offenders to have their case go to trial than to plead guilty or receive a plea negotiation – was not supported. In fact, the opposite was found. Male offenders were *less* likely than female offenders to have their case go to trial.

> There are several possible alternative explanations for the results from these analyses. "Symbolic bargaining" may explain why individual characteristics did not significantly influence negotiated guilty pleas.
> While some changes (a reduction of rape to battery or armed robbery to robbery) can be significant and have important sentencing implications, others may be symbolic or largely so (a reduction of burglary to larceny in a building or dropping three counts of theft in a four-count indictment) (Nardulli, Eisenstein, ad Flemming, 1988, p. 214).

Having knowledge about whether a specific guilty plea is a result of a true bargain or a symbolic bargain could greatly improve the analyses about the potential relationship between offender characteristics and plea bargaining practices. Even though the current analyses did not produce evidence to suggest disparate treatment in prosecutors' plea bargaining decisions, these disparities may be masked by symbolic bargaining.

The results from multinomial logistic regression analyses may indicate that racial/ethnic minorities may feel a sense of apprehension about the system and want to be heard in a trial proceeding. Albonetti (1990) suggested that black defendants, who were more likely to distrust the system, may express this distrust by not pleading guilty and calling for a jury trial. Therefore, the disparity displayed in cases going to trial may not be a product of a trial penalty but may be a product of distrust from particular defendants. Future research should attempt to examine whether this disparity is explained by differential treatment or by the offender's distrust of the system.
There are a few limitations to this current research. First, the data used for this project required one to merge two separate datasets with different units of analysis. Therefore, some data was lost due to averages being created from multiple cases for a single offender. This project also eliminated some cases because the dependent variable produced non-whole integers; however, the strictest of minority of cases were eliminated.

There were no strength of evidence variables included in the original dataset. The literature highlights the importance of including strength of evidence variables to determine the value of the case prior to the examination of the effect of individual characteristics on the likelihood of a negotiated guilty plea. If the prosecutor has strong evidence to suggest factual guilt, the defendant is less likely to receive a plea negotiation. On the other hand, if the prosecutor has weak evidence, the defendant is likely to take their case to trial. Future research should include qualitative data on the reasons for taking a case to trial or not
.
Although this study examined important potential effects of individual demographic characteristics on plea negotiation decisions – an understudied phenomenon – there remains improvements for future research. First, future research could examine how plea negotiation decisions differentiate within the context of severity of charge. More specifically, research on plea bargaining can utilize the liberation hypothesis to examine the context within which individual characteristics can impact plea bargaining decisions. Second, research on legally irrelevant variables on plea bargaining decisions can consult interaction terms between race/ethnicity, sex, and age. Interaction terms can provide a context within which disparate treatment can thrive; however, the sample size must be large enough to utilize interaction terms. Finally, future research should examine the cumulative effects of individual characteristics in case processing decisions from arrest to charging to subsequent plea negotiations to sentencing (see Blumstein et al., 1989).

With the advent of sentencing reforms to limit the discretion of judicial decision making and reduce unwarranted disparity, some scholars have suggested that judicial discretion has simply been displaced to prosecutors who are virtually unrestricted. With the recent decisions in *Apprendi* and *Blakely*, though, this discretion displacement is, potentially, even more expansive. Therefore, prosecutorial discretion is a phenomenon that is understudied yet vastly used in the American courtrooms today. Plea bargaining is, arguably, the decision that is least restricted for prosecutors. The vast majority of cases are decided by guilty pleas and plea negotiations. Therefore, more research on plea bargaining in sentencing guidelines is imperative – especially after *Blakely*.

REFERENCES

Articles
Albonetti, C. A. (1987). Prosecutorial discretion: The effects of uncertainty. *Law and Society Review, 21,* 291-313.

Albonetti, C. A. (1990). Race and the probability of pleading guilty. *Journal of Quantitative Criminology*, *6*, 315-334.

Albonetti, C. A. (1992). Charge reduction: An analysis of prosecutorial discretion in burglary and robbery cases. *Journal of Quantitative Criminology*, *8*, 317-333.

Aldrich, J., & Nelson, F. (1984). *Linear probability, logit, and probit models.* Beverly Hills, CA: Sage.

Ball, J. D. (2005). Unpublished paper, "Disparities in charge bargaining: Testing an integrated theory." Presented at the Annual Meeting of the Academy of Criminal Justice Sciences. Chicago, IL.

Bernstein, I. N., Kick, E., Leung, J. T., & Schulz, B. (1977). Charge reduction: An intermediary stage in the process of labeling criminal defendants. *Social Forces*, *56*, 362-384.

Bibas, S. (2001). Judicial fact-finding and sentence enhancements in a world of guilty pleas. *The Yale Law Journal*, *110*, 1097-1185.

Bishop, D. M., & Frazier, C. E. (1984). The effects of gender on charge reduction. *Sociological Quarterly*, *25*, 385-396.

Blumstein, A., Cohen, J., Martin, S. E., & Tonry, M. H. (Eds.). (1983). *Research on sentencing: The search for reform* (Vols. 1-2). Washington, D.C.: National Academy Press.

Brereton, D., & Casper, J. (1981-1982). Does it pay to plead guilty? Differential sentencing and the functioning of the criminal courts. *Law & Society Review*, *16*, 45-70.

Britt, C. L. (2000). Social context and racial disparities in punishment decisions. *Justice Quarterly*, *17*, 707-732.

Bureau of Justice Statistics. (June, 2003). *Felony Sentences in State Courts, 2000*. Washington, D.C.: U.S. Department of Justice.

Farnworth, M., & Teske, R. H. C. (1995). Gender differences in felony court processing: Three hypotheses of disparity. *Women & Crime Justice*, *6* (2), 23-44.

Figueira-McDonough, J. (1985). Gender differences in informal processing: A look at charge bargaining and sentence reduction in Washington, D. C. *Journal of Research in Crime and Delinquency*, *22*¸ 101-133.

Gottfredson, M. R., & Gottfredson, D. M. (1988). *Decision making in criminal justice* (2nd Ed.). New York: Plenum.

Harrison, P., & Beck, A. (2003). *Prisoners in 2003*. Washington, D.C.: Bureau of Justice Statistics.

Johnson, B. D. (2003). Racial and ethnic disparities in sentencing departures across modes of conviction. *Criminology*, *41*, 449-490.

Kellough, G., & Wortley, S. (2002). Remand for plea: Bail decisions and plea bargaining as commensurate decisions.

Kersetter, W. (1990). Gateway to justice: Police and prosecutorial response to sexual assaults against women. *Criminology*, *81*, 267-313.

LaFree, G. D. (1980). Variables affecting guilty pleas and convictions in rape cases: Toward a social theory of rape processing. *Social Forces*, *58*, 833-850.
LaFree, G. D. (1985). Adversarial and nonadversarial justice: A comparison of guilty pleas and trials. *Criminology*, *23*, 289-312.

McDonald, W. F. (July 1985). *Plea bargaining: Critical issues and common practices*. U.S. Department of Justice: National Institute of Justice.

Menard, S. (2002). *Applied logistic regression analysis*. Thousand Oaks, CA: Sage.

Meyer, J. A., & Gray, T. (1997). Drunk drivers in the courts: Legal and extra-legal factors affecting pleas and sentences. *Journal of Criminal Justice*, *25*, 155-163

Miethe, T. D., & Moore, C. A. (1986). Racial differences in criminal processing: The consequences of model selection on conclusions about differential treatment. *The Sociological Quarterly*, *27*, 217-237.

Nardulli, P., Eisenstein, J., & Flemming, R. B. (1988). *The tenor of justice*, Urbana, IL: University of Illinois Press.

Olson, E. A. (2002). Rethinking mandatory minimums after *Apprendi*. *Northwestern University Law Review*, *96*, 811-842.

Priester, B. J. (2004). Structuring sentencing: Apprendi, the offense of conviction, and the limited role of Constitutional law. *Indiana Law Journal*, *79*, 863-935.

Spohn, C. (2000). Thirty years of sentencing reform: The quest for a racially neutral sentencing process, *3*, 427-502.

Spohn, C. (2002). *How Do Judges Decide? The Quest for Fairness and Justice in Sentencing*. Thousand Oaks, CA: Pine Forge Press
.

Spohn, C., & Beichner, D. (2000). Is preferential treatment of female offenders a thing of the past? A multi-site study of gender, race, and imprisonment. *Criminal Justice Policy Review*, *11*, 149-184.

Spohn, C., Beichner, D., & Davis-Frenzel, E. (2001). Prosecutorial justifications for sexual assault case rejection: Guarding the "gateway to justice." *Social Problems*, *48*, 206-235
.

Spohn, C., & Cederblom, J. (1991). Race and disparities in sentencing : A test of the liberation hypothesis. *Justice Quarterly*, *8*, 305-327.

Spohn, C., & Holleran, D. (2000). The imprisonment penalty paid by young, unemployed Black and Hispanic male offenders. *Criminology*, *38*, 281-306
.

Steffensmeier, D., & Demuth, S. (2000). Ethnicity and sentencing outcomes in U.S. federal courts: Who is punished more harshly? *American Sociological Review*, *65*, 705-729.

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, 763-797.

Thomas, C. W., & Fitch, W. A. (1976). Prosecutorial decision making. *The American Criminal Law Review*, *13*, 507-559.

Tonry, M. (1996). *Sentencing Matters*. New York: Oxford University Press
.

Ulmer, J. T., & Kramer, J. H. (1996). Court communities under sentencing guidelines: Dilemmas of formal rationality and sentencing disparity. *Criminology*, *34*, 383-407.

Voit, E. S. (1987). *Formal, substantive, and ascriptive determinants of prosecutorial decisions and their effects on case outcomes in the criminal justice process*. Unpublished doctoral dissertation, Rutgers University. (dissertation).

Walker, S., Spohn, C., & DeLone, M. (2000). *The color of justice: Race ethnicity and crime in America* (2nd Ed.). Belmont, CA: Wadsworth.

Wilmot, K. A., & Spohn, C. (2004). Prosecutorial discretion and real-offense sentencing: An analysis of relevant conduct under the federal sentencing guidelines. *Criminal Justice Policy Review*, *15*, 324-343.

Wooldredge, J., & Griffin, T. (2005). Displaced discretion under Ohio sentencing guidelines. *Journal of Criminal Justice*, *33*, 301-316.

Wooldredge, J., & Thistlethwaite, A. (2004). Bilevel disparities in court dispositions for intimate assault. *Criminology*, *42*, 417-456.

Cases and Constitution
Apprendi v. New Jersey, 530 U.S. 466 (2000)

Blakely v. Washington, 124 S. Ct. 2531 (2004)

Mistretta v. U.S., 488 U.S. 361 (1989)

United States v. Booker, 125 S. Ct. 738 (2005)

United States Constitution

Table 1 Codes and Frequencies of Dependent and Independent Variables: Binary Dependent Variable

Variable	code	N	%	mean
Dependent Variable				
Negotiated Guilty Plea	1=yes	2,268	83.6%	
	0=no	447	16.4	
Independent Variables[+]				
Offender characteristics				
Race/ethnicity				
Black		1,745	66.7	
Hispanic		444	17.0	
White		401	15.3	
Sex	1=male	2,379	88.7	
	0=female	302	11.3	
Age				28.38
Prior Convictions				0.42
Case Characteristics				
Class of Charge Filed				
Felony 1		339	12.5	
Felony 2		466	17.2	
Felony 3		1003	37.0	
Unclassified Felony		905	33.4	
Type of Offense				
Person		558	22.1	
Property		822	32.5	
Drug		860	34.0	
Other		289	11.4	
Completed Crime	1=yes	2,683	98.9	
	0=no	29	1.1	
Number of Charges Filed				1.41

[+]Due to aggregation, independent variables were averaged across more than one offense.

Table 2 Codes and Frequencies of Dependent and Independent Variables: Multinomial Dependent Variable

Variable	code	N	%	mean
Dependent Variable				
Case Disposition	1=negotiated plea	2,262	68.8%	
	2=non-negotiated plea	439	13.4	
	3=trial conviction	585	17.8	
Independent Variables[+]				
Offender characteristics				
Race/ethnicity				
Black		2,169	68.2	
Hispanic		517	16.3	
White		460	14.5	
Sex	1=male	2,915	89.6	
	0=female	340	10.4	
Age				28.31
Prior Convictions				0.51
Case Characteristics				
Class of Charge Filed				
Felony 1		488	14.9	
Felony 2		617	18.8	
Felony 3		1,165	35.5	
Unclassified Felony		1,017	30.9	
Type of Offense				
Person		784	25.6	
Property		936	30.6	
Drug		966	31.6	
Other		371	12.1	
Completed Crime	1=yes	3,244	98.7	
	0=no	45	1.3	
Number of Charges Filed				1.42

[+]Due to aggregation, independent variables were averaged across more than one offense.

Table 3 Binomial logistic regression analysis of case disposition (negotiated plea or not)

	b	odds ratio	$\mid b(\sigma_x) \mid$
Severity of Charge Filed ("unclassified felony" is reference category)			
Felony 1	-2.294* (1.152)	0.101	0.757 (**1**)
Felony 2	-1.922 (1.144)	0.146	
Felony 3	-1.341 (1.136)	0.262	
Type of Offense ("other felony" is the reference category)			
Person	0.332 (0.257)	1.394	
Property	0.833* (0.219)	2.299	0.392 (**3**)
Drug	-0.492 (1.141)	0.611	
Prior Convictions	-0.376* (0.053)	0.686	0.410 (**2**)
Number of Current Charges	0.007 (0.070)	0.915	
Offender Race/Ethnicity ("White" is reference category)			
Black	0.153 (0.172)	1.165	
Hispanic	0.194 (0.235)	1.214	
Sex	-0.221 (0.189)	0.802	
Age	0.007 (0.007)	1.007	
Constant	2.538		
Number of cases	1768		
Nagelkerke R^2	11.8		
-2 Log Likelihood (goodness of fit)	1595.929		

*$p < .05$

Table 4 Predicted Probabilities for Logistic Regression

	Males				Females			
	Person	**Property**	**Drug**	**Other**	**Person**	**Property**	**Drug**	**Other**
Black	0.636	0.743	0.434	0.578	0.686	0.783	0.489	0.631
Hispanic	0.646	0.750	0.444	0.588	0.694	0.789	0.499	0.640
White	0.600	0.712	0.397	0.541	0.652	0.755	0.451	0.595

Table 5 Multinomial logistic regression analysis of case disposition (negotiated plea; negotiated plea; trial conviction)

	Negotiated Plea			*Non-Negotiated Plea*		
	b	**odds ratio**	**| b(σ$_x$) |**	**b**	**odds ratio**	**| b(σ$_x$) |**
Severity of Charge Filed ("unclassified felony" is reference category)						
Felony 1	-0.965 (1.114)	0.381		1.028 (1.353)	2.797	
Felony 2	-0.607 (1.108)	0.545		0.993 (1.343)	2.700	
Felony 3	0.181 (1.103)	1.198		1.241 (1.336)	3.458	
Type of Offense ("other felony" is the reference category)						
Person	0.265 (0.235)	1.279		-0.002 (0.293)	0.977	
Property	1.029* (0.203)	2.799	0.473 (**2**)	0.188 (0.257)	1.207	
Drug	1.205 (1.110)	3.337		1.407 (1.346)	4.083	
Prior Convictions	-0.456* (0.51)	0.634	0.543 (**1**)	0.001 (0.048)	0.998	
Number of Current Charges	0.001 (0.061)	1.006		-0.022 (0.074)	0.978	
Offender Race/Ethnicity ("White" is reference category)						
Black	-0.425* (0.178)	0.654	0.200 (**4**)	-0.646* (0.214)	0.524	0.304 (**1**)
Hispanic	-0.301 (0.231)	0.740		-0.558 (0.287)	0.573	
Sex	0.647* (0.220)	1.910	0.201 (**3**)	0.890* (0.254)	2.436	0.276 (**2**)
Age	0.001 (0.007)	1.006		-0.002 (0.008)	0.998	
Constant	0.353			-1.900		
Number of cases	2226					
Nagelkerke R^2	0.176					
-2 Log Likelihood (goodness of fit)	2793.219					

*p < .05

Table 6 Predicted Probabilities for Multinomial Logistic Regression

	Males			Females		
	Negotiated	**Non-negotiated**	**Jury/Bench Trial**	**Negotiated**	**Non-negotiated**	**Jury/Bench Trial**
Person Offense						
Black	0.301	0.173	0.526	0.260	0.106	0.634
Hispanic	0.308	0.179	0.513	0.272	0.111	0.617
White	0.311	0.224	0.464	0.288	0.155	0.558
Property Offense						
Black	0.350	0.178	0.472	0.333	0.111	0.556
Hispanic	0.353	0.184	0.462	0.341	0.116	0.543
White	0.346	0.228	0.426	0.345	0.160	0.496
Drug Offense						
Black	0.316	0.275	0.409	0.305	0.218	0.477
Hispanic	0.320	0.278	0.402	0.311	0.223	0.466
White	0.318	0.302	0.379	0.312	0.262	0.426
Other Offense						
Black	0.269	0.200	0.532	0.225	0.128	0.646
Hispanic	0.277	0.205	0.517	0.237	0.134	0.629
White	0.284	0.249	0.466	0.254	0.181	0.565