Examining the Role of Race in Plea Decision-Making for Defense Attorneys and Laypeople

by

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The above committee determined that the thesis is acceptable in form and content and that a satisfactory knowledge of the field covered by the thesis was demonstrated by the candidate during an oral examination. A signed copy of the Certificate of Approval is available from the School of Graduate and Postdoctoral Studies.

ABSTRACT

Guilty pleas and trials both result in convictions, however, the plea process is significantly shorter, and most convictions are secured through guilty pleas. Defendants typically only see their defense attorney during this process, so the advice that they give carries weight. Because defendants may have little time with their defense attorney before making a plea decision, they may turn to other people, such as their friends or family for advice. The racial biases of legal actors and laypeople may influence the advice they give to their clients or friends who are facing plea decisions. The current thesis examined the effects that racial biases have on plea decision-making and recommendations. Study 1 explored the extent to which defense attorney recommendations differ depending on the race of the defendant and the strength of the evidence. Results indicate that defense attorneys do not make decisions based solely on the race of the client, but rather in conjunction with other factors, such as the evidence. Defense attorneys thought that it would be better for Black defendants with strong evidence to accept a plea deal than similarly situated white defendants. Study 2 explored the extent to which peer recommendations differ depending on the race of the defendant and the strength of the evidence. Results indicate that students are influenced by both race and evidence strength separately, but not together. Student participants are influenced by the race of the client, but in a counterintuitive pro-Black direction where they thought that their white friends were more guilty, so they were more likely to recommend the plea deal. The additional analysis compared the results of Study 1 and Study 2 to explore if defense attorneys and student participants make different plea-related recommendations and judgments. Results of the additional analysis indicate that student participants demonstrate more racial bias in their recommendations, and they are more pro-plea than defense attorneys. This is theorized to be because defense attorneys have more experience

in the criminal justice system and with Black defendants. Together, these studies increase the field’s understanding of the role that race plays in plea recommendations and the criminal justice system as a whole.

Keywords: plea bargaining; defense attorneys; race; decision making

AUTHOR'S DECLARATION

I hereby declare that this thesis consists of original work of which I have authored. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Annmarie Khairalla

STATEMENT OF CONTRIBUTIONS

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication. Members of the Psycho-Legal Experiments & Applications (PLEA) Lab at the University of Massachusetts, Lowell assisted in data collection for Study 2 and my supervisors provided invaluable feedback and ideas for improvement. I have used standard referencing practices to acknowledge ideas, research techniques, or other materials that belong to others. Furthermore, I hereby certify that I am the sole source of the creative works and/or inventive knowledge described in this thesis.

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"So he who had received five talents came and brought five other talents, saying, 'Lord you delivered to me five talents; look, I have gained five more talents besides them.' His lord said to him, 'Well done good and faithful servant; you were faithful over a few things, I will make you ruler over many things. Enter into the joy of your lord'" Matthew 25: 20-21

Table of Contents

Thesis Examination Information .... *ii*

Abstract .... *iii*

Author's Declaration .... *v*

Statement of Contributions .... *vi*

Acknowledgements .... *vii*

Chapter 1: General Introduction *1*

1.1 Racial Bias 3

1.2 Racism in the Criminal Justice System 5

1.3 Plea Bargaining 13

1.4 Thesis Overview 23

Chapter 2. Study 1: Plea Recommendations of Defense Attorneys *25*

2.1 Introduction 25

2.2 Study Objectives 29

2.3 Hypotheses 30

2.4 Method 31

2.4.1 Participants 31

2.4.2 Materials and Measures 32

2.5 Results 35

2.6 Discussion 46

2.6.1 Limitations 53

2.6.2 Conclusion 54

Chapter 3. Study 2: Plea Recommendations of Peers *57*

3.1 Introduction 57

3.2 Study Objectives 62

3.3 Hypotheses 63

3.4 Method 63

3.4.1 Participants 63

3.4.2 Materials and Measures 64

3.5 Results 66

3.6 Discussion 80

3.6.1 Limitations 84

3.6.2 Conclusion 86

Chapter 4. Comparing Plea Recommendations of Experts and Laypeople *88*
4.1 Introduction 88
4.2 Present Study 89
4.3 Results 89
4.4 Discussion 94
Chapter 5. General Discussion and Conclusions *100*
5.1 General Discussion and Limitations. 100
References *109*
Appendices *127*
Appendix A: Pre-Simulation Measures Study 1 127
Appendix B: Simulation Screenshots 129
Appendix C: Post-Simulation Measures Study 1 133
Appendix D: Pre-Simulation Measures Study 2 135
Appendix E: Post-Simulation Measures Study 2 136

LIST OF TABLES

CHAPTER 2

Table 2.1: Means of Dependent Variables Concerning Race ……………………………………..37

Table 2.2: Means of Dependent Variables Concerning Evidence Strength …………………….38

Table 2.3: Means of Dependent Variables Concerning the Interaction of Race and Evidence Strength ……………………………………………………………………………………….40

Table 2.4: Principal Component Analysis of Plea Related Items ……………………………….41

Table 2.5: Proportion of Yes/No Responses for Race and Jury Behavior ………………………45

CHAPTER 3

Table 3.1: Means of Dependent Variables Concerning Race ……………………………………...68

Table 3.2: Means of Dependent Variables Concerning Evidence Strength ……………………..69

Table 3.3: Means of Dependent Variables Concerning the Interaction of Race and Evidence Strength ……………………………………………………………………………………….70

Table 3.4: Principal Component Analysis of Plea Related Items ……………………………….75

Table 3.5: Proportion of Yes/No Responses for Race and Jury Behavior ………………………78

CHAPTER 4

Table 4.1: Means of Dependent Variables Concerning Race ……………………………………...91

Table 4.2: Means of Dependent Variables Concerning Evidence Strength …………………….92

LIST OF FIGURES

CHAPTER 2

Figure 2.1 Mean Response Scores by Factor……………………………………………………….44

CHAPTER 3

Figure 3.1 Mean Response Scores by Factor……………………………………………………… 78

Chapter 1: General Introduction

In November 1992, 18-year-old Jason Bowie was found dead in an abandoned house in Milwaukee (National Registry of Exonerations, 2023). Police questioned John Peavey who said that he, Anthony Boddie, and Derrick Sanders got into a fight with Bowie. Peavey said that he left Bowie with Boddie and Sanders and he heard gunshots before they emerged from the house. Later, Boddie turned himself in to the police and gave a similar story except it was he who had left Bowie with the others and heard gunshots before they emerged from the house. Boddie and Peavey plead guilty to homicide and reckless homicide, respectively, shortly after. In June 1993, police arrested the third man, Derrick Sanders, a 21-year-old Black man. He also told police that the 3 men got into a fight with Bowie, but he was not there when Bowie was shot, and he expressed sorrow over the incident. A few months later in September 1993, Sanders pled no contest and was sentenced to life in prison with the possibility of parole after January 2015. Soon after, he filed a motion to withdraw his plea saying he misunderstood the potential punishment. His plea was eventually vacated, and he was granted a new hearing. In 1996, his mother wrote a letter to her son's new attorney, Vishny, telling the attorney that she received a letter from Boddie saying that Sanders was not around when Bowie was shot. Boddie wrote, "The only reason I told the police that Mr. Sanders did it is because they insisted that he did it…I tried to tell them that he didn't do anything, but they kept on insisting that he did it. I was scared, so I gave a false statement." Boddie's statement was not introduced during the new hearing. At his court date his attorney, Vishny, negotiated another no-contest plea with the same terms: life in prison with the opportunity for parole in 2015. During the plea colloquy, the judge asked Sanders if he understood what "party to a crime" meant. Sanders said he did. The judge asked if Sanders and his attorney has discussed the concept. Sanders again said yes.

However, the judge never explained the concept beyond yes/no questions, and neither did his attorney. In 2017, Sanders filed a motion for post-conviction relief claiming that the colloquy was deficient and that Vishny was ineffective because she did not understand that his plea was in conflict with what he had claimed happened. In 2018, the judge granted Sanders the motion to withdraw his plea, dismissed the charge, and Sanders was released from prison (National Registry of Exonerations, 2023). His new attorney, Anderegg, believes that Vishny negotiated the same sentence in 1996 (compared to his 1993 no-contest plea) because she did not believe she could win at trial or improve his sentence (Richmond, 2019). Sanders was 21 years old when he was arrested with no criminal record and was a Navy veteran with an honorable discharge who had served in Operation Desert Storm. In 2020, the state of Wisconsin awarded Sanders $25,000 to compensate him for the nearly 25 years he spent in prison (National Registry of Exonerations, 2023).

Sanders' case played out within a context of wider racial tensions. He was a Black man, arrested in the early 90s, shortly after Rodney King has been killed by police, and at the height of the War on Drugs that disproportionately harmed the Black community (Bobo & Thompson, 2006). He was targeted by police and offered a deal that still included life in prison. It is difficult to imagine why someone would accept a plea deal that still included a life sentence, twice, while claiming that he was not the shooter. A deeper look into the case reveals that his attorney, a respected and experienced legal expert, likely recommended that he accept it, potentially because she did not think she could get a better deal or that she would be successful at trial. His mother also appears to have been involved in the case, thus it is likely she offered input into his decision-making (although it is unclear what her recommendations were; Richmond, 2019). This dissertation will explore the racial biases that are intertwined in the

justice system and the roles that defense attorneys and non-professional laypeople (e.g., family, peers) play, specifically in the plea process.

1.1 Racial Bias

Just as it was in the case of Derrick Sanders, racial bias is apparent in many aspects of the criminal justice system (see the 2023 special issue of Law and Human Behavior, *Racial Justice in the Criminal Justice and Legal Systems,* for a comprehensive review of racial bias in the criminal justice system). Biases can either be explicit or implicit. Explicit biases are typically intentional and deliberately engaged, and individuals are aware of and able to control them; implicit biases are unintentional and automatic (Hunt, 2015a). While changing societal norms and a decreased tolerance for overt racism have resulted in decreased explicit bias (Chong et al., 2021), implicit biases are still prevalent. Biases and heuristics are the associations individuals make about the large amount of information they take in every day (Fiske & Taylor, 1991). They come from a desire to categorize and group people and objects, a preference for things (or people) that are familiar or part of the same group, or to simplify a complex environment (Glaser et al., 2014). By categorizing people according to stereotypes and filtering out information that is not consistent with their stereotypes, individuals are able to manage the information they take in and make decisions without being overwhelmed (Hunt, 2015a). These processes are largely unconscious. They are formed from repeated exposure to stereotypes and associations that are pervasive in a given environment, such as associating "Black" with "violence," or "criminal." These associations can be activated even if one is aware of them but does not believe that they are true (Correll et al., 2002). They can be activated in ambiguous situations where individuals have discretion and there is no previously defined course of action, the individual is inexperienced, or when there are increased cognitive

demands (Swencionis & Goff, 2017). They can also be activated around certain cues such as ethnic names or stereotypical physical descriptions (Andersen et al., 2007; Hunt, 2015a). Once these biases are activated, they can be used to filter out contradictory information and interpret new information so that it is consistent with their stereotypes (Hunt, 2015a). Generally, decision-making under uncertain conditions or with a lack of information can lead to relying on heuristics which can lead to biased decisions (Tversky & Kahneman, 1974). The legal process is ripe for situations like this where individuals are trying to predict juror behavior, estimate the likelihood of conviction at trial, or operating without full case discovery.

For legal actors such as police officers, prosecutors, defense attorneys, and laypersons such as jurors or family members of defendants who are involved in the legal process and who may impact and inform legal decisions, these biases can be activated when they have to make decisions and judgments with little time and information (Graham & Lowry, 2004). Because of this, implicit racial biases can affect a case from beginning to end (Richardson & Goff, 2012). Police officers and investigators can demonstrate racial bias when evaluating evidence, putting together suspect lists, arresting suspects, deciding when to use force, and during routine traffic stops (Farrell et al., 2004; Nix et al., 2017; Smith & Alpert, 2007). Research has shown that police officers are more likely to interpret an ambiguous object, such as a cell phone, as dangerous when the holder was Black, when compared to people of other races (Fachner & Carter, 2015; Fridell, 2017). Racial bias can influence prosecutors when they decide whether to charge someone with a crime, if they should recommend bail, if they want to offer a plea and what type of plea, or if they want to remove non-white[1] jurors during voir dire because they

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[1] We have decided to capitalize "Black" but not "white" when discussing racial groups. Other organizations and publications have also chosen to capitalize Black and white differently because they argue that the terms carry

believe they will identify with non-white defendants (Lyon, 2011; Smith & Levinson, 2011). They can also influence defense attorneys when they judge their clients' guilt and credibility, evaluate the evidence, dedicate their limited resources, interpret their clients' behavior, communicate with their clients and recommend plea deals to their clients (Kang et al., 2011; Kassin et al., 2003; Lyon, 2011; Richardson & Goff, 2012). Lastly, they can influence people of all racial backgrounds, typically to the detriment of those that are Black, Indigenous or People of Color (BIPOC).

1.2 Racism in the Criminal Justice System

Racism is pervasive in the criminal justice system and can be seen in numerous decision points throughout the system (Kutateladze et al., 2014). Black individuals are disadvantaged and overrepresented at nearly every stage of the process and potentially even before entering the system (i.e., the school-to-prison pipeline specifies that inequalities in school discipline for Black students lead to inequalities in arrest and incarceration for Black people down the line; Barnes & Motz, 2018). Black communities are more likely to be policed, and over-policed, than white communities (Jackson et al., 2022). Black youth are at increased likelihood of police-initiated contact when not engaged in criminal behavior compared to white youth (Harris et al., 2020). Data from the 2008 Police-Public Contact Survey found that, while not more likely to be stopped, when they have been stopped, Black drivers (12.3%) are more likely than white (3.9%) and Latino (5.8%) drivers to be searched (Eith & Durose, 2011). However, an analysis of over 18 million traffic stops in North Carolina found that Black drivers, especially young Black drivers were searched and arrested significantly more than

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different meanings. One reason is because of the shared culture and history that Black represents and the history of "White" being used by hate groups (American Bar Association, 2023; Coleman, 2020).

white drivers, female drivers, and older drivers. Despite this, searches that led to police actually locating contraband on these drivers were significantly lower for Black drivers compared to white drivers (Baumgartner et al., 2017). There is also disparate treatment based on crime type. For instance, even though Black and white males use drugs at similar rates (Gross et al., 2022), Black men are 13 times more likely to be sentenced to jail than white male drug users (Gross et al., 2022; Human Rights Watch, 2000).

Policing and Use of Force. Despite the omnipresent police presence in Black communities, it is not increasing people's sense of safety, but rather creating an over-policing/under-policing paradox (Jackson et al., 2022). Prowse, Weaver, and Meares (2020) conducted interviews with hundreds of BIPOC individuals across five cities. Their interviews revealed that policing in BIPOC communities is high contact, zero-tolerance, and targeted at inconsequential behavior such as jaywalking or selling loose cigarettes. Residents in these communities would be asked about their comings and goings or stopped for minor traffic violations. During those interactions, people reported that they thought that police were overly aggressive. However, when actual danger was present or community members needed protection, they reported that police were nowhere to be found; they were unresponsive. Prowse et al. (2022) called this: "distorted responsiveness" – in poor BIPOC communities there is "a consistent collective understanding that aggressive and arbitrary patrolling was *yoked* together with invisibility of police or their ambivalence in the face of immediate danger" (Prowse et al., 2020, p. 13).

Once contact has been initiated with law enforcement, Black individuals are more likely to be victims of use of force by law enforcement (Hunt, 2015a) as evidenced by laboratory studies, government reports, and survey data. Laboratory research using

computerized first-person shooter tasks (Correll et al., 2002) found shooter bias in both police officer and lay participants. Biased response time patterns emerged where participants were faster to shoot unarmed Black targets, but not shoot unarmed white targets (Correll et al., 2002; Correll et al., 2007; Sadler et al., 2012). Other studies found bias in accuracy where participants were more likely to mistakenly shoot unarmed Black targets and not to shoot armed white targets (Correll et al., 2002; Greenwald et al., 2003; Plant & Peruche, 2005; Plant et al., 2005).

The U.S. Department of Justice found that a disproportionate number of incidents of police officers using deadly force (Brown & Langan, 2001) and tasers (Gau et al., 2010) involve Black men. The Bureau of Justice Statistics found that minorities are also more likely to die in police custody (Burch, 2011). Specifically, data from 12 law enforcement agencies found that police officers are more likely to use force against Black individuals than anyone else (Goff et al., 2016). These statistics are felt by these minority communities as well; in a police use of force survey, Black participants were more likely to respond that force has been used against them by the police than were white and Latino participants (Eith & Durose, 2011). Overall, police officers are more likely to use force against Black suspects and their decisions to use force are influenced by racial associations with criminality and danger (Hunt, 2015a).

Prosecutors & Charging. Once individuals have been arrested, they will likely be charged. Prosecutors have broad power and discretion when it comes to charging, with few guidelines or regulations (Bibas, 2009). Within their discretion, they must decide if someone who is arrested should be charged, what they should be charged with and at what level, if they should oppose bail, if they will offer a plea deal, or what their trial strategy should be. Even in an adversarial system that favors the state, prosecutors often do not have important case

information about the crime and the defendant early on in the process. Typically, that information would come out in a trial, but most cases never make it to trial and are plead out. Instead, prosecutors and judges may rely on stereotypes of the defendant's gender, race, or social class to gauge criminality or culpability leading to racial disparities in charging (Kutateladze et al., 2014). For example, prosecutors are more likely to charge Black juvenile defendants as adults than white juvenile defendants. Being tried in adult court denies them the rehabilitation-focused treatment of a juvenile court (Zane et al., 2016). Prosecutors also have a lot of discretion when it comes to plea deals (see below for a more in-depth discussion of the plea process).

Sentencing. Black and minority individuals are more likely to be arrested and imprisoned than their white counterparts. Although Black people make up roughly 13% of the U.S. population (U.S. Census Bureau, 2019), they account for 33% of incarcerated individuals (Gramlich, 2019). Using data from the Bureau of Justice Statistics (2020), The Sentencing Project (2023) reports that the imprisonment rate for Black individuals is nearly five times that of whites, and in some states (e.g., New Jersey) 12.5 Black residents are imprisoned for every 1 white resident. In federal court, Black male defendants are more than three times more likely to be imprisoned that white male defendants (Ulmer et al., 2016) and Black defendants receive sentences that are nearly 20% longer than the ones that white defendants receive (United States Sentencing Commission, 2017). While there are several factors that may affect sentencing, race effects are still persistent. For instance, Mitchell (2005) conducted a meta-analysis of 71 studies and that found that even after controlling for crime seriousness and criminal history, Black defendants were sentenced more harshly than white defendants. Similar trends were found using data from 2012 through 2016 from federal courts (United States Sentencing

Commission, 2017). Research has demonstrated that sentencing disparities are not explained by a slew of other relevant factors, such as criminal history or socioeconomic status, but rather are driven by systematic racial biases that disadvantage Black defendants.

Juries. Black defendants are also disadvantaged if they proceed to trial, however the relationship is complicated. For instance, a meta-analysis of mock juror decision-making studies for (primarily) non-capital cases found a small, but significant, effect of racial bias in both verdict ($d = .092$) and sentencing ($d = .185$) decisions for other-race defendants (i.e., defendants that were of a different race than the participant; Mitchell et al., 2005). For verdict, participants were more likely to render guilty verdicts for defendants of a race other than their own, than for defendants of their own race. Specifically, this effect was strongest for Black participants; Black participants were more likely to give guilty verdicts for white defendants than white defendants were for Black defendants. A similar trend was found for sentencing where the effect was strongest with Black participants; Black participants rendered longer sentences for white defendants than white participants did for Black defendants (Mitchell et al., 2005).

However, different trends emerge when looking at capital cases or cases where there are Black defendants and white victims. In cases where Black defendants are accused of killing white defendants, jurors are more likely to recommend the death penalty. This trend holds through laboratory mock juror studies (Lynch & Haney, 2009) and archival analysis of real-life cases from states such as North Carolina (Unah, 2009) and Delaware (Johnson et al., 2012). Further, this finding is strongest for white men (Lynch & Haney, 2009). Using data from the Capital Jury Project, Bower et al. (2001) found that Black defendants were roughly 40% more likely to receive the death penalty when there five or more white men on the jury. It should

also be noted that this bias towards seeking the death penalty for Black defendants is also seen in prosecutors' decision-making as they are more likely to seek the death penalty when white people are the victims of Black or Latino defendants (Paternoster & Brame, 2008). Despite these mixed findings, research has found that racial bias occurs in jury decision-making when there is a white victim and a Black defendant and is stronger among white male jurors.

There are also downstream effects of the over-prosecution and incarceration of Black individuals. One of the collateral consequences of a conviction is losing the right to vote. Black citizens are being disenfranchised at a higher rate than white citizens because they are convicted and incarcerated at higher rates than white citizens. In conjunction with this, voter registration rolls are the primary source of information for calling people for jury duty. Therefore, Black citizens are also less likely to be represented in the pool of potential jurors (Kovera, 2019). Even when they are called for jury duty, they are not equally likely to be seated (Equal Justice Initiative, 2010: Flanagan, 2018), despite a Supreme Court ruling that prosecutors cannot exclude jurors based solely on their race (*Batson v. Kentucky*, 1986). In turn, Black defendants are less likely to be tried by a "jury of their peers." When there is an increase in the proportion of Black people on a jury, conviction rates go down for both Black and white defendants, but more so for Black defendants. Conversely, when there is an increase in the proportion of white male jurors, there is an increased conviction rate for Black defendants, but not white defendants (Flanagan, 2018). So, this disenfranchisement of Black voters can combine with other factors leading to increased conviction rates for Black defendants.

An additional explanation for juror bias is crime type, where jurors are more likely to pass guilty verdicts and harsher sentences for crimes that are stereotypically linked with the

defendant's race (Hunt, 2015b). For example, this might be seen when white defendants are accused of financial crimes such as embezzlement and fraud or Black defendants are accused of violent crimes and theft (Skorinko & Spellman, 2013). The effects of crime type are particularly strong for serious and violent crimes, ones that would result in a capital sentence (Skorinko & Spellman, 2013).

Another possible explanation is how jurors are interpreting the evidence. Levinson and Young (2010) found that simply introducing the photo of a dark-skinned perpetrator activated racial biases where jurors were more likely to interpret ambiguous evidence as inculpatory. Other studies found that in cases involving Black defendants, white mock jurors thought that the prosecution's witnesses were more credible than Black defendants did (Abshire & Bornstein, 2003). Black defendants, on the other hand, viewed defense witnesses as more credible. This is consistent with the finding that Black people view the criminal justice system less favorably and more discriminatory and biased than white people (Hagan et al., 2005).

Previous research has suggested that juror instruction may moderate bias in that clear instructions about decision-making may reduce ambiguity and, in turn, reduce racial bias (Pfeifer & Bernstein, 2003). Conversely, Hodson et al. (2005) found that even after written and oral instruction to ignore inadmissible evidence, mock jurors were more likely to consider that evidence when the defendant was Black than when he was white. While crime type and evidence may help explain disparate treatment, they are both the result of implicit biases against Black and minority defendants (Hunt, 2015b).

Wrongful Convictions. Lastly, Black people are also overrepresented in the list of known wrongful convictions and exonerations. Even though they only make up 13% of the general population, they account for 32% of the 375 exonerations by DNA from the Innocence

Project (2023) and 52% of the nearly 3,300 exonerations listed in the National Registry of Exonerations (2023). Innocent Black people are seven times more likely to be wrongfully convicted of serious crimes in the United States than white people (Gross et al., 2022). There are several factors, many discussed above, that appear in many cases of innocent Black suspects. For example, one commonality is the race of the victim. For both murder and sexual assault cases, a minority of cases (11-13%) are committed by a Black perpetrator against a white victim. However, these cases account for 26% (for murder) and 44% (for sexual assault) of innocent Black exonerees.

Next, these cases are also more likely to include misconduct by police officers than cases with white defendants. For sexual assault cases, the cross-race effect of eyewitness identifications leads to the increased likelihood of misidentification of Black suspects by white victims. Black exonerees of murder and sexual assault received longer sentences and spent more time in prison before exoneration than white exonerees. Lastly, racial profiling helps to explain much of the disparity in drug crime convictions. As discussed previously, Black and white Americans use illegal drugs at similar rates, but most drug crimes are never reported to the police. Instead, the police chose who to go after for drug offenses and most often, they stop, search, and arrest Black people rather than white people (Gross et al., 2022). In a number of cases, it has been found that police officers framed innocent defendants and fabricated drug charges by planting drugs on them (e.g., the Rampart and Tulia scandals where police officers planted or fabricated drug evidence against innocent Black or Hispanic defendants; Gross et al., 2022). Black exonerees account for 87% of those who were wrongfully convicted for fabricated drug crimes. Nearly 70% of drug crime exonerees are Black while only 16% are

white. This is one of the many consequences that the war on drugs has wreaked on the Black community (Gross et al., 2022).

Many of the well documented disparities that Black people face in the criminal justice are because of implicit racial biases of actors in the legal system. However, the disparity is not because of a single decision by a single actor, but rather a cumulative disadvantage throughout the process that results in larger sentencing discrepancies for defendants of color (Kutateladze et al., 2014; Schlesinger, 2007). Punitive and biased treatment at several decision points can result in substantial disadvantages in a dynamic process. Over time, this disparate treatment becomes the norm, becomes part of the system, such that "patterns of disadvantage evolve over time and may become institutionalized in organizational norms and decision-making routines (Bobo & Hutchings, 1996; Bobo, 1999; Myers, 1987)" (Kutateladze et al., 2014 pg. 9). Taken together, it paints a bleak picture for Black individuals in the criminal justice system who face racial biases at numerous decision points throughout the system. One unsurprising but under researched area is how racial bias affects the plea-bargaining process.

1.3 Plea Bargaining

The most recent report from the Bureau of Justice Statistics (2013) estimates that over 95% of criminal cases in the United States are resolved through guilty pleas and as high as 98% of cases in federal courts; most cases are resolved before they even see a jury (American Bar Association, 2023; Bureau of Justice Statistics, 2013). The United States court system would not be able to function without plea deals. A plea deal is when a prosecutor offers – and the defendant accepts – a reduced charge or sentence if the defendant will plead guilty, thereby saving the system time and money (Burke, 2007). A plea deal is then approved by a judge. Defendants who decide to take a plea deal have a few different options: a standard guilty plea

where they accept responsibility for the crime; a nolo contendere plea (plea of no contest) where they do not accept or deny responsibility for the crime but accept the punishment; or an Alford plea where a defendant enters a guilty plea but is able to maintain their innocence (Redlich, et al., 2017). Nolo contendere and Alford pleas are not allowed in every state with the most common form of plea deals being a standard guilty plea (Bibas, 2003). A standard guilty plea, the most commonly used and researched type of plea, typically requires a factual basis of guilt and that is most often met by the defendant's own admission that they committed the crime (Redlich, 2016). It also requires the defendants to waive a number of rights, such as: the right to a trial, a jury of their peers, the right to confront their accuser, a standard of proof beyond a reasonable doubt, and the right to defend oneself (Redlich et al., 2017). Entering a guilty plea also makes it more difficult to appeal a conviction when the defendant has admitted guilt in open court (Weaver, 2001). Regardless of whether a defendant was convicted by plea or trial, they still suffer the same collateral consequences of a conviction. For example, in many states they are not allowed to vote, receive government aid in the form of housing, food stamps, or college grants, and they face more hurdles well looking for employment (Edkins & Dervan, 2018).

Traditionally, legal actors were thought to make plea decisions using the "shadow of the trial" model (Bibas, 2004). This model dictates that prosecutors, defense attorneys, and defendants make plea decisions by considering the likelihood of conviction at trial and the expected sentence if convicted. If the offered plea deal is for a lesser sentence than the one predicted with the shadow of the trial model, a defendant should accept it. Tests of the model have found that it provides credible probabilities of conviction at the aggregate level, but not the individual level, even though it is an individual level model (Bushway & Redlich, 2012),

and that even legal actors do not fully adhere to the model (Bushway, et al., 2014). Others have criticized the model for being simplistic and that plea outcomes are not systematic, but rather dependent on a myriad of factors such as structural pressures and psychological biases (Bibas, 2004).

Further, this model assumes that legal actors are rational actors and does not take into consideration other psychological processes that guide human decision-making, such as risk aversion and overconfidence (Bibas, 2004). For example, it does not take into consideration cognitive biases such as anchoring. Anchoring is when individuals rely heavily on the first piece of information they receive, the anchor, and make decisions based on that (Tversky & Kahneman, 1974). If a prosecutor offers a defendant an exorbitant plea deal, for example, twenty years for marijuana possession, a defendant is going to reject that offer. If the prosecutor comes back with a deal for twelve years, the defendant may be more likely to accept it because it is more reasonable than the original offer, the anchor, of twenty years. If the prosecutor would have initially offered the twelve years, the defendant may have rejected it for being a bad deal. Prosecutors may offer unreasonable plea deals to get defendants to accept more reasonable, but still exorbitant, plea deals (Bibas, 2004). The predictive validity of the shadow of the trial model begins to break down at certain maximums as it does not account for the potentially irrational decisions of defendants facing exorbitant plea deals (Redlich et al., 2017). It also neglects the implicit biases of legal actors or the consideration of others (e.g., friends and family) who may influence an individual's decision to accept a plea deal (Viljoen et al., 2005).

For instance, in the United States, prosecutors have a lot of discretion in the plea process. They decide whether they are going to charge a defendant, what they are going to

charge, whether they request pretrial detention, if they are going to offer a plea deal, how long until the deal expires, and what kind of concessions they should make (Smith & Levinson, 2011). The shadow of the trial model says that prosecutors will offer larger plea discounts when the likelihood of conviction at trial is low or uncertain and smaller discounts when the likelihood of conviction at trial is high. The likelihood of conviction at trial is based on the strength of the evidence and prosecutors are more likely to interpret weak or ambiguous evidence negatively for minority defendants (Smith & Levinson, 2011).

Prosecutors have a number of tools to induce defendants to plead guilty. For example, prosecutors may overcharge, not because they want to impose a harsher sentence but because they want more plea-bargaining leverage (Caldwell, 2011). They may also offer exploding offers or time-limited offers. These are plea offers with a tight time limit that do not allow defense attorneys proper time to investigate the case or allow defendants enough time to make an appropriate decision (Caldwell, 2011; Zottoli et al., 2016). Some places, like New York, have a "best offer first" method where prosecutors offer a plea deal at arraignment and if it is not accepted, every subsequent offer will be less favorable (Kutateladze et al., 2014). Taken together, it makes for a situation ripe for coercion. Nearly 25% of the 3,293 exonerations recorded by the National Registry of Exonerations (2023) involved false guilty pleas (i.e., individuals plead guilty to crimes they did not commit).

While there is some ambiguity because of charge bargaining where defendants are pleading to reduced charges, it is concerning that an increasing number of innocent defendants are accepting plea deals where the plea discount is so large that it outweighs the chance of being acquitted at trial (Zottoli et al., 2016). In this situation, a rational person would accept the guilty plea, even if they are innocent (Wilford & Khairalla, 2019). Both laboratory studies and

studies with people who have accepted plea deals have found that innocent people do in fact accept plea deals, typically because the deal is *too* good (Redlich et al., 2010; Viljoen et al., 2005; Wilford & Wells, 2016; Zottoli et al., 2016).

Who pleads guilty and why? There are a number of reasons why defendants would plead guilty or accept plea deals, even if they are innocent. First is that they are factually guilty; they committed the crime and instead of going through a trial they are admitting guilt and accepting a punishment that is less than they would have received at trial.

Second is if they are held in pretrial detention; individuals who are held in pretrial detention are more likely to plead guilty (Euvrard & Leclerc, 2017; Kellough & Wortley, 2002; Kutateladze et al., 2014; Petersen, 2020). Using data from large urban counties, Petersen (2020) conducted survival analyses and found that defendants who are detained pretrial plead guilty 2.86 times faster than those who have been released. Typically, defendants are held pre-trial because they cannot afford bail (Edkins & Dervan, 2018) and many have argued that the current cash bail system disadvantages indigent defendants (Schlesinger, 2015). Once in jail, there are numerous reasons why someone would take a plea deal to get out. Defendants who are facing crimes that do not require incarceration may take a plea deal to avoid having to spend time in jail. Those who are facing a carceral sentence may take a plea deal to start their sentence right away (Kellough & Wortley, 2002). It also gives defendants a sense of certainty. It is difficult for detainees to estimate how long they are going to spend in jail pre-trial, but a post-conviction sentence is typically clear: they either get to go home or start their sentence (Euvrard & Leclerc, 2017). They may also take a plea to avoid losing their job, their home, time in school, time away from their family, or to keep their family together (Heaton et al., 2017).

Further, jails are notoriously unpleasant places. They are often overcrowded with people who have mental or physical needs that are not receiving the proper care, have higher rates of infectious disease, and are an overall dangerous place to be (Euvrard & Leclerc, 2017; Kellough & Wortley, 2002). Getting out of jail pre-trial is not only beneficial for a defendant's mental and physical health, it is also better for their case. It is more difficult for defendants to investigate their cases or meet with their attorneys when they are held pretrial. Defendants that are detained pretrial are more likely to be prosecuted, convicted, incarcerated, and have longer sentences (Dobbie et al., 2018). Lastly, prosecutors are less likely to drop a case if the defendant is already sitting in jail (Kellough & Wortley, 2002).

Being held in pretrial detention affects the plea process in a number of ways, especially for Black defendants (Sutton, 2013a). Using data from the New York County District Attorney's office, Kutateladze et al. (2014) found that Black defendants are more likely to be detained before their trial compared to white defendants. They are also more likely to have a combination of pretrial detainment and to be subsequently incarcerated, compared to white defendants. Despite this, Black defendants who are detained are less likely to accept plea deals (Kellough & Wortley, 2002; Sutton, 2013a). This might be because they have weaker representation (e.g., attorneys that are unwilling/unable to negotiate, are inexperienced, or lack the appropriate resources) or an overall distrust in the plea process (Kellough & Wortley, 2002).

Similarly, when just looking at case dismissals, Black defendants were more likely to have their cases dismissed compared to white defendants and other racial minority defendants (Kellough & Wortley, 2002; Kutateladze et al., 2014). Kellough and Wortley (2002) have speculated that Black defendants are more likely to have their cases dismissed because their

cases are overall weaker, or they have been falsely accused. Prosecutors may have realized that they do not have a strong case, so they are less likely to secure a conviction at trial, especially if the defendant is refusing to accept a plea deal, and decide to dismiss the charges. This is in line with the discussion above regarding Black individuals being targeted more strongly by police.

While holding out in pretrial detention to get a case dismissed may be successful at times, it is high risk. For example, Kalief Browder was accused of stealing a backpack and was held in pretrial detention on Rikers Island for nearly three years because his family could not afford bail. He was offered numerous plea deals during that time that he rejected, insisting on going to trial. During Browder's final hearing the prosecutor dropped the charges because they lost contact with the witness. He was able to leave Rikers after nearly three years where he was physically assaulted by guards and spent most of the time in solitary confinement. Browder ultimately took his own life shortly after being released (Gonnerman, 2014). So, while Black defendants held in pretrial detention are more likely to get their charges dismissed and are less likely to accept plea deals, they must still wait in jail for an undetermined amount of time in uncertain conditions and ultimately suffer worse consequences in the system.

Problems with plea bargaining. An overwhelming majority of criminal convictions are secured through guilty pleas, however there are few checks on this system meant to ensure "fairness and equality in plea bargaining" (Johnson & Richardson, 2019). In 2019, the Plea Bargain Task Force was formed by the American Board Association Criminal Justice Section to assess the state of plea bargaining and address criticism of the plea-bargaining system (American Bar Association, 2023). The task force comprises prosecutors, defense attorneys, judges, academics and members of various think tanks and advocacy organizations, including

those affiliated with organizations such as The Innocence Project and the National Association of Criminal Defense Lawyers (NACDL). In their review, they found that plea bargaining offers several benefits, among them: efficiently solving cases when there are limited resources; providing a clear resolution to the case for the defendant and victim; and allowing some defendants to avoid some of the harsh consequences of the criminal justice system. However, they also found evidence of misuse of the process. They found that defendants, including innocent defendants, can be coerced into taking plea deals (Blume & Helm, 2014; Zottoli et al., 2016) and waiving their rights to avoid mandatory minimum laws that produce disproportionately long sentences or collateral consequences that may include deportation. They also found that such a large proportion of plea deals hurts the integrity of the system as well. Because so few cases make it to pre-trial and trial hearings, there is no outlet for defendants to shed light on police and prosecutorial misconduct (American Bar Association, 2023). This also results in both prosecutors and defense attorneys being less likely to investigate the evidence or the witnesses because they assume most defendants will just accept a plea deal. While the negative consequences of the plea-bargaining system affects everyone involved, it disproportionately affects Black defendants and defendants of color. Black defendants and defendants of color are less likely to receive deals that avoid mandatory minimum sentences or charge stacking (American Bar Association, 2023). Across all charges that the task force reviewed, including drug and gun charges, Black and defendants of color received worse and less favorable sentences than their white defendant counterparts (American Bar Association, 2023).

Another potential problem with plea bargaining is the effect of third-strike laws and mandatory minimums. Third strike laws are a mandatory minimum policy where if a defendant

is convicted of a crime the third time, the punishment is life in prison. One of the goals of third-strike laws, and mandatory minimums, was to reduce judicial discretion and increase equity in sentencing (Sutton, 2013b). The idea was that by setting sentencing guidelines for judges, it would be easier for them to sentence those convicted of crimes. Instead, it has shifted more power into the hands of prosecutors and created more coercive plea bargaining situations because prosecutors are able to charge bargain (Sutton, 2013b). For example, if a defendant is offered a plea deal that they will not accept, a prosecutor is able to threaten to charge them with a more serious crime that would result in a mandatory sentence. Or, if a defendant is charged with a crime for the third time and the punishment carries a mandatory minimum sentence of life imprisonment, a prosecutor is able to offer a plea deal for a less serious crime with another long sentence. Either way, a defendant may be coerced into accepting a plea deal and giving up their rights rather than going to trial and risking a mandatory sentence (American Bar Association, 2023). This is particularly dangerous for innocent defendants who may accept a plea deal to avoid a life sentence (Wilford & Khairalla, 2019) or situations where previous convictions were the result of false guilty pleas. Black individuals make up 29% of those serving a felony sentence in California prisons, but 45% of those serving time for a third-strike offense (Mauer, 2010). Mandatory minimum sentencing and three-strike laws have resulted in harsher sentences overall and longer sentences for Black defendants (Sutton, 2013b).

There is also little oversight of the plea process, as it is largely done in the shadow of a trial. One supposed requirement is that in order for a plea deal to be valid, it must be made voluntarily, knowingly, and willingly (Redlich & Summers, 2012). Courts typically make this determination through a plea colloquy or tender-of-plea form. Unfortunately, these procedures

are subject to few standards (Redlich, 2016), are brief (often less than 10 minutes), and rarely require more than perfunctory affirmative responses from defendants (Dezember et al., 2021).

Plea colloquies involve judges asking defendants a set of questions or statements to ensure that the defendant understands the consequences of the plea, the rights they are giving up, and if they were made any other promises that may influence their decision (Redlich, 2016). However, plea colloquies can be “boilerplate” (Bibas, 2011), both for the judge and the defendant. Judges may read questions or statements from a form and defendants may answer in the affirmative to ensure that the plea goes through, rather than to ensure proper understanding and decision-making. Tender-of-plea forms can also be used to record defendants’ plea decisions (and concomitant waiver of rights; Redlich & Bonventre, 2015). Tender-of-plea forms are written documents that aim to ensure that defendants understand the plea decision and are competent enough to enter one. An analysis of these forms revealed that many are missing important information such as that accepting the plea offer would have the same effect as being found guilty at a trial (i.e., that it was still a conviction). Also, less than five percent of the analyzed forms were written at a 6th-grade reading level, the average reading level of an adult or juvenile offender. The average reading level required to understand these forms was 9th grade and many of the forms used also use complicated legal language (i.e., legalese) that many offenders would be unable to understand (Redlich & Bonventre, 2015).

Given the perfunctory, and often incomprehensible, nature of plea colloquies and tender-of-plea forms, defense attorneys have been thought to be a safeguard to ensure that these requirements are met (Scott & Stuntz, 1992). However, interviews with youth and adults who accepted guilty pleas found that defense attorneys may not be providing necessary protection against the often difficult-to-understand nature of plea deals (Zottoli et a., 2016).

Many items on tender-of-plea forms assume that defense attorneys have sufficiently advised their clients (Redlich & Bonventre, 2015) and judges assume that defense attorneys had covered the remaining voluntary and intelligent components of the plea deal (Sanborn, 1992). However, respondents reported limited attorney-client contact. Twenty percent of juveniles said they only met with their defense attorneys once and decision times ranged from one hour to more than a day (Zottoli et al., 2016) even though juveniles typically know less about the justice system and require more assistance (Zottoli & Daftary-Kapur, 2019).

This makes for a situation where defendants are meeting with their defense attorneys infrequently, and sometimes in conjunction with a hearing, with little time to make a plea decision, and potentially navigating mandatory minimum sentencing (Daftary-Kapur & Zottoli, 2014; Zottoli et al., 2016). Research has shown that defendants do not understand many of the rights they are giving up and are generally not knowledgeable about the plea process or the criminal justice system (Redlich & Summers, 2012). A defense attorney is a defendant's primary source of information in the plea process; if there is not sufficient interaction with their attorney, defendants may not fully understand and appreciate the plea process and the rights they are giving up (Redlich & Summers, 2012). It also remains to be explored what kind of advice they are getting from other people in their life they may turn to, such as their friends or family.

1.4 Thesis Overview

Because there is so little oversight and so much discretion in the plea process, it makes for a situation ripe for racial bias. There is a considerable amount of research about how other actors interact with Black defendants; the studies in this dissertation will focus specifically on how defense attorneys and peers influence the plea process. The purpose of these studies is to

examine the effects that racial biases have on plea decision-making and recommendations. Study 1 will be a conceptual replication of Edkins (2011), examining plea decisions based on defense attorney recommendations for Black and white defendants using a more ecologically valid plea simulation instead of vignettes. Research comparing the plea simulation to vignettes found that participants reported the simulation to be more immersive and they were more attached to the simulation avatar than they were to the vignette character (Wilford et al., Under Revision). Vignettes also make race more salient because the race of the participant typically has to be stated, whereas in simulation participants simply see the race of the participant (making race salient may result in counterintuitive race effects; Smalarz, 2023, Sommers & Ellsworth, 2000). Edkins (2011) found that defense attorneys were more likely to recommend longer plea deals for Blacks than they would for whites and that those plea deals were more likely to include jail time. Despite this, they did not rate Black defendants as more guilty than their white counterparts, possibly due to a conscious effort to seem less biased. Study 2 will examine how laypeople would make plea recommendations for their friends. Study 3 will compare the results of Study 1 and Study 2 to explore the differences in recommendations between knowledgeable experts and laypeople.

Chapter 2. Study 1: Plea Recommendations of Defense Attorneys

2.1 Introduction

The role of defense attorneys. A defense attorney's role is to provide effective counsel to their clients and to guide them through the criminal justice process (Henderson, 2019; Hessick & Saujani, 2001). Defense attorneys are critical in the adjudication process because they are the individuals that defendants spend the most time with and are a source of information for the defendant (Henderson, 2019). They are able to educate the defendant about the legal process, as well as provide their evaluations of the evidence, the likelihood of conviction at trial, or relay their previous experiences working with the prosecutor or judge (Bibas 2004; Henderson 2019). Defense attorneys have many, often competing, considerations for both themselves and their clients (Hessick & Saujani, 2001). They have financial incentives (flat fee vs. hourly; Bibas, 2004), pressures from other legal actors (Hessick & Saujani, 2001), and assessments of guilt status (Helm et al., 2018), or defendant preference (Kramer et al., 2007), among others. They want to secure the best outcomes for their clients, either by taking the case to trial, negotiating a favorable plea deal, or arguing to get the charges dropped while being aware of the barriers that they and their clients face.

There are also institutional pressures on defense attorneys that may be exacerbated by high caseloads, limited resources, or not enough discovery, which may lead to perfunctory treatment of their clients (Findley & Scott, 2006). Defense attorneys may figure that most of their clients are guilty anyway, so an ideal situation would be for them to accept a plea deal (Hessick & Saujani, 2001). There is also pressure from prosecutors and judges to resolve cases quickly (i.e., accepting plea deals and not engaging in the adversarial nature of the criminal justice system). Defense attorneys who have experience may learn that cooperating with the

prosecution leads to better deals for their clients (Findley & Scott, 2006). If defense attorneys do not file motions to suppress or for evidence, and instead discuss informally with prosecutors, their clients may get more lenient deals. This both saves resources and allows for greater cooperation with the prosecution to secure more favorable deals for their clients (Findley & Scott, 2006; Hessick & Saujani, 2001). For example, the *Brady* doctrine says that prosecutors need to turn over any exculpatory information to the defendant before trial (*Brady v. Maryland,* 1963). Many cases do not make it to trial so, according to the *Brady* doctrine, they are not entitled to exculpatory information before they enter a plea deal. Brady violations are difficult to detect unless the defense learns of them some other way. This is unlikely as defense attorneys typically lack the resources to investigate cases and therefore are unable to investigate (Wilson, 2016). For example, according to the Department of Justice, in 2013 six states reported having less than 10 full-time investigators on staff for public defender offices (Department of Justice, 2021). Further, they may know that their clients are struggling financially, have limited knowledge of the criminal justice system, were unfairly targeted, or are one strike away from a life sentence. Defense attorneys have high caseloads and limited resources that, whether they intend it or not, may lead to the perfunctory treatment of their clients.

Research has shown that when counseling their clients during the plea process, defense attorneys also take into consideration the strength of the evidence, the type of evidence, the presence of an eyewitness or confession, the likelihood of conviction at trial, funding and resources, workload, whether the defendant is in pretrial detention, and the defendants desire to plead or go to trial when making plea decisions and recommendations (Bibas, 2004; Kramer et al., 2007; McAllister, 1990; Redlich et al., 2016). According to the shadow of the trial model,

likelihood of conviction at trial is based on the strength of the evidence. If defense attorneys evaluate the evidence to be stronger, they would estimate a low chance of being successful at trial and therefore advise their clients to take a plea deal. As previously discussed, racial bias can influence how police officers, prosecutors, and jurors interpret evidence (e.g., Fridell, 2017; Kang et al., 2011), therefore it is conceivable that it would also influence how defense attorneys are interpreting the evidence against their client.

Further, a defendant's desire to go to trial or plead out may be affected by the experience they have with their defense attorney. Because a majority of cases are resolved through guilty pleas, defendants typically only see their defense attorneys during this process. In a study looking at adults and youth who falsely pled guilty to felonies in New York, Zottoli et al. (2016) found that most adults had less than a day to make their plea decisions, with some youth defendants having less than an hour. Adults typically met with their lawyers four times while adolescents met with them once. Even though adults met with their lawyers more frequently, they did not rate those interactions favorably or rate their attorneys as competent. When asked what factors they considered when making their plea decision, a participant in Zottoli & Daftury-Kapur's (2019) research responded, "I'm pretty sure if I had the right person representing me, it wouldn't have been [certain that I would lose]" while another said, "Because my lawyer wasn't working well with me…wasn't really helping me" (pg. 174).

Defense attorneys and racial bias. Another factor that defense attorneys may consider is the race of their client. Lawyers are just as susceptible to biases as everyone else, but some have argued that they bring with them experience and expertise to the table that may shelter them from the effects of biases (Bibas, 2004). Defense attorneys are meant to effectively counsel their clients, however in an adversarial system, they may not always have all the

information about the case, making it difficult to make educated recommendations. Thus, others have argued that the way the justice system is set up encourages lawyers to rely on biases and heuristics during the plea process (Hollander-Blumoff, 2007). Some of the biases they could be relying on are racial biases and stereotyping, which likely result in disparate incarceration rates between Black and white defendants. After controlling for socioeconomic status, criminal history, and crime seriousness, a meta-analysis showed that there was still an effect of race where Black defendants were punished more harshly than white defendants (Mitchell, 2005). For example, a Black man is seven times more likely to be incarcerated than a white man (Harrison & Beck, 2006). These biases can also be seen in white defense attorneys having a preference for their own ethnicity. Research looking at the implicit biases of capital defense attorneys using the Implicit Association Test (IAT) showed that white defense attorneys paired pictures of white faces with “good” words faster than with “bad” words and pictures of Black faces with “bad” words faster than with “good” words (Eisenberg & Johnson, 2004). Race can also affect how defense attorneys evaluate the evidence. Research on how police officers and prosecutors evaluate evidence has demonstrated that when racial biases have been activated, either by seeing a Black defendant or making decisions with time constraints and limited information, they interpret ambiguous evidence as against the Black defendant (Levinson & Young, 2010; Swencionis & Goff, 2017). Although defense attorneys are not working on the same side as police officers and prosecutors, they are in similar decision-making situations to the extent that they have a Black client and limited time and information that would activate racial biases.

Differences in plea recommendations by practicing defense attorneys for minority and white defendants have been examined (Edkins, 2011). In one study, participants read vignettes

of case summaries that manipulated the defendant's race (white or Black) and the evidence strength (weak or strong). They were asked what kind of plea they think they would be able to secure for their client, what they thought their chance of conviction would be if they went to trial, how certain they are of their client's guilt, and how many of their cases end in a plea deal. They were also shown a list of twelve factors and asked to rate how important each was when considering whether to recommend their client accept a plea deal. Edkins (2011) found that defense attorneys were more likely to recommend longer plea deals for Black clients than they would for white clients and that those plea deals were more likely to include jail time. This disparity did not appear to be because defense attorneys thought the Black defendants were more guilty; they actually rated them as less guilty than the white clients. Edkins (2011) suggested that this was a conscious effort from the defense attorneys to sound less biased. When asked to rate plea relevant factors, defense attorneys rated the likelihood of conviction at trial and the sentence if convicted at trial as the most important factors for making plea decisions. That this is not reflected in the results of the plea recommendations speaks to the possibility that defense attorneys might be unaware that their biases are playing a role in the representation they provide for their clients. Thus, further investigation into racial biases is critical to developing a better understanding of how defense attorneys are advising their clients regarding plea decisions.

2.2 Study Objectives

Racial biases exist and are present in the decision-making process of defense attorneys (Edkins, 2011; Kang et al., 2011; Lyon, 2011; Richardson & Goff, 2012). This is particularly important because 95% of cases are resolved through guilty pleas so defendants typically only see their defense attorney during the plea process (Bureau of Justice Statistics, 2013); their

opinions and recommendations carry weight in this decision (Bordens & Bassett, 1985). Some of the factors that can influence a defense attorneys' plea decision-making are race and evidence strength (Redlich et al., 2016). This can be seen in the greater likelihood for a Black man to be incarcerated than a white man and the harsher punishments they receive (Harrison & Beck, 2006; Mitchell, 2005). Thus, it is important to understand how defense attorneys are making these plea decisions and recommendations, if they are affected by racial biases. This study aims to investigate the effect of race and evidence strength on defense attorney plea recommendations. The objectives of this study are 1) to determine the extent to which defense attorney recommendations differ depending on the race of the defendant and; 2) to examine the influence of strength of evidence on defense attorney recommendations.

2.3 Hypotheses

H_1: Defense attorneys will rate their likelihood of success at trial as higher and be less likely to recommend a plea deal when they have a white defendant than they will with a Black defendant (i.e., a main effect of Defendant Race).

H_2: Defense attorneys will rate their likelihood of success at trial as lower and be more likely to recommend a plea deal when there is strong evidence than they will when there is weak evidence (i.e., a main effect of Evidence Strength).

H_3: Defense attorneys will be more likely to recommend that a Black defendant accept a plea deal than a white defendant when there is weak evidence, compared to strong evidence (i.e., an interaction showing that the main effect of Defendant Race will be stronger in the weak evidence condition than in the strong evidence condition).

2.4 Method

Past research examining the effects of racial biases on defense attorney plea decision-making has used vignettes to present the case information. This study extended the previous studies by using a more ecologically valid plea simulation in which I manipulated race and evidence strength. I used a 2 (Defendant Race: Black or White) x 2 (Evidence Strength: strong or weak) x 2 (Simulation Scenario: hit-and-run vs. shoplifting) between–subjects design. Participants completed one of two plea simulations and a plea decision and recommendations questionnaire. Participants were randomly assigned to one of the eight conditions. Crime scenario is not a variable of interest; rather, the goal was to increase the generalizability of the findings by incorporating different crime scenarios. The purpose of utilizing two plea simulations is to ensure that results are not unique to any one scenario.

2.4.1 Participants

Participants were N=156 U.S criminal defense attorneys, determined to be an acceptable sample size through G*power analysis at .85 power. This was an online study, so a large number of participants were able to start the study (N=366). After removing participants who did not complete a significant portion of the study (e.g., many participants exited the study after the demographics questions and before the simulation so there was little to no experimental data for these participants, N = 173) and those who did not answer/did not answer correctly the manipulation check question (i.e., “What was the race of the client in this case?” N = 17) the final sample size was N=156.

Participants had an average age of 44.68 years (M = 44.68, SD = 11.83), 52% male (N_{Male} = 80, N_{Female} = 75), and 76% White/Caucasian with the second largest group being 8% Black (N_{White} = 119, N_{Black} = 13). Note that participants did not have to answer all demographic

questions so some totals will not be equal to 156. Participants had been practicing attorneys for an average of 16.8 years (M = 16.76, SD = 10.82) and practicing defense attorneys for an average of 14 years (M = 14.06, SD = 10.11), representing 28 states. Attorneys were majority public defenders at 63% (N = 98), with a sizable portion being private defense attorneys, 28.8% (N = 45). Out of the 156 participants, 5.8% (N = 9) had never taken a case to trial. Participants who had taken cases to trial ranged in their trial experience from 1 to 51+ cases, with 42.2% (N = 62) having taken 51+ cases to trial. Conversely, attorneys reported that, on average, 70% of their cases were resolved through a guilty plea or a plea deal (M = 70.03, SD = 23.35).

Participants were recruited through email using the emails of attorneys listed on the National Association of Criminal Defense Lawyers website, emails to individual state criminal defense attorney associations, professional contacts, and social media snowball recruitment. Attorneys were offered the chance to enter a raffle to win a $50 Amazon gift card as compensation. All participants provided consent before taking part in the study, and the project was approved by the Ontario Tech University Research Ethics Board.

2.4.2 Materials and Measures

Participants completed a computer plea simulation and were asked their plea recommendations regarding the defendant.

Procedure. Participants completed the study online. They either received an email with a link to a Qualtrics survey, saw the posting online, or were forwarded the study information through a listserv. The survey began with a consent form and a demographic questionnaire. The demographic questionnaire asked about their age, gender, race and ethnicity, if they are retired or currently practicing, how long they have been an attorney, and how long they have

been a defense attorney (see Appendix A for Pre-Simulation Measures). They viewed one of the scenarios (hit-and-run or shoplifting incident) and were asked about what kind of recommendations they would give to their clients. They were randomly assigned to one of the 4 conditions (1. Black defendant with strong evidence; 2. Black defendant with weak evidence; 3. White defendant with strong evidence; 4. White defendant with weak evidence) and the plea scenarios were counter balanced. Lastly, they were debriefed and asked if they wanted to enter a raffle to win a $50 Amazon gift card. The survey to enter their email for the raffle was separate from the study survey.

Plea simulation. Participants completed a plea simulation: a hit-and-run and a shoplifting incident (see Appendix B for images). The hit-and-run simulation starts by showing the avatar, Jordan, entering a car and pulling out of a parking spot. The avatar is either a Black male or a White male. The shoplifting simulation starts by showing Jordan entering a retail store, asking to view a pair of sunglasses, receiving text messages, and then exiting the store. Both simulations then flashed to a court summons where the prosecutor tells the judge that the defendant is being charged with either a hit-and-run or larceny and explains the punishment. The prosecutor provides evidence, either strong or weak. For strong evidence, the prosecutor explains that they have two confident witnesses who made immediate identifications, clear security footage, and they either found paint on the defendant's car that matches the victim's car or stolen sunglasses with the store tag in the defendant's coat pocket. For weak evidence, the prosecutor explains that they have one tentative witness who was far away and could not make an identification, grainy security footage, and they either found a scratch on the defendant's car or a sunglasses case in the defendant's car. The prosecutor also explains that this is Jordan's third offense of a similar nature, so they are going for the maximum penalty.

After they are charged, the prosecutor then requests that the defendant be held, at which time the judge will remand them to a holding cell. Jordan then posts bail and meets with his defense attorney who will explain to the defendant that the prosecutor has offered a plea deal. The deal is to plead guilty for 12 months in jail and a $2,000 fine, or risk 24 months in jail and a $3,000 fine if found guilty at trial.

The plea simulation was pilot tested with N = 19 defense attorneys to ensure that there were clear differences between the levels of evidence strength and race of the client. The race manipulation was effective in that 17 out of 19 participants responded correctly when asked about the race of their client. The evidence strength manipulation was not as clear in that attorneys rated the evidence as weak, regardless of whether they were in the strong or weak evidence condition. There were no significant differences in the rating of evidence strength (t (17) = -.239, p = .746) between defense attorneys who saw the weak evidence (M = 3.28, SD = .768) and those who saw the strong evidence condition (M = 3.50, SD = .548). The evidence strength conditions were adjusted and the changes are reflected in the descriptions above[2].

Plea decisions and recommendations. Participants were asked to treat this as if it were a case they were working on in their practices. They were asked: “If you were to take this case to trial, what do you think is the likelihood that you would be successful on a 0 to 100% scale?” and “How beneficial do you think it would be for your client to accept this plea deal? (5-point Likert scale from “Very beneficial” to “Very unbeneficial”).” They were also asked:

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[2] For the strong evidence conditions, language was added to emphasize that the witnesses were confident and made identifications immediately (both simulations) and that the sunglasses had the price tag intact (larceny simulation only). For the weak evidence conditions, language was added that said that the security footage showed a car a similar color to Jordan’s hit the parked car (hit-and-run simulation) or that the footage showed someone a similar height as Jordan walk out of the store (larceny simulation only), and that the witness was farther away (60 ft. vs. 100 ft.) and that they could not identify Jordan after viewing a lineup (both simulation scenarios).

"If your client asked for recommendation, how likely are you to recommend that your client take this plea deal? (5-point Likert scale from "Very likely" to "Very unlikely")" Further, participants were asked if they thought that accepting this plea deal would be in their client's best interest and if not, what sentencing concessions they think would need to be offered. They were asked how much personal characteristics (e.g., physical, psychological, socioeconomic, background of any kind etc.) would influence their plea recommendation or a colleague's plea recommendation. They were asked how they communicate their recommendation to their clients – whether they use a numeric evaluation (0-100%) or a verbal evaluation (e.g., great chance, poor chance). They were asked "If this were a female/juvenile/Black/white defendant, do you think a jury would treat them the same way? Why or why not?" They were also asked to rate the evidence against their client (5-point Likert scale from "Very weak" to "Very strong"), how certain they are that the client is guilty, and a multiple-choice question asking, "What was the race of the client in this case?" that served as the manipulation check question. Lastly, they were asked how to rate how important a list of factors was following in deciding whether to recommend your client take a plea deal (e.g., "Defendant's willingness to go to trial" and "Presence of a confession"). For a full list of questions see Appendix C.

2.5 Results

Note that other than the manipulation check question, "What was the race of the client in this case?" participants were not required to answer every question to be retained in the final data set. Some attorneys did not answer every question and chose to leave some questions blank therefore there is not the full sample of N=156 attorneys for all questions.

Data cleaning, transformations, and manipulation checks. Participants who did not answer or did not correctly answer the manipulation check question were removed from the

final data set. The manipulation check question asked, “What was the race of this client?” Even though participants did not have to answer every question, it is possible that some skipped this question because they did not remember the race of the client, even though “I do not remember” and “I was not paying attention” were response options. Removing participants that skipped this question, but answered all the others, decreases the possibility that participants were answering without remembering or paying attention to the race of their client, a focal point of this study. To ensure that the evidence strength manipulation was successful, I conducted an independent sample t-test and found there were significant differences ($t(154) = 6.491$, $p < .001$, $d = 1.052$, $CI = .712$ to 1.389) in the evidence ratings between those saw the strong evidence (M = 3.65, SD = .868) and those who saw the weak evidence (M = 2.67, SD = .983). Because this was not a dichotomous measure that had a clear wrong answer, but rather averages, no participants were removed from the data set based on responses to this question.

Questions asking about how beneficial attorneys thought this plea deal would be, how likely they are to recommend it, how similar this is to other cases they have had, how much the personal characteristics of a defendant would affect their recommendation, and if personal characteristics would influence a colleague’s recommendation were reverse coded. This was done so that response options were consistent and in the same direction.

To test my hypotheses, I conducted Chi-Square tests and 2-way ANOVAs for the dependent variables. I also conducted an exploratory factors analysis of plea factors to further understand how defense attorneys are making plea recommendations.

Likelihood of Success at Trial. To test the hypotheses, defense attorneys were asked how successful they think they would be trial. A 2-way ANOVA revealed that there was no main effect of race on how successful defense attorneys think they would be at trial (F (1, 152)

= .437, p = .510, η_p^2 = .003, d = .040, CI = -.275 to .355). The results of this analysis do not support the first hypothesis. See Table 2.1 for means for dependent variables by race.

There was a main effect of evidence strength on likelihood of success at trial (F (1, 152) = 23.633, p < .001, η_p^2 = .135, d = -.796, CI = -1.124 to -.465). See Table 2.2 for means for dependent variables by evidence strength. In support of the second hypothesis, defense attorneys thought they would be more successful at trial when there was weak evidence than they would be with strong evidence.

Lastly, there was no significant effect of the interaction of race and evidence strength on perceived likelihood of success at trial (F (1, 152) = 1.555, p = .214, η_p^2 = .010) indicating that there is no support for the third hypothesis. See Table 2.3 for means of dependent variables by race and evidence strength interaction.

Table 2.1
Means of Dependent Variables Concerning Race

Dependent variable	Client Race	Mean	Standard Deviation	Sig.	Partial Eta Squared
Likelihood of success at trial	Black	55.92	24.46	.510	.003
	White	55.01	19.84		
Likelihood of recommending the plea deal	Black	2.65	1.42	.632	.002
	White	2.66	1.18		
Beneficial for client	Black	2.79	1.45	.728	.001
	White	2.85	1.19		
Certainty of guilt	Black	3.14	.93	.051	.025
	White	2.90	.81		

Likelihood of Recommending the Plea Deal. To test the hypotheses, defense attorneys were also asked how likely they are to recommend that their client accept this plea deal. A 2-way ANOVA revealed that there was no main effect of race on how likely defense attorneys were to recommend the plea deal (F (1, 152) = .231, p = .632, η_p^2 = .002, d = -.011, CI = -.326 to .304). This analysis did not find support for the first hypothesis.

There was also no main effect of evidence strength on likelihood of recommending the plea deal (F (1, 152) = 2.294, p = .132, η_p^2 = .015, d = .258, CI = -.061 to .577). This analysis also did not find support for the second hypothesis.

Lastly, in partial support of the third hypothesis, there was a significant effect of the interaction of race and evidence strength on likelihood of recommending (F (1, 152) = 5.134, p = .025, η_p^2 = .033). Defense attorneys were more likely to recommend the plea deal to their Black clients when there was strong evidence than when there was weak evidence. Defense attorneys were not any more or less likely to recommend the plea deal for their white clients depending on the strength of the evidence.

Table 2.2
Means of Dependent Variables Concerning Evidence Strength

Dependent variable	Evidence Strength	Mean	Standard Deviation	Sig.	Partial eta squared
Likelihood of success at trial	Strong	45.91	22.79	<.001*	.135
	Weak	62.54	19.42		
Likelihood of recommending the plea deal	Strong	2.85	1.33	.132	.015
	Weak	2.51	1.29		
Beneficial for client	Strong	3.09	1.25	.033*	.030
	Weak	2.61	1.36		

Certainty of guilt	Strong	3.09	.91	.347	.006
	Weak	2.99	.87		

Beneficial for Client. Defense attorneys were also asked how beneficial they think it would be for their clients to accept this plea deal. Results indicated that there was no main effect of race on how beneficial defense attorneys thought the plea deal would be (F (1, 152) = .122, p = .728, η_p^2 = .001, d = -.042, CI = -.358 to .273).

There was a main effect of evidence strength on benefit for the client (F (1, 152) = 4.65, p = .033, η_p^2 = .030, d = .364, CI = .044 to .684). Defense attorneys thought it would be more beneficial for their client to accept the plea deal when there was strong evidence than when there was weak evidence.

Lastly, there was a significant effect of the interaction of race and evidence strength on benefit to the client (F (1, 152) = 4.022, p = .047, η_p^2 = .026). Defense attorneys thought it would be more beneficial for their Black clients to accept a plea deal when there was strong evidence than when there was weak evidence, while they did not think it would be any more or less beneficial for their white clients to accept a plea deal depending on the strength of the evidence.

Certainty of Guilt. Defense attorneys were also asked how certain they are of their client's guilt. Results indicated that there was no significant main effect of race on perceived guilt (F (1, 152) = 3.869, p = .051, η_p^2 = .025, d = .273, CI = -.044 to .589). Also, there was not a significant main effect of evidence strength (F (1, 152) = .889, p = .347, η_p^2 = .006, d = .115, CI = -.203 to .433) or an interaction of race and evidence strength (F (1, 152) = 1.253, p = .265, η_p^2 = .008) on perceived client guilt.

Table 2.3
Means of Dependent Variables Concerning the Interaction of Race and Evidence Strength

Dependent variable	Race				Partial eta squared
	Black		White		
	Evidence Strength				
	Strong	Weak	Strong	Weak	
Likelihood of success at trial	42.33 (25.73)	63.33 (20.42)	48.89 (12.9)	61.31 (17.96)	.010
Likelihood of recommending the plea deal	3.17 (1.37)*	2.36 (1.38)*	2.58 (1.25)*	2.74 (1.12)*	.033
Beneficial for client	3.37 (1.27)*	2.47 (1.45)*	2.86 (1.19)*	2.83 (1.2)*	.026
Certainty of guilt	3.33 (.99)	3.04 (.88)	2.89 (.79)	2.91 (.85)	.008

Note: Mean (Standard Deviation); * Denotes mean differences significant at $p < .05$

Best Interest of Client. Defense attorneys were also asked if accepting this plea deal would be in the best interest of their client. A Chi-Square analysis found there was no significant relationship between defense attorneys' belief that this would be in the best interest of their client and race (X^2 (1, 156) = 1.526, $p = .217$) or evidence strength (X^2 (1, 156) = 492, $p = .483$). Concerning race, 67% (N = 57) of the defense attorneys who had a Black client and 76% (N = 54) of those who had a white client did not think it would be in their best interest to accept the plea deal. Concerning evidence strength, 68% (N = 45) of those who saw the strong evidence and 73% (N = 66) of those who saw the weak evidence also did not think it would be in the best interest of their client to accept the plea deal.

General Case Factors

Plea Factors. In order to gain a better understanding of how defense attorneys believe they are making plea-related decisions, I conducted a principal component analysis with plea-related factors to determine common themes. “Likelihood of conviction at trial based on the evidence” and “Severity of the sentence in plea compared to sentence if convicted” were reverse coded to avoid negative loading values. A principal component analysis was chosen over principal axis factoring because the goal was to reduce the number of variables, not interpret them or explore the relationship between them. The principal component analysis extracted 5 factors with eigenvalues over 1 that explained 68.32% of the variance. The Kaiser-Meyer-Olkin value was .725 and the Bartletts Test of Sphericity was significant at $p < .001$. Coefficients below .4 were suppressed to increase the strength of each factor using a Varimax rotation with Kaiser Normalization. See Table 2.4 for the factor loading matrix. The principal component analysis extracted five composite factors: (1) Legal & Extralegal Considerations (2) Crime Seriousness, (3) Prior Record, (4) Evidence Type, and (5) Trial Perceptions. See Figure 2.1 for mean response scores for each factor.

Table 2.4
Principal Component Analysis of Plea-Related Items

Plea Related Items	Legal & Extralegal Considerations	Crime Seriousness	Prior Record	Evidence Type	Trial Perceptions
Likelihood of conviction based on the evidence	.539				
Severity of the sentence in plea compared to sentence if convicted	.538				
Current caseload	.743				
You think the defendant is guilty	.679				

Personal relationship with the judge	.766				
Personal relationship with the prosecutor	.787				
Whether the defendant was granted bail	.419				
Defendant's age		.743			
The crime involved a gun		.832			
Seriousness of the crime		.849			
Defendant's previous convictions for a similar offence			.839		
Defendant's prior record			.897		
Presence of a confession				.738	
Presence of an eyewitness				.878	
Impression that your client may not present well a jury					.581
Client willingness to go to trial					.700

1) Legal & Extralegal Considerations. Legal & Extralegal Considerations is comprised of likelihood of conviction based on the evidence, severity of the sentence in plea compared to the sentence if convicted, the attorney's current caseload, whether the attorney thinks the client is guilty, the attorney's relationship with the judge, the attorney's relationship with the prosecutor, and whether the defendant was granted bail. All of these items are related to different legal considerations of the case and attorney related factors within the workings of the legal system. Examination of the component matrix indicated that all items loaded at .419

or higher (range = .419 to .787). A reliability analysis revealed a high Cronbach's Alpha of .785, but if the item related to bail was removed, the factor would have a Cronbach's Alpha of .798. This factor had a mean response score of 2.72, indicating that attorneys thought that these items were only slightly important to consider when deciding whether to recommend a plea deal.

2) Crime Seriousness. Crime Seriousness includes the defendant's age, whether the crime involved a gun, and the seriousness of the crime. All of these items are related to how serious the crime may be viewed: whether it involved a minor, if the perpetrator used a gun, and whether the crime was a felony or a misdemeanor. Examination of the component matrix indicated that all items loaded at .743 or higher (range = .743 to .849). A reliability analysis revealed a high Cronbach's Alpha of .801. This factor had a mean response score of 3.26, indicating that attorneys thought that these items were moderately important to consider when deciding whether to recommend a plea deal.

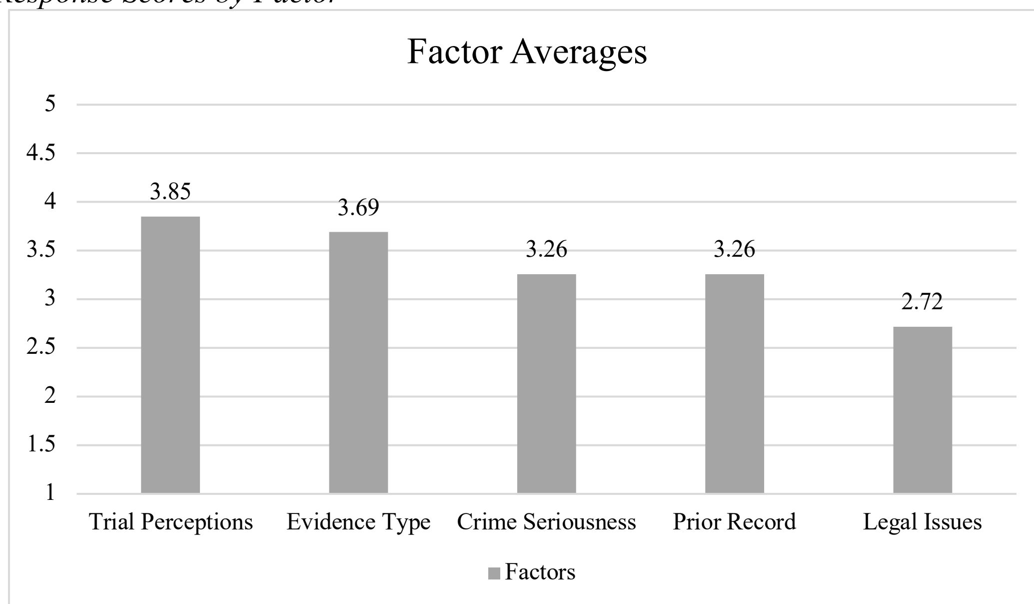
3) Prior Record. Prior Record is comprised of the defendant's previous convictions for a similar offense and the defendant's prior record. All of these items are related to the criminal history of the defendant. Examination of the component matrix indicated that all items loaded at .839 or higher (range = .839 to .897). A reliability analysis revealed a high Cronbach's Alpha of .802. This factor had a mean response score of 3.26, indicating that attorneys thought that these items were moderately important to consider when deciding whether to recommend a plea deal.

4) Evidence Type. Evidence Type includes the presence of a confession and the presence of an eyewitness. These items are all related to the types of evidence involved in the case. Examination of the component matrix indicated that all items loaded at .738 or higher

(range = .738 to .878). A reliability analysis revealed a medium Cronbach's Alpha of .650. This factor had a mean response score of 3.69, indicating that attorneys thought that these items were moderately important to consider when deciding whether to recommend a plea deal.

5) Trial Perceptions. Trial Perceptions includes the attorneys' impressions that their client may not present well to a jury and the client's willingness to go to trial. These items are related to how both the attorney and defendant feel about the trial. Examination of the component matrix indicated that all items loaded at .581 or higher (range = .581 to .700). These items had a mean response score of 3.85 so defense attorneys thought they were moderately important to consider. However, a reliability analysis revealed a low Cronbach's Alpha of .235 so this factor should be interpreted cautiously.

Figure 2.1
Mean Response Scores by Factor



Opposite Race Defendants. Defense attorneys were also asked if they thought that juries would treat a defendant of the opposite race the same way, but there was not a significant

relationship between those who had a Black client and those who had a white client (X^2 (1, 155) = 2.71, p = .10). See Table 2.5 for a breakdown of participant responses. While not significant, it is revealing and interesting that a majority of the defense attorneys (66%) believed that juries would dispense different treatment based on the race of the client. Open-ended responses provided some insight into why defense attorneys think that opposite-race defendants would not receive the same treatment by a jury (in absence of a main effect of race). Although a thematic analysis of these open responses is beyond the scope of this thesis, responses were reviewed in order to provide context for some of the quantitative findings.

Table 2.5
Proportion of Yes/No Responses for Race and Jury Behavior

	Would a jury treat a defendant of the opposite race the same way?	
Client Race*	Yes	No
Black	33 (40%)	51 (60%)
White	19 (27%)	52 (73%)

* *Note that participants were asked about the opposite of their client's race (e.g., participants who had a Black client were asked if a jury would treat a white defendant the same way).*

Participants who had a Black client, were subsequently asked about a white client, and said that a jury would treat them the same way, typically gave responses that mentioned equality, for example: “Everyone is equal before the law;” “A thief is a thief;” or “In dealing with such cases racism is not allowed.”

However, participants who said that a jury would not treat a white defendant the same way typically gave responses that acknowledged bias in the justice system, for example: “Whites get lighter sentences;” “Evidence is clear that unconscious bias affects most people. This is especially true for white people, who are often treated better and get better plea deals

and sentences. Especially in mostly white communities;" "Juries treat white defendants better, particularly because our juries are mostly all white;" or "This is America. Racism still exists."

Similar responses were seen for those who had a white client and were subsequently asked if a jury would treat a Black client the same way. Those who said a jury would treat a Black defendant the same way typically did so because they believed the system was fair and equal, for example: "There is no racial discrimination in court;" "As the saying goes, everyone is equal before the law."

Those who did not think a jury would treat a Black defendant the same way typically indicated that this was because of racial bias, for example: "I work in a predominantly white county in a southern state. I do not believe a jury would treat a black defendant in the same way as a similarly situated white defendant. I believe the community has an unrealistic understanding of who the criminals are in our county (most are white) due to the media they choose to watch;" "I don't think juries treat them the same way, because in their hearts, black people are inferior;" "The jury pools are not peers of most of the people impacted by the criminal legal system. So more often than not, a Black defendant will have to face a majority white jury of a different socioeconomic class. Because white supremacy is so prevalent and engrained in the fabric of this country and within the criminal legal system especially, the likelihood that the accused will be impacted by bias and lack of empathy are high." Note that this is a representative sample of open-ended responses and is not exhaustive.

2.6 Discussion

Literature on plea bargaining has shown that race and evidence strength may play a role in the decision-making of defense attorneys and that defense attorneys have an influence on

their client's decision to accept or reject a plea deal. This study manipulated race and evidence strength as a direct test of their roles in defense attorney plea decision-making.

Race Main Effect. Overall, there was little support for the first hypothesis that race *alone* would have an impact on defense attorney plea decisions where defense attorneys would rate their likelihood of success at trial as higher and be less likely to recommend a plea deal when they have a white defendant than they would with a Black defendant. Defense attorneys did not think they would be more successful at trial with a white client than a Black client, were not more likely to recommend the plea deal to white clients, did not think it would be more beneficial for or in the best interest of a Black client to accept a plea deal, and did not think that a Black client was more guilty than a white client. Unlike the findings of Edkins (2011), the results of this study did not demonstrate a main effect of race. However, we know that Black defendants receive disparate treatment in the criminal justice system. It is possible that defense attorneys are not making their plea recommendations based *solely* on the race of their client.

The null findings for the first hypothesis could also be due to attorneys overcorrecting their own behavior. Recent research examining findings of race-related studies found that counterintuitive race effects were more common in studies examining legal contexts than non-legal contexts (Smalarz et al., 2023). They also found that over the last decade, there have been fewer published laboratory studies of race effects in legal psychology journals. This might be because researchers and journals are hesitant to publish null or pro-Black findings when naturalistic studies are finding opposite results. There are a few reasons why participants in the current study, and other studies, may demonstrate behavior that is counterintuitive (Smalarz et al., 2023). First is, as explained by the flexible-corrections model of bias correction (Petty &

Wegener, 1993; Wegener & Petty, 1995), participants are correcting for their biases by changing their responses in the opposite direction, and with the same magnitude, of their bias. Second, a social desirability bias may be playing a role, where participants are underreporting socially undesirable attitudes and/or overreporting socially desirable attitudes (Krumpal, 2013; Nederhof, 1985). These behaviors may be heightened given the recent high-profile episodes of police violence toward the Black community (Nellis, 2021) and the resulting salience of race in legal contexts (Peter-Hagene, 2019; Smalarz et al., 2023). In this study, participants may have been, for example, hesitant to rate a Black defendant as guilty, especially when there was weak evidence against them. Defense attorneys may have been reluctant to display behaviors that would give the impression that they are biased against their own clients. Additionally, it is difficult to ascertain how much and to what extent defense attorneys were overcorrecting. It is possible that defense attorneys were overcorrecting in their responses to this study, but that the overcorrecting does not extend to the cases they work on in real life. It is also possible that attorneys are overcorrecting in their real-life cases as well and that their responses in this study are an accurate reflection of their plea recommendations. Future research should aim to understand the extent to which defense attorneys overcorrect in studies examining racial bias.

While race alone did not have an effect on defense attorneys' own plea-related decisions, they did believe that it would affect a jury; a majority of defense attorneys thought that a jury would treat a defendant of another race differently. In their responses, many claimed that this is because of racial bias, the racial composition of the jury, or the area where they practice. This finding is consistent with previous research that found that juries treat defendants differently based on their race (Hodson et al., 2005; Hunt, 2015b; Levinson & Young, 2010; Lynch & Haney, 2009; Mitchell et al., 2005). So, while defense attorneys did not demonstrate

racial bias in their own decision-making, they do think that juries may be racially biased, essentially saying "*I* am not racist, but the *system* is." However, despite their beliefs that juries may be biased against a Black defendant, defense attorneys were not deciding whether to recommend a plea deal or basing their evaluation of how successful they would be at trial *only* on the race of their client. Therefore, there is some incongruence between how defense attorneys would advise their clients and what they believe is the reality of the treatment they would receive.

Evidence Strength Main Effect. There was partial support for the second hypothesis that evidence strength would have an impact on defense attorneys' plea decisions where defense attorneys would rate their likelihood of success at trial as lower and be more likely to recommend a plea deal when there was strong evidence than they would when there was weak evidence. Attorneys thought they would be more successful at trial with weak evidence, but they were not any more likely to recommend the plea deal. Results indicate that the strength of the evidence did not affect defense attorneys' likelihood of recommending a plea deal, whether they think it is in the best interest of the client, or their evaluation of the client's guilt. It is possible that defense attorneys base their decision to recommend a plea deal on something other than the evidence. It is also possible that defense attorneys are simply not making plea recommendations, but rather stating the facts for their clients and allowing them to decide. As one defense attorney said, "I don't recommend plea deals. I've never told a client to take a plea. I explain to my clients their options and advise them I'm there to answer any questions they have pertaining to a plea." It was also found that defense attorneys are not basing their assessment of their client's guilt on the strength of the evidence. Attorneys may have adopted an "innocent until proven guilty" mindset as a standard of the job and are not considering the

actual guilt status of their clients. Instead, they are not considering their client's guilt because, as their attorney, they must provide a defense regardless.

Further, results indicated when there was strong evidence, defense attorneys thought they would be more successful at trial than they would be with weak evidence and attorneys perceived likelihood of conviction at trial was affected by the strength of the evidence. However, this did not make them any more likely to recommend that their client accept the plea deal. This casts doubt on the normative shadow of the trial model that posits that plea decision-making is based on the outcome at trial, which is based on the strength of the evidence (Landes, 1971). Even though attorneys thought the evidence was strong against their client and rated their likelihood of success at trial as lower, they were not going to recommend that their client accept the plea deal. This, again, could be a general hesitancy by attorneys to make plea recommendations. It could also be that the defense attorneys are not making plea decisions solely on the strength of the evidence and there is something else in this case that is making them hesitant to recommend the plea deal.

Finally, it could be the terms of the plea deal itself, which were: plead guilty for 12 months in jail and a $2,000 fine or risk a jail sentence of 24 months and a $3,000 fine at trial, that decreased their likelihood of recommending it. The terms of the deal were not manipulated and there was no offer of a second deal. It is possible that attorneys thought that they could negotiate a better deal for their clients and that is why, even with strong evidence, they were not going to recommend that their client accept this particular plea deal. Future research should explore the effects of subsequent offers on defense attorneys' willingness to recommend plea deals.

Lastly, attorneys thought it would be more beneficial for their clients to accept the plea deal when there was strong evidence than when there was weak evidence. When the evidence against their client was strong, attorneys recognize that it is probably better for them to accept a plea deal. Despite that, again, they were not any more likely to recommend it. Once again, there is an incongruence between what attorneys think would be best for their clients and what they are willing to recommend.

Race and Evidence Strength Interaction. There was partial support for the third hypothesis that an interaction of race and evidence strength would influence defense attorney plea recommendation where defense attorneys would be more likely to recommend that a Black defendant accept a plea deal than a white defendant when there is weak evidence, compared to strong evidence. While previous sections discussed the main effect of race and the main effects of evidence strength, this section discusses the interaction of race and evidence strength. There was no effect of an interaction of race and evidence strength on attorney's evaluation of their client's guilt or how successful attorneys think they would be at trial with varying combinations of Black/white defendants with strong/weak evidence.

The results show that there was an interaction of race and evidence strength on how likely defense attorneys are to recommend that their client accept a plea deal. Attorneys are more likely to recommend that their Black clients accept a plea deal when there is strong evidence than when there is weak evidence; there is no difference in recommendation for their white clients. Defense attorneys are making different recommendations for their Black clients based on the strength of the evidence, but they are not doing the same for their white clients. It is possible that they are concerned about how a Black client with strong evidence against them would present to a jury, but do not have the same concern for a white client, therefore a plea

deal is preferable. When also considering the strength of the evidence, defense attorneys are demonstrating racial bias when they make different recommendations for their Black and white clients. When asked if they thought a jury would treat a defendant of the opposite race differently, a majority of attorneys said that they did. Thus, it is reasonable to assume that part of the reason for this difference is that attorneys have jury-related concerns, as one defense attorney said, “Racial bias is real in a trial…My fear is always that my clients of color will be viewed by a jury as ‘even if they didn’t do this, they did something else otherwise the police would not have arrested them.’” It is also possible that attorneys do not think they would be able to negotiate a better deal for their Black clients with strong evidence and they should just accept the one that is offered. This is similar to the case of Derrick Sanders; his attorney likely thought that she could not secure a better deal for her client and he, a Black man, accepted a second plea deal that still included a life sentence.

Similarly, attorneys thought it would be more beneficial for their Black clients with strong evidence to accept a plea than their Black clients with weak evidence; there were no differences between their white clients with strong and weak evidence. Again, it is possible that they had jury-related concerns or concerns about their own ability to secure a better plea deal.

Overall, defense attorneys have differing plea recommendations for their clients with respect to their race and the strength of the evidence. They are more likely to recommend that a Black defendant with strong evidence accept a plea deal and that it would be more beneficial for them. While it is reasonable for a defense attorney to recommend that a client with strong evidence accept a plea deal, it is interesting that they do not have the same concerns for their white clients. Therefore, race does affect defense attorneys' decision-making when combined

with other factors, such as evidence strength. This finding could be demonstrative of racial bias in attorneys' *own* decision-making but considering that they do not think that these defendants are any more or less guilty, it could be demonstrative of how biased they think the *system* is.

2.6.1 Limitations

The goal of the present study was to further understand the role of racial bias in plea decision-making, specifically whether defense attorneys displayed racial bias in their plea recommendations based on the race of their client and the strength of the evidence. Results indicated that when defense attorneys consider both the race of the client and the strength of the evidence, they do display racial bias in their recommendations and make different recommendations for Black clients, compared to their white clients. However, they are not making recommendations based solely on the race of their client. One limitation of this work is that attorneys might not be displaying the same behaviors in an online research study as they would in real life. Despite attempts at realism to increase ecological validity by using an interactive plea simulation instead of a vignette, it does not have the same real-life consequences for the attorney's client. When defense attorneys are counseling a client in real life, they may be facing time pressures and other case aspects that were not covered in the simulation (e.g., limited access to discovery or financial constraints). Limited information and time pressures have been shown to influence decision-making by forcing individuals to rely on heuristics and biases (Tversky & Kahneman, 1974). In an online study, participants were able to take as long as they wanted, or not make a decision at all. Further, participants only had to consider one client in isolation whereas they might have several clients at a time in real life. It is unclear whether competing interests and resources may influence real-life decision-making. Therefore, it is possible that the simulation was an "ideal" situation, not a "real" situation.

Similarly, a second limitation of this study, as discussed above, is the possibility that defense attorneys are overcorrecting their behavior, or purposefully not reporting biased recommendations. Recent research examining racial bias has found that study participants are hesitant to display racial bias in their responses, especially in studies with legal contexts (Smalarz et al., 2023). Instead, they will overcorrect by reporting pro-Black behavior so as to not appear racist. It has been clearly established that Black individuals receive disparate treatment in the system, so the behaviors and decisions that study participants are demonstrating are not reflective of the treatment that Black people receive in real life. Defense attorneys may have deduced that this study focused on racial bias and corrected their behavior accordingly.

Lastly, the results of the study could be a function of the sample. There was a high attrition rate where roughly half of the participants who started the study dropped out during the simulation stage. It is possible that participants thought they were only signing up to answer a few questions and were not expecting to have to sit through a simulated legal scenario. There might be something different between the attorneys who completed the study and those who did not, such as an interest in research or willingness to help, that influenced the results.

2.6.2 Conclusion

Black individuals are disadvantaged at nearly every decision point in the criminal justice system, and sometimes before they even enter the system. One of those decision points is the plea process and the recommendations that defendants receive from their attorneys. Given that most cases are resolved through a guilty plea, most defendants' primary interaction with a legal actor is with their defense attorney during the plea process. Defense attorneys, like

others, are susceptible to racial bias. This study explored the role of racial bias in plea decision-making, specifically whether defense attorneys displayed racial bias in their plea recommendations based on the race of their client and the strength of the evidence. Results indicate that defense attorneys made differing decisions regarding evidence. When the evidence is weak, defense attorneys think they would be more successful at trial. When the evidence is strong, defense attorneys think it would be more beneficial for their client to accept a plea deal but, they are not willing to recommend it.

Further, while race *alone* did not have an effect on defense attorneys' plea decisions, race in conjunction with other factors, such as evidence strength, did have an effect on their decision-making. Attorneys are more likely to recommend that a Black defendant with strong evidence accept a plea deal, but they do not make the same recommendation for their white clients. Similarly, they also believed that it would affect a jury. A majority of defense attorneys reported that they thought that a jury would treat a defendant of another race differently, in line with thinking: "I am not racist, the system is racist."

The results of this study demonstrate the complicated, and sometimes incongruent, decision-making that Black defendants navigate with their attorneys in the criminal justice system. It is possible that defense attorneys harbor racial prejudice against their clients, even if they are not evidenced in their decision making. It is also possible that even if defense attorneys do not have their own racial biases, they may have to consider the biases of other people that their clients may have to interact with and adjust their recommendations accordingly. Future research should interview attorneys to get a more in-depth understanding of how they are making these plea recommendations. More research is needed to gain a better

understanding of how defense attorneys are making plea recommendations for their Black and white clients.

Chapter 3. Study 2: Plea Recommendations of Peers

3.1 Introduction

Defense attorneys are meant to serve as a defendant's gateway to the criminal justice system, where they are to educate defendants about the process and its consequences. However, given the limited time they have together, this process may be supplemented by other people whom defendants see more often. They may be turning to the people around them, such as their friends and family, for advice. These people may also be weighing in on a defendant's plea decision, similar to how patients turn to family members for medical decisions (Gilbar, 2012). Although these people may provide advice that could have life-changing implications for the defendant, many scholars report their belief that laypeople are not knowledgeable about the criminal justice system generally, the plea process specifically, or their related scientific findings (Benton et al., 2006; Reifman, et al., 1992) Notwithstanding, to our knowledge, there are no studies directly examining laypeople's knowledge of plea bargaining or the criminal justice system generally, or how individuals would counsel a friend facing a plea decision. However, research examining individuals with a felony conviction knowledge of plea bargaining (Redlich & Summers, 2012; Zottoli & Daftury-Kapur, 2019) and people's attitudes towards plea bargaining (Herzog, 2003; Khogali et al., 2018) could provide insight, as could research explaining how individuals make situational judgments for themselves compared to other people.

Plea Knowledge. To measure plea knowledge, Redlich and Summers (2012) tested 99 adult male defendants who had just plead guilty; most of the sample scored below 60% on their measure. One third of the sample was not aware that they make the final plea decision or that they could withdraw their plea; they thought that someone else made that decision. In relation

to their case, only half were told that this plea could influence past or future charges against them or were told of the evidence the State had against them. Similarly, Zottoli and Daftary-Kapur (2019) conducted interviews with 69 adolescents and 60 adults who had recently been convicted and directed to community programs. They found that more adults than youth knew that a guilty plea would result in a criminal record. Even though the plea colloquy asks if they understand that they are waiving their right to a trial, more youth than adults did not know that they could go to trial if they rejected their plea. Of the youth who knew that they had a right to trial, just over a quarter did not know basic information about how a trial would unfold (Zottoli & Daftary-Kapur, 2019). Lastly, several studies have found that in advising their juvenile children, parents believe that they have the final say in their child's legal case/the child's decision to plea (Birnbaum & Haney-Caron, 2023; Fountain & Woolard, 2017). Overall, these studies found significant shortcomings in the understanding of the plea process and its consequences for individuals involved in the plea process.

Plea Perceptions. While we have little information about laypeople's knowledge of the plea process, a few studies have measured their perceptions of the plea process with mixed results. Early work on this issue found that people generally disapprove of the plea system (Cohen & Doob, 1989). More recently, Herzog (2003) measured Israelis' opinions of the plea process and found crime severity influenced people's perceptions. Respondents were more supportive of pleas in cases that involved less serious crimes, such as tax evasion, and less supportive of more serious crimes, such as murder. Further, respondents who had a criminal record were less supportive of plea bargaining. There are several differences between the Israeli criminal justice system and the United States system (e.g., prosecutorial discretion) so Khogali et al. (2018) used vignettes to measure the plea perceptions of people from the United

States. They found that participants were less supportive of plea bargaining, believing that it allowed criminals to get off easy when the plea deal was cooperative, there was no exculpatory evidence, and the sentence was lenient. Conversely, they believed plea bargaining was fairer when the evidence was strong. Similarly, other research has found support for plea bargaining in cases involving sexual assault (Golding et al., 2018), and driving under the influence (Webster et al., 2020). Lastly, a survey administered to law students who are in the liminal space between laypeople and legal actors found that when asked about the benefits of plea bargaining, virtually no students said that it was used to achieve justice (Johnson, 2019). In sum, the few studies examining laypeople's perceptions of the plea system have found that while the general public generally disapproves of plea bargaining, these opinions can change based on the severity of the crime or the sentence imposed (Hamovitch et al., 2022).

Decision Making for Others. Even with laypeople's lack of plea knowledge and low approval of the plea system, defendants may seek the guidance of their friends and family when making a plea decision. Therefore, it is important to understand how people make decisions for other people, compared to themselves. Research looking at different decision-making styles has relied on actor-observer differences in attribution. Individuals make the fundamental attribution error in situations where, when they are observers, they focus on the actor and ignore contextual and situational factors. When they are the actor, they focus on their environment, not themselves, when evaluating their behavior (Ross, 1977). For example, the car in front of you stopped short because they are a bad driver, but you stopped short because you thought you saw a rabbit run into the road. The actor-observer effect is not only applicable in benign situations such as bad driving, but in legal contexts as well. In measuring plea perceptions, Hamovitch et al. (2022) found that community and student participants were able

to understand how certain situational and dispositional factors, such as getting out of pretrial trial detention, attorney recommendations, or minority status could influence *other* innocent people to accept a plea deal, but they resisted the idea that these factors could influence their *own* decision to accept a plea deal. The authors speculate that the reason for the disparity in this study is that participants thought they were more immune to the risk factors of pleading guilty than the hypothetical peer (Hamovitch et al., 2022).

In examining perceptions of custody, Alceste et al. (2017) found that participants who were questioned about a mock theft as witnesses did not feel free to leave while being questioned. These same participants reported that they objectively knew they could leave because they were told in the instructions, but subjectively did not feel as if they could. Observers who later watched recordings of the questioning reported that the witnesses were free to leave, both objectively and subjectively. However, when the observers were asked to imagine themselves in the actor's situation, they also reported that, subjectively, they would not feel free to leave and the actor-observer effect disappeared (Alceste et al., 2017). Together, these studies demonstrate that the decisions and judgments that individuals make for others may not necessarily be the same as the ones they would make for themselves.

Racial Bias in General Population. Lastly, laypeople, like defense attorneys and other legal actors, have racial biases that may affect their decision-making and judgments. Again, these biases are typically unconscious, but are seen in the disparate treatment and outcomes for Black people compared to white people in areas such as medicine and the media. For example, the infant mortality rate for Black babies is nearly three times the rate of white babies in the United States. However, when Black babies are cared for by Black physicians, the mortality rate is halved (Greenwood et al., 2020). There are also disparities in pain management,

believed to stem from the (false) idea that Black people feel less pain than white people; that they have thicker skin. Hoffman et al. (2016) conducted two studies examining racial bias in the pain management assessment of Black and white people by both laypeople and medical students. Participants read scenarios and were asked how much pain the Black/white target would feel. Medical students were also asked to make medical recommendations for the targets. They found that white laypeople who endorsed the belief that Black people experience less pain gave lower pain ratings for the Black target than the white target. When sampling medical students and residents, they found that half of the white participants also endorsed the belief that Black people feel less pain. Their belief was manifested in their responses; they gave lower pain ratings for Black patients and less accurate medical treatment recommendations (Hoffman et al., 2016). Despite not being aware of their own biases, medical professionals, as well as laypeople, are influenced by the racial biases they espouse, and they affect the decisions they make about and for Black people.

Racial biases of laypeople can also be seen in the media portrayals of mass shooters and protesters. For example, when mass shooters are Black or Latino men, they are portrayed as violent and discussion of mental illness relates to criminal traits and behavior (Duxbury et al., 2018). Conversely, when mass shooters are white men, they are treated as victims or sympathetic characters. When discussing their mental health, they are portrayed as redeemable and victims of society (Duxbury et al., 2018).

Further, a content analysis of coverage of the Black Lives Matter (BLM) protests related to the 2020 murder of George Floyd found differences in how news outlets (across the political spectrum) covered the BLM protests compared to COVID-19 protests (Reid & Craig, 2021). The BLM protests were characterized as violent, even after protestors pointed out that

the property damage was done by fringe groups. Journalists also used language that minimized the harm inflicted by police violence and framed the protesters as a threat to public safety. Overall, the "media portrayals functioned to suppress and delegitimize the critical messages of equality, justice, and respect for constitutional rights" (Reid & Craig, 2021, pg. 304). On the other hand, those who were protesting COVID-19 regulations were characterized as "patriotic citizens seeking to uphold their rights and freedoms" even with their aggressive actions (Reid & Craig, 2021, pg. 305). Racial bias in news coverage is particularly dangerous because of the audience that they reach. Reporters are the gatekeepers of information; they chose what information is brought to the public, and their framing may affect the way viewers are thinking about these events. When the biases of newscasters and news organizations influence the way they frame and report events, their viewers may adopt those same biased viewpoints. Those viewpoints are then manifested in their interactions with others, the decisions and judgments they make, and how they treat them (e.g., medical treatments).

3.2 Study Objectives

In order to have a holistic understanding of the plea decision-making process, it is important to consider other actors who could influence a defendant's decision to accept or reject a plea deal. As discussed, plea recommendations for peers could be influenced by a number of factors (e.g., individual's personal perceptions and knowledge of the plea system, observer status, or racial bias) so it is important to examine what recommendations they believe they might make if asked. Study 1 examined how defense attorneys may influence that process. Study 2 examines how a defendant's peers may influence that process.

3.3 Hypotheses

H_1: Students will rate their likelihood of success at trial as higher and be less likely to recommend a plea deal when their friend is white than they will when their friend is Black (i.e., a main effect of Defendant Race).

H_2: Students will rate their likelihood of success at trial as lower and be more likely to recommend a plea deal when there is strong evidence than they will when there is weak evidence (i.e., a main effect of Evidence Strength).

H_3: Students will be more likely to recommend that a Black friend accept a plea deal than a white friend when there is weak evidence, compared to strong evidence (i.e., an interaction showing that the main effect of Defendant Race will be stronger in the weak evidence condition than in the strong evidence condition).

H_4: The actor-observer effect will be extended to plea decision-making where students will make different decisions for their peers than they would for themselves.

3.4 Method

This study utilizes the same 2 (Defendant Race: Black or White) x 2 (Evidence Strength: strong or weak) x 2 (Simulation Scenario: hit-and-run vs. shoplifting) between – subjects design with university student participants. Participants completed one of two plea simulations and a plea decision and recommendations questionnaire. Participants were again randomly assigned to one of the eight conditions.

3.4.1 Participants

Participants were N = 97 university students from a large northeastern university in the United States. One hundred and eight participants completed the study, but after removing participants who did not correctly answer the attention and manipulation check questions, there

was a final sample of N = 97. An a priori analysis through G*power determined N=104 to be an acceptable sample size at .85 power. Participants had an average age of 19.96 years (M = 19.96, SD = 2.12), 59% male (N_{Male} = 57, N_{Female} = 38), and 55% White/Caucasian with the second largest group being 20% Black (N_{White}= 53, N_{Black} = 20). Students were recruited through SONA and were given in course credit in exchange for their participation.

3.4.2 Materials and Measures

Participants completed a computer plea simulation and were asked their plea recommendations regarding the defendant.

Procedure. Participants completed the study in person. Participants registered for the study through SONA after reading a generic description of the study. They were told that it would take no longer than 30 minutes and they would receive 1 credit as compensation. The survey began with a consent form and a demographic questionnaire. The demographic questionnaire asked about their age, gender, race and ethnicity. See Appendix D for Pre-Simulation Measures. They viewed one of the scenarios (hit-and-run or shoplifting incident) and were asked about what kind of recommendations they would give to their clients. They were randomly assigned to one of the 4 conditions (1. Black defendant with strong evidence; 2. Black defendant with weak evidence; 3. White defendant with strong evidence; 4. White defendant with weak evidence) and the plea scenarios were counterbalanced. Lastly, they were debriefed and assigned credit. Measures and plea simulation are based on those from Study 1 but adjusted for student participants.

Plea simulation. Participants completed a plea simulation: a hit-and-run and a shoplifting incident (see Appendix B for images). The plea simulation is the same as the one used in Study 1. The hit-and-run simulation starts by showing the avatar, Jordan, entering a car

and pulling out of a parking spot. The shoplifting simulation starts by showing Jordan entering a retail store, asking to view a pair of sunglasses, receiving text messages, and then exiting the store. The avatar is either a Black male or a white male. Both simulations then flashed to a court summons where the prosecutor tells the judge that the defendant is being charged with either a hit-and-run or larceny, explains the punishment and provides either strong or weak evidence. The prosecutor also explains that this is Jordan's third offense of a similar nature so they are going for the maximum penalty and requests that the defendant be held, at which time the judge will remand them to a holding cell. Jordan then posts bail and meets with his defense attorney who will explain to the defendant that the prosecutor has offered a plea deal. The deal is to plead guilty for 12 months in jail and a $2,000 fine, or risk 24 months in jail and a $3000 fine if found guilty at trial.

Plea decisions and recommendations. Participants were told to imagine that the defendant is their friend. They were asked similar questions as defense attorneys, such as: "If your friend were to take this case to trial, what do you think is the likelihood that he would be successful?" (0-100 scale) and "How beneficial do you think it would be for your friend to accept this plea deal? (5-point Likert scale from "Very beneficial" to "Very unbeneficial")." They were also asked: "If your friend asked for a recommendation from you, how likely are you to recommend that your friend take this plea deal? (5-point Likert scale from "Very likely" to "Very unlikely")" Further, participants were asked if they think that the plea deal is in their friend's best interest (Yes/No) and what sentencing concessions they think would need be offered. They were also asked to rate the evidence against their friend (5-point Likert scale from "Very weak" to "Very strong"), how certain they are that their friend is guilty, and a multiple-choice question asking "What was the race of the client in this case?" that served as

the manipulation check question. They were asked "If this were a female/juvenile/Black/White defendant, do you think a jury would treat them the same way? Why or why not?" Further, they were asked to rate how important they think a list of factors should be when a defense attorney is advising their client about a plea deal (e.g., "Defendant's willingness to go to trial" and "Presence of a confession"). Lastly, unlike defense attorneys, they were asked a series of questions aimed at understanding what they would do in this situation, for example, "Imagine it was you in this situation, how likely would you be to accept the plea offer?" and "How beneficial do you think it would be for you to accept this plea deal?" For a full list of questions see Appendix E.

3.5 Results

To test the hypotheses, I conducted Chi-Square tests and 2-way ANOVAs for the dependent variables. I also conducted an exploratory factors analysis of plea factors to further understand how the items related to one another.

Data cleaning, transformations, and manipulation checks. Participants who did not correctly answer the manipulation check question or the attention check questions were removed from the final data set. The manipulation check question asked, "What was the race of this client?" To ensure that the evidence strength manipulation was successful I conducted an independent sample *t*-test and found there were significant differences ($t(95) = 6.495$, $p < .001$, $d = 1.427$, $CI = .973$ to 1.875) in the evidence ratings between those saw the strong evidence (M= 4.29, SD = .825) and those who saw the weak evidence (M = 3.05, SD = .921). Again, because this was not a dichotomous measure that had a clear wrong answer, but rather averages, no participants were removed from the data set based on responses to this question.

Questions asking how beneficial participants thought this plea deal would be for their friend, how likely they are to recommend it to their friend, how much the personal characteristics of a defendant would affect their recommendation, if personal characteristics would influence a defense attorney's recommendation, how likely they are to accept the offer themselves, and how beneficial it would be for them to accept the plea offer were reverse coded. This was done so that response options were consistent and in the same direction.

3.5.1 Decision-Making for Others

Participants were asked to pretend that the avatar in the simulation, Jordan, was their friend. Then, they were asked questions assessing the types of plea decisions they would make for others.

Likelihood of Success at Trial. To test the hypotheses, participants were asked how successful they think their friend would be if they took this case to trial. A 2-way ANOVA revealed that there was no main effect of race on how successful participants think their friends would be at trial (F (1, 93) = 1.11, p = .295, η_p^2 = .012, d = .19, CI = -.201 to .598). This analysis did not support the first hypothesis. See Table 3.1 for means for dependent variables by race.

There was a main effect of evidence strength on likelihood of success at trial (F (1, 93) = 8.535, p = .004, η_p^2 = .084, d = -.60, CI = -1.01 to -.19). In support of the second hypothesis, participants thought their friends would be more successful at trial when there was weak evidence than they would be with strong evidence. See Table 3.2 for means for defendant variables by evidence strength.

Lastly, there was no significant effect of the interaction of race and evidence strength on the perceived likelihood of success at trial (F (1, 93) = .59, p = .444, η_p^2 = .006. This

analysis does not support the third hypothesis. See Table 3.3 for means of dependent variables by the race and evidence strength interaction.

Table 3.1
Means of Dependent Variables Concerning Race

Dependent variable	Client Race	Mean	Standard Deviation	Sig.	Partial Eta Squared
Likelihood of success at trial	Black	29.85	24.44	.295	.012
	White	25.47	19.48		
Likelihood of recommending the plea deal	Black	3.48	1.28	.007	.077
	White	4.14	1.20		
Beneficial for friend	Black	3.52	1.15	<.001	.127
	White	4.20	.78		
Certainty of guilt	Black	3.33	.94	.009	.072
	White	3.80	.87		

Likelihood of Recommending the Plea Deal. To test the hypotheses, participants were asked how likely they are to recommend that their friend accept this plea deal. A 2-way ANOVA revealed that there was a main effect of race on how likely participants were to recommend that their friend accept the plea deal (F (1, 93) = .7.74, p = .007, η_p^2 = .077, d = -.556, CI = -.961 to -.148). Participants were more likely to recommend that their white friends accept the plea deal than their Black friends. This analysis supports the first hypothesis of a main effect of race, but in the opposite of the predicted direction.

There was a main effect of evidence strength on likelihood of recommending (F (1, 93) = 4.92, p = .029, η_p^2 = .050, d = .451, CI = .042 to .857). In support of the second hypothesis,

participants were more likely to recommend that their friend accept the plea deal when there was strong evidence, compared to when there was weak evidence.

Lastly, there was no significant effect of the interaction of race and evidence strength on likelihood of recommending the plea deal (F (1, 93) = .326, p = .570, η_p^2 = .003). This analysis does not support the third hypothesis.

Table 3.2
Means of Dependent Variables Concerning Evidence Strength

Dependent variable	Evidence Strength	Mean	Standard Deviation	Sig.	Partial eta squared
Likelihood of success at trial	Strong	22.18	21.58	.004	.084
	Weak	34.88	20.55		
Likelihood of recommending the plea deal	Strong	4.05	1.12	.029	.050
	Weak	3.51	1.31		
Beneficial for friend	Strong	4.11	.95	.006	.079
	Weak	3.56	1.05		
Certainty of guilt	Strong	3.82	.81	.002	.099
	Weak	3.24	.99		

Beneficial for Friend. Participants were also asked how beneficial they think it would be for their friend to accept this plea deal. A 2-way ANOVA revealed that there was a main effect of race (F (1, 93) = 13.56, p < .001, η_p^2 = .127, d = -.695, CI = -1.10 to -.28) where participants thought it would be more beneficial for their white friends to accept the plea deal than their Black friends.

There was also a main effect of evidence strength on benefit for friend (F (1, 93) = 8.02, p = .006, η_p^2 = .079, d = .551, CI = .139 to .96). Participants thought it would be more

beneficial for their friend to accept the plea deal when there was strong evidence than when there was weak evidence.

Lastly, there was no significant effect of the interaction of race and evidence strength on benefit to the friend (F (1, 93) = 2.30, p = .133, η_p^2 = .024).

Table 3.3
Means of Dependent Variables Concerning the Interaction of Race and Evidence Strength

Dependent variable	Race				Partial eta squared
	Black		White		
	Evidence Strength				
	Strong	Weak	Strong	Weak	
Likelihood of success at trial	22.85 (23)	38.95 (23.75)	21.6 (20.65)	31 (16.63)	.006
Likelihood of recommending the plea deal	3.77 (1.18)	3.1 (1.33)	4.3 (1.02)	3.9 (1.18)	.003
Beneficial for friend	3.88 (1.03)	3.05 (1.15)	4.3 (.84)	4.05 (.67)	.024
Certainty of guilt	3.62 (.9)	2.95 (.89)	4 (.7)	3.52 (1.03)	.003

*Note: Mean (Standard Deviation); * Denotes mean differences significant at p < .05*

Certainty of Guilt. Participants were also asked how certain they are of their friend's guilt. A 2-way ANOVA revealed a significant main effect of race on perceived guilt (F (1, 93) = 7.17, p = .009, η_p^2 = .072, d = -.527, CI = -.931 to -.12) where participants thought that their white friends were more guilty than their Black friends.

There was also a main effect of evidence strength on perceived guilt (F (1, 93) = 10.17, p = .002, η_p^2 = .099, d = .647, CI = .232 to 1.058). Participants thought that their friends with strong evidence against them were more guilty than their friends with weak evidence against them.

Lastly, there was no significant interaction of race and evidence strength (F (1, 93) = .279, p = .598, η_p^2 = .003) on perceived friend guilt.

Best Interest of Friend. Participants were also asked if accepting this plea deal would be in the best interest of their friend. A Chi-Square analysis found that there was a significant relationship between race and participants' belief that this would be in the best interest of their friend (X^2 (1, 97) = 5.72, p = .017) where 63% (N=29) of those who had a Black friend and 84% (N=43) of those who had a white friend said it would be in the best interest of their friend to accept the plea deal.

There was also a significant relationship between evidence strength and belief that this plea deal would be in the best interest of their friend (X^2 (1, 97) = 4.34, p = .037) where 82% (N = 46) of those who saw strong evidence and 63% (N = 26) of those who saw the weak evidence thought it would be in the best interest of their friend to accept the plea deal.

3.5.2 Decision-Making for Self

After answering questions about their friend, Jordan, participants were asked what kind of plea decisions they would make for themselves if they were in the same situation.

Likelihood of Accepting. Participants were asked how likely they would be to accept the plea offer if they were in this situation. Results of a 2-way ANOVA indicated that there was a significant main effect of race on how likely participants were to accept the plea deal (F (1, 93) = 6.147, p = .015, η_p^2 = .062, d = -.463, CI = -.866 to -.058). Participants indicated they were more likely to accept the plea deal when the avatar was white Jordan, compared to Black Jordan.

There was also a significant main effect of evidence strength on likelihood of accepting the plea (F (1, 93) = 16.465, p = .002, η_p^2 = .099, d = .640, CI = .226 to 1.052) where

participants were more likely to accept the plea deal when there was strong evidence against them, compared to weak evidence. There was no significant interaction effect of race and evidence strength on how likely participants were to accept this plea deal (F (1, 93) = 2.576, p = .210, η_p^2 = .017).

Actual Acceptance. Participants were shown a yes/no question asking if they would accept this plea deal. A Chi-Square analysis revealed that there was not a significant relationship between race and whether participants would accept the plea deal (X^2 (1, 97) = 1.519, p = .218). A majority of participants 56% (N=26) who saw the Black defendant said they would accept the plea deal and 67% (N=35) of those who saw the white defendant said they would accept the plea deal.

There was a significant relationship between evidence strength and whether participants would accept the plea deal (X^2 (1, 97) = 6.055, p = .014) where 73% (N = 41) of those who saw the strong evidence said they would accept the plea deal while only 49% (N = 20) of those who saw the weak evidence said they would accept the plea deal.

Beneficial for Self. Participants were also asked how beneficial it would be for them to accept this plea deal. Results indicate that there was a small significant main effect of race on how beneficial participants thought this plea deal would be for them (F (1, 93) = 4.538, p = .036, η_p^2 = .047, d = -.392, CI = -.794 to .011). Participants thought this plea deal would be more beneficial for them when they were in place of a white defendant than when they were in the place of a Black defendant.

Results also indicated a significant main effect of evidence strength F (1, 93) = 10.119, p = .006, η_p^2 = .079, d = .565, CI = .153 to .974) where participants thought the plea deal would be more beneficial when there was strong evidence, compared to weak evidence.

There was no significant interaction of race and evidence strength on how beneficial participants thought it would be to accept the plea deal F (1, 93) = 1.967, p = .164, η_p^2 = .021).

Best Interest of Self. Participants were also asked if it would be in their best interest to accept this plea deal. There was not a significant relationship between race and whether participants thought accepting this plea deal would be in their interest (X^2 (1, 97) = 1.018, p = .313). Of those who saw a Black defendant, 61% (N=28) and 71% (N = 36) of those who saw a white defendant thought it would be in their best interest to accept the plea deal.

There was a significant relationship between evidence strength and whether participants thought this plea deal would be in their best interest (X^2 (1, 97) = 6.893, p = .009) where 77% (N = 43) of those who saw strong evidence and 51% (N = 21) of those who saw weak evidence thought it would be in their best interest to accept the plea deal.

3.5.3 Decision-Making for Others vs. Self

To explore whether participants made different decisions for their friend compared to themselves, I conducted a repeated measure ANOVA for how likely participants are to recommend/accept the plea deal and how beneficial they think the plea deal would be. Participants were asked how likely they are to recommend that their friend accept the plea deal and how likely they are to accept the plea deal themselves. While the wording of the questions is not exactly the same, they target the same idea: how much they think someone should accept the plea deal.

In support of the fourth hypothesis, there was a significant difference in how much participants think someone should accept this plea deal (F (1, 93) = 21.223, $p < .001$). Participants were more likely to recommend that their friend accept the plea deal (M = 3.82, *SD* = 1.23) than they were to accept it themselves (M = 3.42, *SD* = 1.36). There were no

significant differences in how much they thought someone should accept the plea deal when considering race (F (1, 93) = .012, p = .913), evidence strength (F (1, 93) = 2.871, p = .094), or the interaction of race and evidence strength (F (1, 93) = 1.17, p = .282).

Results also indicated that there was a difference in how beneficial participants thought the plea deal would be (F (1, 93) = 22.059, p < .001). Participants thought it would be more beneficial for their friend to accept the plea deal (M = 3.88, *SD* = 1.02) than it would be for themselves to accept the plea deal (M = 3.55, *SD* = 1.19). There were no significant differences in perceived benefit for others vs. self when considering race (F (1, 93) = 2.224, p = .139), evidence strength (F (1, 93) = .616, p = .434), or the interaction of race and evidence strength (F (1, 93) = .061, p = .805).

3.5.4 General Case Factors

Plea Factors. In order to gain a better understanding of how laypeople think defense attorneys are, or should be, making plea decisions, I conducted a principal component analysis with plea related factors to determine common themes. Again, I chose a principal component analysis over principal axis factoring because I want to reduce the number of variables, not interpret them or explore the relationship between them. The item “Whether the defendant was granted bail” was reverse coded to avoid negative loadings. The principal component analysis extracted 5 factors with eigenvalues over 1 that explained 59.84% of the variance. The Kaiser-Meyer-Olkin value was .683 and the Bartletts Test of Sphericity was significant at p < .001. We chose to suppress coefficients below .4 to increase the strength of each factor and used a Varimax rotation with Kaiser Normalization. See Table 3.4 for the factor loading matrix. The principal component analysis extracted five composite factors: (1) Attorney Factors (2) Crime Factors (3) Outcome Factors, (4) Outside Factors, and (5) Defendant Contributions.

Defendant's age did not load onto any factors. See Figure 3.1 for mean response scores for each factor.

Table 3.4
Principal Component Analysis of Plea Related Factors

Plea Related Items	Attorney Factors	Crime Factors	Outcome Factors	Outside Factors	Defendant Contributions
Current caseload	.603				
Attorney thinks the defendant is guilty	.684				
Personal relationship with the judge	.840				
Personal relationship with the prosecutor	.742				
The crime involved a gun		.623			
Seriousness of the crime		.679			
Defendant's previous convictions for a similar offense		.717			
Defendant's prior record		.690			
Likelihood of conviction based on the evidence			.796		
Severity of the sentence in plea compared to sentence if convicted			.731		
Whether the defendant was granted bail				.612	
Presence of an eyewitness				.811	
Impression that your client may not present well a jury				.614	
Presence of a confession					.582
Defendant's willingness to go to trial					.713
Defendant's age					

1) Attorney Factors. Attorney factors are comprised of the attorney's current caseload, whether the attorney thinks the defendant is guilty, the attorney's relationship with the judge, and the attorney's relationship with the prosecutor. All of these items are related to the defense attorney; the attorney's relationships, workload, and judgments. Examination of the component matrix indicated that all items loaded at .603 or higher (range = .603 to .840). A reliability analysis revealed a high Cronbach's Alpha of .730. This factor had a mean response score of 2.59, indicating that participants thought that these items were moderately important for a defense attorney to consider.

2) Crime Factors. Crime factors include whether the crime involved a gun, the seriousness of the crime, the defendant's previous convictions for a similar offense, and the defendant's prior record. These factors all relate to the crime and criminal history of the defendant; how serious the crime was and whether the defendant has a history of committing this type of crime. Examination of the component matrix indicated that all items loaded at .623 or higher (range = .623 to .717). A reliability analysis revealed a Cronbach's Alpha of .646. This factor had a mean response score of 4.04, indicating that participants believed that these items were very important for a defense attorney to consider.

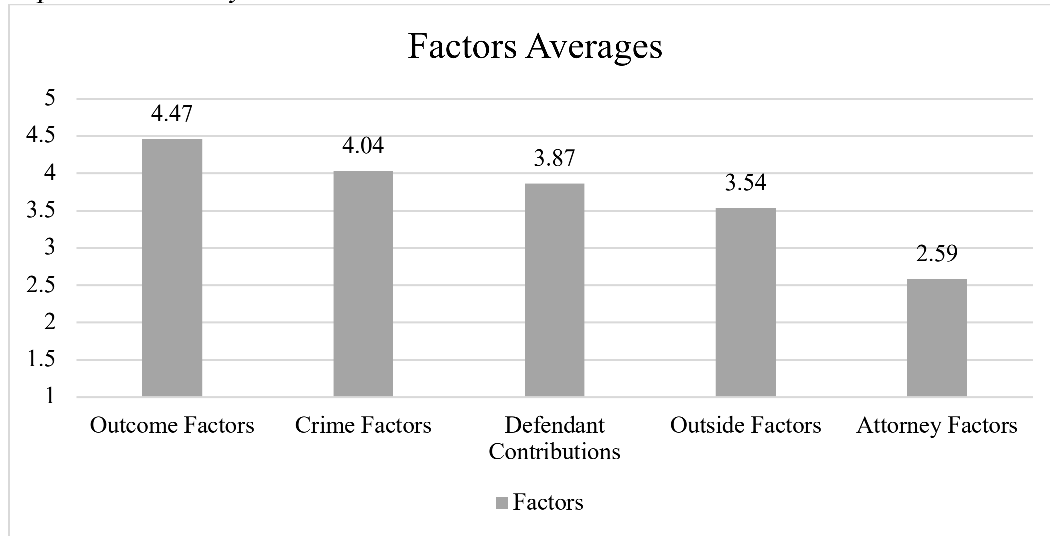
3) Outcome Factors. Outcome factors are comprised of the likelihood of conviction based on the evidence and the severity of the sentence in plea compared to the sentence if convicted at trial. These factors all relate to the outcome of the case, whether they will be convicted and what the consequence will be if convicted, either by guilty plea or trial. Examination of the component matrix indicated that all items loaded at .731 or higher (range = .731 to .796). A reliability analysis revealed a medium Cronbach's Alpha of .580. This factor

had a mean response score of 4.47, indicating that participants believed that these items were extremely important for a defense attorney to consider when counseling their client.

4) Outside Factors. Outside Factors include whether the defendant was granted bail, the presence of an eyewitness, and the attorney's impression that their client may not present well to a jury. These factors are case-related factors that are outside the control of the defendant; whether the judge allowed them bail and whether there was an eyewitness, and how the jury views the defendant. All items loaded at .612 or higher (range = .612 to .811) and a reliability analysis revealed a medium Cronbach's Alpha of .576. This factor had a mean response score of 3.54, indicating that participants believed these items were moderately important for defense attorneys to consider.

5) Defendant Contributions. Defendant contributions are comprised of the presence of a confession and the defendant's willingness to go to trial. These items are things that the defendant can control: whether they confess and how much they want to go to trial. All items loaded at .582 or higher (range = .582 to .713). These items had a mean response score of 3.87 so participants thought they were moderately important for a defense attorney to consider. However, a reliability analysis revealed a low Cronbach's Alpha of .213 so this factor should be interpreted cautiously.

Figure 3.1
Mean Response Scores by Factor



Opposite Race Defendants. Lastly, participants were asked if they thought that juries would treat a defendant of the opposite race the same way, but there was not a significant relationship between those who had a Black friend and those who had a white friend (X^2 (1, 97) = 2.839, p = .092). Overwhelmingly, regardless of which friend they had, participants thought that a jury would not treat an opposite race defendant the same way; 73% (N = 71) thought that juries would give differential treatment to defendants based on the color of their skin.

Table 3.5
Proportion of Yes/No Responses for Race and Jury Behavior

	Would a jury treat a defendant of the opposite race the same way?	
Friend Race*	Yes	No
Black	16 (35%)	30 (65%)
White	10 (20%)	41 (80%)

* *Note that participants were asked about the opposite of their friend's race e.g., participants who had a Black friend were asked if a jury would treat a white defendant the same way.*

Participants overwhelmingly said opposite race defendants would be treated differently by a jury, regardless of which race condition they were in. They believed that juries would treat

defendants differently based on the color of their skin and their open-ended responses give some ideas about why that might be so. Participants who had a Black friend in the simulation and said that a jury would treat a white defendant the same way did so because they believed the system is fair and that the evidence is strong enough to convict anyone, for example: "Everyone above 18 is treated the same in the Court of Law;" and "I think the nature of the incident and the criminal record of the defendant are the main factors to be considered in this case. The race of the defendant is of no significance."

Participants who had a Black friend and said that a white defendant would not be treated the same way typically said that it was because white defendants have an advantage, for example: "Depending how the judge is, (especially in modern society), the justice system can be very corrupt and cause unequal treatment towards minorities. A white defendant will always have the upperhand in society;" and "Oftentimes juries give white defendants the benefit of the doubt and give them a lesser punishment for the same crime that was allegedly committed by a poc [person of colour]."

The smallest group was participants who had a white friend and thought that a Black defendant would get the same treatment by a jury. They typically said it was because the system was fair, for example: "Even though in todays world of "systematic racism" I think the judicial system on a whole is very fair and does not judge a person based on their skin color, instead its their actions;" and "Because every people deserve the same rights and punishment." It is interesting that this participant said that people "deserve" equal treatment, however, without considering that what people deserve and what they get is not always the same.

Lastly, the largest group was participants who had a white friend in the simulation and said that a Black defendant would not receive the same treatment by a jury. They typically said

it was because of racial biases, for example: “Racism is almost always prevalent in a court room. The races associated in the jury could have a significant impact on the verdict. I'm not saying that a white jury would automatically see them as guilty, but i do think there is a directly proportional relationship between the number of white people in a jury and the likelyhood of a verdict due to color;” “because it has been proven many times that people see black people as more dangerous, there for they're usually treated harsher in cases like that, to 'prevent future crime;'” and “The jury could be racially motivated to punish or save a black defendant.” While most responses focused on the negative treatment of Black defendants, the final quote presents a new idea that juries may treat Black defendants differently, by being more lenient. This is consistent with research that found that people may overcorrect their behavior so as to not appear biased (Smalarz et al., 2023). Note that this is a representative sample of open-ended responses and is not exhaustive.

3.6 Discussion

Literature on laypeople’s legal decision-making has shown that race may play a role in the outcomes that defendants receive, and that people may make different decisions for others than they would for themselves. This study manipulated race and evidence strength as a direct test of their roles on individuals’ plea decision-making for others and themselves.

Race Main Effect. There was partial support for the first hypothesis that participants will rate their likelihood of success at trial as higher and be less likely to recommend a plea deal when their friend is white than they will when their friend is Black. There were no significant differences in how successful participants thought a white friend would be, compared to a Black friend. On average, participants thought that both friends would be equally unlikely to be successful at trial.

Contrary to the first hypothesis, participants were more likely to recommend that their white friend accept a plea deal, instead of their Black friend. They also thought it would be more beneficial for their white friend to accept the plea deal and were more certain of their white friend's guilt than they were of their Black friend's guilt. Participants perceived their white friends to be more guilty than their Black friends so they may have thought it would be more beneficial for their white friends to accept the plea deal and were more likely to recommend that they do. This would allow their white friends to avoid the harsher penalty if convicted at trial, where they already believe they are not likely to be successful. In turn, because participants did not perceive their Black friends to be as guilty, they may have been less likely to recommend the plea deal and did not see it as beneficial. However, they did not think their Black friends would be successful at trial, so it is unclear what participants thought would be the appropriate outcome or punishment for their Black friends.

Interestingly, participants rated their white friends as more guilty than their Black friends, which is inconsistent with prior research. There is an abundance of research that shows that Black people and People of Color are viewed as more guilty than their white counterparts, especially in situations where race is not salient (Sommers & Ellsworth, 2000, 2001). In this study, other than the appearance of the avatar, there was no mention of the race of the defendant, so race was not salient to the participant. However, participants were more certain of the guilt of the white friend than the Black friend. It is possible that, similar to defense attorneys, participants were overcorrecting in their judgments of the Black friend and were hesitant to judge them as more guilty, resulting in increased certainty of guilt for white friends. It is also possible that this is a result of the Black Sheep Effect. The Black Sheep Effect is when individuals judge unlikable ingroup members more negatively than unlikeable outgroup

members (Marques & Paez, 1994). In this situation, because most of the participants were white, the white friend would be part of the ingroup, the Black friend would be part of the outgroup, and the undesirable trait would be the friend's guilt. Consistent with the Black Sheep Effect, participants rated the white ingroup friend as more guilty than the outgroup Black friend. However, as race of the participant was not considered in the analysis, this interpretation should be taken with caution. Future research should examine the extent to which participant race affects decision-making.

Overall, participants demonstrated racial bias in their decision-making for their Black and white friends. They thought that their white friends were more guilty and therefore were more likely to recommend the plea deal and that it would be more beneficial for them. However, despite not being as willing to recommend the plea deal or thinking it would be as beneficial for their Black friends, they do recognize that if their Black friends went to trial, they are not likely to be successful and would not get equal treatment by the jury.

Evidence Strength Main Effect. There was support for the second hypothesis that participants would rate their friend's likelihood of success at trial as lower and be more likely to recommend a plea deal when there is strong evidence than they would when there is weak evidence. Participants thought that their friend would be more successful at trial when there was weak evidence against them than when there was strong evidence. In turn, they were more likely to recommend the plea, thought the plea deal was more beneficial, and were more certain of their friend's guilt when there was strong evidence, compared to weak evidence. When participants felt that the evidence against their friend was strong and they were more likely to be guilty, they recommended the plea deal so they could get the reduced punishments and not risk a harsher penalty at trial. When there was weak evidence against their friend, they were

less certain of their guilt, and thought they might be better suited to going to trial and potentially not facing any penalty.

For student participants, their pattern of results lends support for the normative shadow of the trial model which says that plea decision-making is based on the outcome at trial, which is based on the strength of the evidence (Landes, 1971). In this study, participants perceived likelihood of conviction at trial was affected by the strength of the evidence, which, in turn, influenced how likely they were to recommend the plea deal. When there was strong evidence against their friend, participants felt that they would not be successful at trial and reported an increased likelihood that they would accept the plea deal.

Overall, in line with the hypothesis, participants' plea decision-making was, in part, motivated by the strength of the evidence. When there was strong evidence, they thought their friend was more guilty and that a plea deal would be more beneficial, so they were more likely to recommend it. When there was weak evidence, participants thought that their friend would have a better outcome if they went to trial.

Race and Evidence Strength Interaction. There was no support for the third hypothesis that participants would be more likely to recommend that a Black friend accept a plea deal than a white friend when there was weak evidence, compared to strong evidence. There were no significant differences in how successful participants thought their friends would be at trial, how likely to they are to recommend the plea deal, how beneficial they think the plea deal is, and how certain they are of their friends' guilt across any combination of race and evidence strength. Considering there are significant main effects for both race and evidence strength, separately, it appears that students are not making plea decisions based on the totality of the circumstances, but rather focusing on individual factors. It is possible that

students do not view plea bargaining as a dynamic process, but rather more static, focusing on one aspect at a time: either race or evidence strength.

Decision Making for Others vs. Self. Lastly, there was support for the fourth hypothesis that the actor-observer effect will be extended to plea decision-making where students will make different decisions for their peers than they would for themselves. Participants thought that their friends should accept the plea deal more than they themselves should accept the plea deal and that accepting the plea deal would be more beneficial for their friends than it would be for them. When participants were observers for their friends, accepting the plea deal seemed like a great idea and would be more beneficial for them. However, when participants were the actor, and had to make these decisions for themselves, the plea deal was suddenly less appealing; it was not that great of a deal anymore. Perhaps, participants thought they should have their day in court, or they felt less guilty, or were simply not ready to have a conviction on their record and face the consequences without trying anything else first. It appears that, objectively, participants are able to recognize the benefits of accepting a plea deal. However, subjectively, it is difficult for them to make the same decision for themselves, when the consequences would actually affect them.

3.6.1 Limitations

The goal of the present study was to further understand the role of racial bias in plea decision-making. Specifically, this study explored whether students make different decisions for their friends based on their race and the strength of the evidence, and whether they would make those same decisions for themselves. Results indicated that participants do make different decisions based on the race of their friend and the strength of the evidence, and they do make different decisions for themselves. However, one limitation of this study is that

participants were asked to pretend that the avatar, Jordan, was their friend. It is possible that participants did not feel any connection to Jordan and did not make decisions the same way they would for a real-life friend. Some of the questions participants were asked were subjective, concerning whether they thought it would be good for Jordan to accept the plea deal. However, not having any history with Jordan may have made those questions difficult to answer with only a general understanding of Jordan, something they do not have with their real -life friends. There are no real consequences for their actual friends, so they might be making "ideal" decisions rather than the more thought-out and measured recommendations that they would make if this was a real-life friend. Participants may have different recommendations if they were to be asked by a real-life friend, someone with whom they share a history and real-life experience.

A second limitation of this study is that participants were told "Imagine it was you in this situation" and then asked questions about how they would treat this plea offer. It is unclear whether participants interpreted that as imagining themselves in their current state (gender, race, etc.) or if they imagined themselves as Jordan, a Black or white male. For some participants, they may have imagined themselves as a different gender or race, while others maintained who they were. Because this study looks at the effects of race, this constitutes a limitation because it is unclear how participants interpreted, and subsequently answered, these questions.

Lastly, the sample size is a limitation of this study. A power analysis through G*power determined that 104 participants would be an appropriate sample size for the study design. Data was collected from 108 participants, however after removing those who did not pass attention and manipulation check questions, 97 participants were retained. Also, G*power has

been known to underestimate the sample size needed for simple main effects, and especially interactions. The lack of significant interactions may be due to the study being underpowered. While significant effects and mean differences still emerged, the sample size is below the appropriate sample size for this study design. Further, it is a small sample for a study measuring general attitudes and may not reflect the attitudes of the U.S. population, more generally. Future research should attempt to replicate and expand on these findings.

3.6.2 Conclusion

While defendants primarily interact with their defense attorney during the plea process, that time is limited, therefore they may be turning to other people around them for advice, such as their friends. This study explored the role of racial bias in plea decision-making, specifically whether individuals displayed racial bias in their plea recommendations for their friends, based on the race of their friend and the strength of the evidence, and whether they would make those same decisions for themselves. Results indicate that student participants demonstrated racial bias in their decision-making where they thought that their white friends were more guilty and therefore were more likely to recommend the plea deal and that it would be more beneficial for them. Concerning evidence strength, when there was strong evidence participants thought their friend was more guilty and that a plea deal would be more beneficial, so they were more likely to recommend it. Conversely, when there was weak evidence, participants thought that their friend would have a better outcome if they went to trial. Further, there were no significant interactions of race and evidence strength. It appears that student participants are not considering the totality of the circumstances when making plea decisions, rather focusing on individual aspects of the case. Lastly, the plea decisions that participants made for their friends were not the same ones they would make for themselves; they thought that their friends should

accept the plea deal and that it would be more beneficial for their friends than it would be for them to accept the deal.

The results of this study further demonstrate the complicated biases involved in plea decision-making. Participants in this study displayed pro-Black biases, which could potentially be the reality of university students in the 21st century but is not consistent with research on racial bias in the general population. Regardless of their personal views, they do however recognize that people of different races receive different treatment in the justice system, again, saying, "*I* am not racist, the *system* is racist." Even then, they would make different decisions for themselves, when suddenly the plea deal becomes less attractive. Taken together, it paints a complicated scene for defendants to navigate. Future research should continue to explore the differing types of advice (and factors that inform that advice) that defendants are getting from the people in their lives.

Chapter 4. Comparing Plea Recommendations of Experts and Laypeople

4.1 Introduction

Defendants who are offered a plea deal have a number of people they can turn to to help them in this decision, however not all help is equal. The level of expertise can range from a knowledgeable expert, such as a defense attorney, to an interested but potentially less, or not at all, knowledgeable peer. This chapter will compare the results of Study 1 and Study 2 to explore how defense attorneys and laypeople differ in their plea recommendations. There are no a priori hypotheses; instead, the goal is to explore the differences in how laypeople and defense attorneys make decisions for Black and white defendants.

To our knowledge, no studies have compared the plea decision-making of defense attorneys and laypeople. Rather, past research has compared the knowledge of experts and laypeople on several specific psycho-legal topics such as interrogation tactics and eyewitness memory. For example, regarding interrogation tactics, laypeople are not as sensitive to the coerciveness of certain prohibited tactics (Kaplan et al., 2020). Both laypeople and experts agree that youth status and intellectual disability may lead to a false confession, but they disagree on several maximization and minimization tactics. Laypeople do not see repeated accusations and the presenting of false evidence as coercive as did a sample of experts. Laypeople also do not rate minimization tactics, such as promises of leniency or offering justification for the crime, as coercive as experts do (Kaplan et al., 2020). Further, there is a large difference in how much experts and laypeople know about the factors that can lead to an eyewitness misidentification; from a list of 30 eyewitness-related items laypeople agreed with experts on only 13% of the items (Benton et al., 2006). For example, laypeople did not endorse unconscious transference, weapon focus, or the cross-race bias as affecting an eyewitness's

ability to make an identification. Both laypeople and experts however, recognized that identification speed can be diagnostic of accuracy (Benton, 2006). Taken together, these studies demonstrate that, as expected, laypeople do not know as much about interrogations and eyewitness memory as people who are experts in the field.

While not surprising, it is notable that topics, such as false confessions and eyewitness misidentification, that have made it into the mainstream are not widely understood by the general public. Extrapolating from this lack of knowledge about more mainstream legal concepts, it can be assumed that laypeople are not knowledgeable about the factors and considerations that go into making a plea decision, a field that has not been as extensively researched or received mainstream attention to the extent that interrogations and eyewitness memory have. While measuring laypeople's actual plea knowledge is beyond the scope of this study, their presumed difference in expertise, in comparison with defense attorneys, and how this may influence how they interpret a case and counsel their peers is possible and will be the focus of this study.

4.2 Present Study

This analysis will compare the results of Study 1 and Study 2 to explore if defense attorneys and student participants make different plea-related recommendations and judgments. This is an exploratory analysis, so there are no a priori hypotheses.

4.3 Results

To analyze the two data sets, I used 3-way ANOVAs for the dependent variables. The independent variables were race, evidence strength, and participant type (defense attorney or student participant).

Data cleaning, transformations, and manipulation checks. The same data sets from Study 1 and Study 2 were used for this analysis. Participants who did not correctly answer the

manipulation check question (or the attention check questions for student participants) and were removed from Studies 1 and 2 were also removed from this final data set. The two data sets were combined and a new variable was created: Participant Type. Participant Type was dummy coded as follows: 0 = defense attorney, 1 = student participant.

Questions asking about how beneficial attorneys and student participants thought this plea deal would be and how likely they would be to recommend it to their client/friend were again reverse coded so that response options were consistent and in the same direction.

Likelihood of Success at Trial. Both sets of participants were asked how successful they think they/their friend would be if they took this case to trial. A 3-way ANOVA revealed that there was a significant main effect of participant type on how successful participants think they/their friend would be at trial (F (1, 245) = 83.940, p < .001, η_p^2 = .255, d = 1.257, CI = .980 to 1.532). Defense attorneys rated their overall success at trial as higher than student participants rated their friend's success at trial. See Table 4.1 for means of dependent variables by participant type.

There was also a main effect of evidence strength on likelihood of success at trial (F (1, 245) = 28.306, p < .001, η_p^2 = .104, d = -.776, CI = -1.031to -.519). Overall, both participant groups thought they/their friends would be more successful at trial with weak evidence than they would if there was strong evidence.

Lastly, there was no significant main effect of race (F (1, 245) = .177, p = .675, η_p^2 = .001, d = .158, CI = -.090 to .404), or significant interactions of race and participant type (F (1, 245) = 1.539, p = .216, η_p^2 = .006). See Table 4.2 for means of dependent variables for the interaction of race and participant type. There were also no significant interactions of evidence strength and participant type (F (1, 245) = .511, p = .475, η_p^2 = .002), or race, evidence

strength, and participant type (F (1, 245) = .028, p = .866, η_p^2 = .000) on respondents' assessment of likelihood of success at trial.

Table 4.1
Means of Dependent Variables Concerning Participant Type

Dependent variable	Participant Type	Mean	Standard Deviation	Sig.	Partial eta squared
Likelihood of success at trial	Defense Attorney	55.51	22.41	<.001	.255
	Student	27.55	21.97		
Likelihood of recommending the plea deal	Defense Attorney	2.65	1.31	<.001	.144
	Student	3.82	1.23		
Beneficial for defendant	Defense Attorney	2.81	1.33	<.001	.130
	Student	3.88	1.02		
Certainty of guilt	Defense Attorney	3.03	.88	<.001	.066
	Student	3.58	.93		

Beneficial for Client/Friend. Participants were also asked how beneficial they think it would be for their client/friend to accept this plea deal. A 3-way ANOVA revealed that there was a significant main effect of participant type on how beneficial participants think the plea deal would be for their client/friend (F (1, 245) = 36.52, $p < .001$, η_p^2 = .130, d = -.868, CI = -1.131 to -.602). Overall, student participants rated the plea deal as more beneficial than defense attorneys.

There was also a main effect of race on benefit for client/friend (F (1, 245) = 4.138, p = .043, η_p^2 = .017, d = -.276, CI = -.524 to -.028). Overall, participants thought the plea deal would be more beneficial for white clients/friends than Black clients/friends.

Further, there was a main effect of evidence strength (F (1, 245) = 10.511, p = .001, η_p^2 = .041, d = .504, CI = .253 to .754) where participants thought it would be more beneficial for defendants with strong evidence to accept the plea deal than those with weak evidence.

There was also a significant interaction of race and participant type (F (1, 245) = 6.331, p = .013, η_p^2 = .025) where student participants said that the plea deal was more beneficial for a white friend than a Black friend, but defense attorneys made similar judgments for clients of both races.

Next, there was a significant interaction of race and evidence strength (F (1, 245) = 5.403, p = .021, η_p^2 = .022) where participants said that it was more beneficial for a white defendant with weak evidence to accept the plea deal than a Black defendant with weak evidence.

Lastly, there was no significant interaction of participant type and evidence strength (F (1, 245) = .067, p = .796, η_p^2 = .000) or of race, participant type, and evidence strength on benefit to client/friend (F (1, 245) = .202, p = .653, η_p^2 = .001).

Table 4.2
Means of Dependent Variables Concerning the Interaction of Race and Participant Type

Dependent variable	Participant Type				Partial eta squared
	Defense Attorney		Student		
	Race				
	Black	White	Black	White	
Likelihood of success at trial	55.92 (24.46)	55.01 (19.84)	29.85 (24.44)	25.47 (19.48)	.006
Likelihood of recommending the plea deal	2.65 (1.42)*	2.66 (1.18)*	3.48 (1.28)*	4.14 (1.09)*	.022
Beneficial for defendant	2.79 (1.45)*	2.85 (1.19)*	3.52 (1.15)*	4.2 (.76)*	.025

Certainty of guilt	3.14 (.93)*	2.9 (.81)*	3.33 (.94)*	3.8 (.87)*	.043

*Note: Mean (Standard Deviation); * Denotes mean differences significant at p < .05*

Likelihood of Recommending the Plea Deal. Participants were asked how likely they are to recommend that their client/friend accept this plea deal. A 3-way ANOVA revealed that there was a main effect of participant type on how likely participants were to recommend that the defendants accept the plea deal (F (1, 245) = 41.267, p < .001, η_p^2 = .144, d = -.915, CI = -1.18 to -.648). Student participants were overall more likely to recommend that the defendant accept the plea deal than defense attorneys.

There was also a main effect of evidence strength on likelihood of recommending (F (1, 245) = 6.768, p = .010, η_p^2 = .027, d = .421, CI = .171 to .670) where participants who saw the strong evidence were more likely to recommend the plea deal than participants who saw the weak evidence.

There was also a significant interaction of race and participant type (F (1, 245) = 5.50, p = .020, η_p^2 = .022). Student participants were more likely to recommend the plea deal for their white friends than they were for their Black friends; defense attorneys made comparable decisions for both their Black and white clients.

Lastly, there was no significant main effect of race (F (1, 245) = 2.97, p = .086, η_p^2 = .012, d = -.244, CI = -.491 to .004), or significant interactions of race and evidence strength (F (1, 245) = 3.547, p = .061, η_p^2 = .014), participant type and evidence strength (F (1, 245) = .411, p = .522, η_p^2 = .002), or race, participant type, and evidence strength (F (1, 245) = 1.10, p = .295, η_p^2 = .004) on likelihood of recommending.

Certainty of Guilt. Participants were also asked how certain they are of their client/friend's guilt. A 3-way ANOVA revealed a significant main effect of participant type on perceived guilt (F (1, 245) = 17.33, $p < .001$, $\eta_p^2 = .066$, $d = -.604$, $CI = -.862$ to -.345) where student participants rated the defendant as more guilty than did defense attorneys.

There was also a main effect of evidence strength on perceived guilt (F (1, 245) = 9.424, $p = .002$, $\eta_p^2 = .037$, $d = .387$, $CI = .138$ to .636) where those who saw the strong evidence were more certain of the defendant's guilt than those who saw the weak evidence.

There was also a significant interaction of participant type and race on certainty of guilt (F (1, 245) = 10.974, $p = .001$, $\eta_p^2 = .043$). Defense attorneys rated the white defendant as less guilty than student participants rated the white defendant, but both groups made comparable guilt evaluations of the Black defendant.

Lastly, there was no significant main effect of race (F (1, 245) = .725, $p = .395$, $\eta_p^2 = .003$, $d = -.077$, $CI = -.324$ to .170), or significant interactions of race and evidence strength (F (1, 245) = 1.235, $p = .268$, $\eta_p^2 = .005$), participant type and evidence strength (F (1, 245) = 3.572, $p = .060$, $\eta_p^2 = .014$), or race, participant type, and evidence strength (F (1, 245) = .084, $p = .773$, $\eta_p^2 = .000$) on guilt evaluations.

4.4 Discussion

When defendants are making plea decisions, they have a number of people they can turn to for advice; among them are their defense attorneys and their friends. Defense attorneys and peers, however, have a potentially large gap in experience that influences how they make plea decisions. In this analysis, I compared the plea recommendations of defense attorneys and student participants.

Participant Type Main Effect. There were no a priori hypotheses developed for this analysis, but results indicate that there are significant differences in how defense attorneys and students make plea recommendations. Many of these differences can be explained by the different levels of experience of attorneys and students. Overall, defense attorneys rate their success at trial as higher than students rate their friend's success at trial; defense attorneys rate their success as almost twice as high as students. This is likely explained by the difference in trial experience between attorneys and students. In Study 1, 94% of attorneys reported that they have some sort of trial experience, so they are more familiar with the workings of a trial. Thereby, making them better suited to predict when they will or will not be successful based on the evidence, their client, or any number of other factors that they consider. Students on the other hand, particularly non-law students, likely do not have that same level of practical experience.

On the other side, students were more likely to recommend that the defendant accept the plea deal than defense attorneys. If attorneys thought they would be more successful at trial, they are less likely to recommend a plea deal. They may also be less likely to recommend the plea deal because they think they can secure a better deal for their client, or they have secured better deals in the past for similar cases. Attorneys might be interpreting the case and the plea deal in a different way than students are, and it is resulting in their decreased likelihood of recommending the plea deal.

Similarly, student participants thought the plea deal would be more beneficial for the defendant than defense attorneys. Defense attorneys are likely more familiar with the direct and collateral consequences of a conviction than students are and may be more hesitant to say

that the plea deal is beneficial, especially if they feel that they can secure a better one, or that they would be successful at trial.

Lastly, student participants were more certain of the defendant's guilt than defense attorneys. This might be an expectation of the job and defense attorneys are hesitant to view their clients as guilty. It could also be that defense attorneys are better at seeing how they can argue against certain pieces of evidence and therefore do not interpret it as strong evidence, a skill that students may not possess.

Race and Participant Type Interaction. When considering the interaction of race and participant type, students made more disparate recommendations for Black and white defendants than defense attorneys. The differences in scores that students gave for Black and white defendants were larger than the differences in scores reported by defense attorneys. However, students demonstrated pro-Black responses, which is counterintuitive to what one would expect based on the research of Black individuals in the criminal justice system. Student participants thought that the white defendant was more guilty, so it was more beneficial for them to accept the plea deal, making them more likely to recommend it. Defense attorneys, on the other hand, when looking at race alone, did not give such disparate recommendations.

A potential explanation for why students gave more disparate responses than defense attorneys is the increased exposure of attorneys to Black defendants and general life experience. Black individuals are disproportionately represented in the criminal justice system, so it would be fair to assume that most of the defense attorney participants in this sample have worked with Black defendants at some point in their careers. The mere exposure effect says that liking for a stimulus increases with repeated exposure to that stimulus (Bornstein, 1989; Zajonc, 1968). Exposure to people of other races has been shown to reduce racial bias

(Zebrowitz et al., 2008). Defense attorneys who work with Black defendants often may have reduced expressions of racial bias *in comparison to* students at a primarily white university (students in this sample were from a primarily white university). Attorneys also have more life experience than university students which may influence their decision making.

4.4.1 Limitations

One of the limitations of this study is the unequal sample sizes. Study 1 had 156 defense attorney participants while Study 2 had 97 student participants. Unequal sample sizes may have skewed the results, particularly in a 3-way ANOVA.

Another limitation is that it is only speculation that defense attorney participants and student participants made different recommendations because of a difference in knowledge about the criminal justice system. This study did not include any measures assessing student knowledge of the criminal justice system or plea bargaining. While it was beyond the scope of the current study, future research should evaluate how much student participants know about the criminal justice system and the plea process to determine if that influences how participants are making recommendations.

Lastly, while defense attorneys and students were asked the same questions about how they would make recommendations for the defendant, they were made in different capacities. Defense attorney participants were asked to make recommendations in their capacity as an attorney, their occupation. Student participants were asked to make recommendations in their capacity as a friend. It is unclear if the relationship dynamic between the participant and the defendant could be impacting their recommendations. It is also unclear how the closeness of the relationship impacted their recommendations and if they would make different recommendations for an acquaintance vs. close friend or friend vs. sibling/parent. It would be

interesting to explore if defense attorneys would have made different recommendations if they were also asked to make recommendations for a friend, not in the capacity of a legal representative.

4.4.2 Conclusion

The goal of this additional analysis was to explore the differences in how defense attorneys and students make plea recommendations. Results demonstrate that defense attorneys and students do make different plea-related evaluations. Students think the defendant is more guilty than defense attorneys do. Therefore, students think the defendant would be less successful at trial and are more likely to recommend a plea deal with the belief that the plea is more beneficial for the defendant. Students display more racial bias in their recommendations, but in a counterintuitive pro-Black direction, possibly as a result of overcorrecting. The differences in plea recommendations can be partially attributed to defense attorneys' increased experience and exposure, in comparison to student participants. Defense attorneys are more knowledgeable about the criminal justice system, the workings of a trial, and have more experience that can inform their decision-making. They also have more experience working with Black defendants. Students on the other hand do not have the same level of experience and exposure, potentially explaining the differences in their interpretation of the case.

Defendants may not have a lot of time with defense attorneys, so they may be turning to their friends or family for advice when presented with a plea deal. The results of this analysis demonstrate that the type of advice that defendants receive differs depending on whom they ask. The advice of a knowledgeable expert, such as a defense attorney, is not the same as the advice of a well-intentioned peer. Therefore, defendants should be cautious when they receive and weigh potentially conflicting advice as they navigate the plea process.

Chapter 5. General Discussion and Conclusions

5.1 General Discussion and Limitations.

An overwhelming majority of cases are resolved through guilty pleas, and Black defendants are likely to be punished more harshly than white defendants. Previous research has shown that defense attorneys and the general population are susceptible to racial biases and that these biases affect their decision-making (Correll et al., 2002; Richardson & Goff, 2012). The consequences of defense attorneys and peers recommending support for or against a defendant accepting a plea deal last beyond their court dates. Black men are overly represented in the criminal justice system and with a conviction comes collateral consequences, regardless of whether the case was adjudicated through a guilty plea or trial. Collateral consequences can include eviction from public housing, loss of access to food stamps or other financial support, loss of the right to vote, and occupational roadblocks. Defendants who are economically disadvantaged and are unable to afford bail are more likely to plead guilty to get out of pre-trial detention and return home (Edkins & Dervan, 2018). This is particularly dangerous for innocent defendants who falsely plead guilty to get out of prison or because the potential trial sentence is too great (Wilford & Khairalla, 2019). Thus, it is important to know how defense attorneys and peers are making plea decisions and how those recommendations compare, because there are far-reaching consequences of a guilty plea that follow individuals through their lives.

Taken together, the studies that compose this thesis advance the field's current understanding of how plea decisions are made and the role that race plays in that process. Two studies and an additional analysis were presented: 1) Study 1 explored how the race of a defendant affects a defense attorney's plea recommendations for that defendant; 2) Study 2

explored how the race of a defendant affects a friend's plea recommendation for that defendant and how those recommendations compare to the plea decisions the friend would make for themselves; 3) the additional analysis compared the results of Study 1 and Study 2 to explore the differences in plea recommendations by experts and laypeople. Little research has directly examined how defense attorneys advise clients during the plea process and almost no literature discusses the advice that peers would give a friend who has been offered a plea deal.

First, regarding how defense attorneys make plea decisions, Study 1 found that race *alone* did not affect defense attorney plea recommendations, but race, *in conjunction* with over factors, such as evidence strength, did affect defense attorney plea recommendations. When considering evidence strength alone, defense attorneys think they would be more successful at trial with weak evidence. But, when the evidence is strong, defense attorneys think it would be more beneficial for their client to accept a plea deal, but they are not anymore willing to recommend it. When considering race alone, defense attorneys make similar recommendations for their Black and white clients. However, when combined with evidence strength, attorneys begin to make diverging recommendations. When attorneys are faced with a Black client with strong evidence, they are more likely to recommend that this client accept a plea deal, with the belief that it would be more beneficial for them. While it is understandable that a defense attorney recommends that a client with strong evidence against them accept a plea deal, it is interesting that they do not have the same concerns for their white clients. When hypothetically representing white clients, defense attorneys make similar recommendations, regardless of the strength of the evidence against them. It appears that defense attorneys are focusing on multiple facets of the information they have in a case when making a plea decision, rather than on one single aspect, such as the race of their client.

The disparity in defense attorneys' plea recommendations for Black and white clients, when also considering the strength of the evidence, does not appear to be driven by how guilty they think those clients are. When attorneys are recommending that Black clients with strong evidence accept a plea deal, it is not because they think those clients are more guilty. In fact, the results demonstrate that attorneys have comparable guilt evaluations for all four variations of clients. Therefore, it is possible that the disparity in plea recommendations is an attorney's own unconscious racial bias whereby they are unaware they are making different recommendations, or an explicit indictment of how they think the system treats people of color. In support of the second point, attorneys were asked if they think a defendant of the opposite race would be treated the same way and, regardless of which client they saw, a majority responded that no, they do not think a jury would treat an opposite race defendant the same way. Attorneys are aware of the disparate treatment of Black defendants in the criminal justice system and could be adjusting their responses so that their clients are not further disadvantaged through the system. Lastly, the disparity could be driven by both: attorneys are aware of the racial bias in the system, but are unaware of their own racial bias towards their clients, as one attorney said, "I believe that Race always will be a factor unfortunately."

Second, regarding how student participants make plea decisions, Study 2 found that race and evidence strength individually affected student participants' plea recommendations, but not in conjunction, and that students would make different recommendations for their friends than they would make for themselves. With respect to race, participants thought that their white friends were more guilty than their Black friends. From there, they were more likely to recommend that their white friend accept the plea deal because they thought it would be more beneficial for them. With respect to evidence strength, participants thought that their

friends with weak evidence against them would be more successful at trial. For their friends that had strong evidence against them, participants thought they were more guilty, and therefore, were more likely to recommend that they accept the plea deal because they thought it was more beneficial for them. However, it seems that student participants are not considering the full spectrum of the information they have when they are making plea recommendations as there were no significant interactions of race and evidence strength. Instead, students are narrowing in on certain aspects of a case, race *or* evidence strength, and letting that guide their decision-making.

Further, the results of Study 2 demonstrate that the actor-observer effect can be extended to plea decision-making scenarios. The actor-observer effect says that when an individual is the observer of a situation, they focus on the actor and ignore contextual and situational factors. When they are the actor in the situation and evaluating their behavior, they focus on their environment, not themselves (Ross, 1977). In a plea context, participants made different decisions for their friends than they did for themselves. They thought that the plea deal would be more beneficial for their friends than it would be for them, and therefore they indicated their friends should accept it more than they should accept it themselves. When participants are the observers, they are able to evaluate the situation objectively and are able to recognize the benefits of accepting a plea deal. However, when participants are actors and evaluate the situation subjectively, it is difficult for them to recognize the benefits of the plea deal and make the same decision for themselves.

Student participants display interesting patterns in their plea recommendations. When making plea decisions for others, they recognize that the strength of the evidence plays an important role and make decisions accordingly. However, their decisions concerning the race

of the client are counterintuitive to what one would expect based on the extant research that says that racial bias exists in the general population (Greenwood et al., 2020; Hoffman et al., 2016; Reid & Craig, 2021). Instead of demonstrating pro-white tendencies in their decision-making, student participants demonstrated pro-Black tendencies. This could be because participants were overcorrecting in their judgments of the Black friend and were hesitant to make decisions that would further disadvantage them. Lastly, when making plea decisions for themselves, they are less likely to recognize the same benefits of accepting the plea deal; it suddenly becomes less enticing.

Third, the results of the additional analysis demonstrate that defense attorneys and student participants make different decisions for a client/friend. Student participants see more benefit in the plea deal because they think their friend is more guilty than defense attorneys and are therefore more willing to recommend it. Defense attorneys rated the defendant as less guilty, therefore they are less likely to recommend the plea deal because they think they would be more successful at trial. Student participants and defense attorneys also displayed differing recommendations when considering the race of the client. As discussed above, defense attorneys did not make differing recommendations based on the race of the client *alone.* Students, on the other hand, had a significant gap in their recommendations for their Black and white friends, however, their responses were pro-Black. They thought their white friend was more guilty, so they should accept the plea deal. These differences potentially stem from practical experience in the legal system that informs decision-making. Defense attorneys have experience counseling defendants and can lean on past experience in an attempt to predict the best outcomes for their defendants.

Of course, these studies are not without their limitations. Two-way and three-way ANOVAs were used for a majority of the analysis instead of MANOVAs because the dependent variables measured different aspects of the decision, rather than a mean score. Because of this, each study had several analyses run with the same data set, increasing the risk of a Type 1 error. It is possible that because of the number of analyses, some of them are false positives. Second, as noted previously, it is possible that defense attorney and student participants were not reporting true behaviors and instead were overcorrecting to not appear biased. Future research should continue to explore the plea recommendations of those involved in the plea process. For example, how do defendants weigh and make decisions when faced with conflicting advice from their attorneys and their close friends and family? Further, the characteristics of this sample may have affected the results. A majority of the participants in the defense attorney sample were from a diverse, metropolitan area where the proportion of Black individuals is twice that of the national average. Both the student participant sample and the defense attorney participant sample were primarily white. It is possible that the race of the participant could have influenced the results. A cursory analysis with participant race as a factor did not yield significant results, but there is a largely uneven number of white and Black participants which prohibits a proper analysis. Further, whether the defendant was held in custody pretrial may have influenced defense attorneys and student recommendations. Defendants who are held pretrial have increased conviction rates (Petersen, 2020). Participants may have been more willing to recommend a plea deal when the defendant is sitting in jail than they would if they were not held. Lastly, the crime types chosen here may affect the generalizability of these results. At the time of study design, the plea simulation was limited to two scenarios: hit-and-run and shoplifting. These crimes are not traditionally racially

stereotyped. It is possible that defense attorneys and students would make different plea recommendations if presented with more racially stereotyped crimes, such as carjacking or financial crimes. Future research should explore how the race of the participant, or the type of crime, affects the types of plea recommendations that participants would make for a friend or client.

Despite these limitations, this work has important implications for the legal system. The results of these studies demonstrate that the race of a defendant can influence the plea recommendations of both defense attorneys and the defendant's peers. This is concerning because these are the individuals that defendants are most likely to turn to when making a plea decision. Inadequate legal defense contributed to 28% of all exonerations and 21% of no-crime exonerations accounted for by The National Registry of Exonerations in 2022 (2022 Annual Report, 2022). No-crime exonerations are convictions for crimes that never happened (e.g., a murder that was actually an accidental death). Further, 48% of those exonerated in no-crime cases had entered false guilty pleas; nearly half of these exonerated individuals plead guilty to crimes that never happened. While these numbers are disheartening, it should be encouraging that there are remedies.

The Plea Bargaining Task Force, discussed previously, has identified several ways in which plea bargaining can be problematic, many of which have been discussed above and throughout this thesis. To help address the issues related to plea bargaining, the task force has identified a number of principles to guide plea practice (American Bar Association, 2023). While these are not being enforced, they believe that sharing the principles will help guide the behavior and decision-making of legal actors. Among these principles are: "A vibrant and active docket of criminal trials and pre- and post-trial litigation is essential to promote

transparency, accountability, justice, and legitimacy in the criminal justice system;" "Guilty pleas should not result from the use of impermissibly coercive incentives or incentives that overbear the will of the defendant;" "The criminal justice system should recognize that plea bargaining induces defendants to plead guilty for various reasons, some of which have little or nothing to do with factual and legal guilt. In the current system, innocent people sometimes plead guilty to crimes they did not commit;" and "There should be robust and transparent procedures at the plea phase to ensure that the defendant's plea is knowing and voluntary, free from impermissible coercion, and that the defendant understands the consequences of their decision to plead guilty" (American Bar Association, 2023 pg. 10-11).

Another way to improve the plea-bargaining process is to increase funding for defense attorneys. Public defenders typically earn significantly less than prosecutors with the same amount of experience (*The State of Justice Reform 2017*, 2020). In 2020, state and local governments spent $129 billion on police, $86 billion on corrections, and $51 billion on courts (*Criminal Justice Expenditures: Police, Corrections, and Courts*, 2023). Each year, the funding for law enforcement increases (Department of Justice, 2021) and most of that money goes toward building new jails and hiring more police officers (Hessick, 2021). The funding that is reserved for the courts covers, among other services, prosecuting and district attorneys and public defenders. However, a majority of that money goes toward funding prosecutors' offices while public defense staffing has only increased by 4% in recent years (Hessick, 2021). For example, of the funding available from a Justice Department grant program in 2016, states allocated less than one percent of funding ($1.8 million) to public defense while prosecution and court initiatives received $17 million from the program that year (Furst, 2019). Increasing funding for public defenders could allow them to hire more public defenders to ease the burden

on those already working on cases. It would also allow public defenders more time and resources to investigate cases and hire experts.

5.2 Conclusion

Race plays a dark role not only in the history of the criminal justice system, but in its current state and Black individuals are disadvantaged at nearly every step. The racial bias of legal actors is evident in their decision-making, even if they believe they are doing right by the defendant. Despite their intentions, the consequences are the same, and more Black people become caught up in the system every year. The argument for plea deals is that it makes the criminal justice system more efficient. Unfortunately, sometimes that efficiency comes at the cost of accuracy and innocent defendants are wrongfully convicted or guilty defendants are over-punished. Part of the reason individuals plead guilty is the advice they receive from their attorneys and friends. The studies in this thesis have demonstrated that the advice that attorneys and friends give is not only conflicting, but is tinged with racial bias. The results of this work can help defense attorneys better understand how race can affect their own work in counseling their clients and how defendants may be receiving outside advice. This work has expanded the field's understanding of the role that race plays in plea recommendations and the differences that legal expertise can make in evaluating cases.

References

Abshire, J., & Bornstein, B. H. (2003). Juror sensitivity to the cross-race effect. *Law and Human Behavior*, *27*(5), 471.

Alceste, F., Luke, T. J., & Kassin, S. M. (2018). Holding yourself captive: Perceptions of custody during interviews and interrogations. *Journal of Applied Research in Memory and Cognition*, *7*(3), 387-397. https://doi.org/10.1016/j.jarmac.2018.03.001

American Bar Association (2023). *Plea bargain task force report*. Retrieved from https://www.americanbar.org/content/dam/aba/publications/criminaljustice/plea-bargain-tf-report.pdf

Andersen, S. M., Moskowitz, G. B., Blair, I. V., & Nosek, B. A. (2007). Automatic thought. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 138–175). New York, NY: Guilford Press.

Barnes, J. C., & Motz, R. T. (2018). Reducing racial inequalities in adulthood arrest by reducing inequalities in school discipline: Evidence from the school-to-prison pipeline. *Developmental Psychology*, *54*(12), 2328.

Batson v. Kentucky, 476 US 79 (1986)

Baumgartner, F. R., Epp, D. A., Shoub, K., & Love, B. (2017). Targeting young men of color for search and arrest during traffic stops: evidence from North Carolina, 2002–2013. *Politics, Groups, and Identities*, *5*(1), 107-131.

Benton, T. R., Ross, D. F., Bradshaw, E., Thomas, W. N., & Bradshaw, G. S. (2006). Eyewitness memory is still not common sense: Comparing jurors, judges and law enforcement to eyewitness experts. *Applied Cognitive Psychology: The Official Journal of the Society for Applied Research in Memory and Cognition*, *20*(1), 115-129.

Bibas, S. (2003). Harmonizing substantive-criminal-law values and criminal procedure: The case of Alford and nolo contendere pleas. *Cornell Law Review*, *88*, 1361.

Bibas, S. (2004). Plea bargaining outside the shadow of a trial. *Harvard Law Review*, *117*(8), 2463-2547. doi: 10.2307/4093404

Bibas, S. (2009). Prosecutorial regulation versus prosecutorial accountability. *University of Pennsylvania Law Review*, 959-1016.

Bibas, S. (2011). Regulating the plea-bargaining market: From caveat emptor to consumer protection. *California Law Review*, 1117-1161.

Birnbaum, A., & Haney-Caron, E. (2023). What advice do parents give their children about plea bargains? Understanding the role of parent race, attorney race, and attorney recommendations. *Journal of Ethnicity in Criminal Justice*, 1-28.

Blume, J. H., & Helm, R. K. (2014). The unexonerated: Factually innocent defendants who plead guilty. *Cornell Law Review*, *100*, 157.

Bobo, L. D., & Thompson, V. (2006). Unfair by design: The war on drugs, race, and the legitimacy of the criminal justice system. *Social Research: An International Quarterly*, *73*(2), 445-472.

Bordens, K. S., & Bassett, J. (1985). The plea bargaining process from the defendant's perspective: A field investigation. *Basic and Applied Social Psychology*, *6*(2), 93-110.

Bornstein, R. (1989). Exposure and affect: Overview and meta-analysis of research, 1968–1987. *Psychological Bulletin, 106,* 265–289.

Bowers, W. J., Steiner, B. D., & Sandys, M. (2001). Death sentencing in Black and white: An empirical analysis of the role of jurors' race and jury racial composition. *UPenn. Journal of Constitutional Law*, *3*, 171.

Brady v. Maryland, 373 U.S. 83 (1963).

Brown, J. M., & Langan, P. A. (2001). *Policing and homicide, 1976–98: Justifiable homicide of felons by police and murder of police by felons*. Washington, DC: Bureau of Justice Statistics.

Burch AM. 2011. *Arrest-related deaths, 2003–2009—statistical tables*. Bull., NCJ 235385, Bureau Justice Statistics. http://www.bjs.gov/content/pub/pdf/ard0309st.pdf

Bureau of Justice Statistics. (2013). Felony defendants in large urban counties, 2009. Retrieved from http://www.bjs.gov/content/pub/pdf/fdluc09.pdf

Burke, A. S. (2007). Prosecutorial passion, cognitive bias, and plea bargaining. *Marquette Law Review*, 91, 183–211.

Bushway, S. D., & Redlich, A. D. (2012). Is plea bargaining in the “shadow of the trial” a mirage?. *Journal of Quantitative Criminology*, *28*, 437-454.

Bushway, S. D., Redlich, A. D., & Norris, R. J. (2014). An explicit test of plea bargaining in the “shadow of the trial”. *Criminology*, *52*(4), 723-754.

Caldwell, H. M. (2011). Coercive plea bargaining: The unrecognized scourge of the justice system. *Catholic University Law Review*, *61*, 63.

Chong, D., Citrin, J., & Levy, M. (2021). The Realignment of Political Tolerance in the United States. *Perspectives on Politics*, 1-22.

Cohen, S. A., & Doob, A. N. (1989). Public attitudes to plea bargaining. *Journal of Criminal Law & Criminalogy*, *32*, 85.

Coleman, N. (2020, July 5). Why We’re Capitalizing Black. *The New York Times*. https://www.nytimes.com/2020/07/05/insider/capitalized-black.html

Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology*, *83*, 1314–1329. doi:10.1037/0022-3514.83.6.1314

Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2007). The influence of stereotypes on decisions to shoot. *European Journal of Social Psychology*, *37*, 1102–1117. doi:10.1002/ejsp.450

Criminal Justice Expenditures: Police, Corrections, and Courts. Urban Institute. (2023, February 27). https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/state-and-local-backgrounders/criminal-justice-police-corrections-courts-expenditures

Daftary-Kapur, T., & Zottoli, T. M. (2014). A first look at the plea deal experiences of juveniles tried in adult court. *International Journal of Forensic Mental Health*, *13*(4), 323-336.

Department of Justice. (2021, November*). Justice Department Announces $139 Million for Law Enforcement Hiring to Advance Community Policing [Press release]*. https://www.justice.gov/opa/pr/justice-department-announces-139-million-law-enforcement-hiring-advance-community-policing

Dezember, A., Luna, S., Woestehoff, S. A., Stoltz, M., Manley, M., Quas, J. A., & Redlich, A. D. (2022). Plea validity in circuit court: judicial colloquies in misdemeanor vs. felony charges. *Psychology, Crime & Law*, *28*(3), 268-288.

Dobbie, W., Goldin, J., & Yang, C. S. (2018). The effects of pre-trial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *American Economic Review*, *108*(2), 201-240.

Duxbury, S. W., Frizzell, L. C., & Lindsay, S. L. (2018). Mental illness, the media, and the moral politics of mass violence: The role of race in mass shootings coverage. *Journal of research in crime and delinquency*, *55*(6), 766-797.

Edkins, V. A. (2011). Defense attorney plea recommendations and client race: Does zealous representation apply equally to all?. *Law and Human Behavior*, *35*(5), 413-425.

Edkins, V. A., & Dervan, L. E. (2018). Freedom now or a future later: Pitting the lasting implications of collateral consequences against pretrial detention in decisions to plead guilty. *Psychology, Public Policy, and Law, 24*(2), 204-215. doi:https://doi.org/10.1037/law0000159

Eisenberg, T., & Johnson, S. L. (2004). Implicit racial attitudes of death penalty lawyers. *DePaul Law Review*, 53, 1539–1556.

Eith, C., & Durose, M. R. (2011). *Contacts between police and the public, 2008* (NCJ 234599). Washington, DC: Bureau of Justice Statistics. Retrieved from http://bjs. ojp.usdoj.gov/content/pub/pdf/cpp08.pdf

Equal Justice Initiative (EJI). (2010). *Illegal racial discrimination in jury selection: A continuing legacy*. https://eji.org/wp- content/uploads/2019/10/illegal-racial-discrimination-in-jury-selection.pdf

Euvrard, E., & Leclerc, C. (2017). Pre-trial detention and guilty pleas: Inducement or coercion?. *Punishment & Society*, *19*(5), 525-542.

Fachner, G., & Carter, S. (2015). An assessment of deadly force in the Philadelphia Police Department (collaborative reform initiative). Washington, DC: Office of Community Oriented Policing Services, U.S. Department of Justice.

Farrell, A., McDevitt, J., Bailey, L., Andresen, C., & Pierce, E. (2004). *Massachusetts Racial and Gender Profiling Study*. Boston: Northeastern University Institute on Race and Justice. Retrieved November 1, 2020, from http://www.boston.com/globe/metro/packages/tickets/profiling_finalreport.pdf

Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.

Flanagan, F. X. (2018). Race, gender, and juries: Evidence from North Carolina. *The Journal of Law and Economics*, *61*(2), 189-214.

Fountain, E. N., & Woolard, J. L. (2017). The capacity for effective relationships among attorneys, juvenile clients, and parents. *Ohio State Journal of Criminal Law*, *14*(2), 493–519.

Fridell, L. (2017). Explaining the disparity in results across studies: Assessing disparity in police use of force: A research note. *American Journal of Criminal Justice*, 42, 502–513.

Furst, B. (2019). A Fair Fight. *Brennan Center for Justice, September*, *9*.

Gau, J. M., Mosher, C., & Pratt, T. C. (2010). An inquiry into the impact of suspect race on police use of tasers. *Police Quarterly*, *13*, 27–48. doi:10.1177/1098611109357332

Gilbar, R. (2012). Asset or burden? Informed consent and the role of the family: law and practice. *Legal studies*, *32*(4), 525-550.

Glaser, J., Spencer, K., & Charbonneau, A. (2014). Racial bias and public policy. *Policy Insights from the Behavioral and Brain Sciences*, *1*(1), 88-94.

Goff, P. A., Lloyd, T., Geller, A., Raphael, S., & Glaser, J. (2016). *The science of justice: Race, arrests, and police use of force*. Los Angeles, CA: Center for Policing Equity.

Golding, J. M., Lynch, K. R., Malik, S. E., & Foster-Gimbel, O. (2018). Justice served? Perceptions of plea bargaining involving a sexual assault in child and adult females. *Criminal justice and behavior*, *45*(4), 503-518.

Gonnerman, J. (2014, September 29). Three Years on Rikers Without Trial. *The New Yorker*. https://www.newyorker.com/magazine/2014/10/06/before-the-law

Graham, S., & Lowery, B. S. (2004). Priming unconscious racial stereotypes about adolescent offenders. *Law and human behavior*, *28*(5), 483-504.

Gramlich, J. (2019, April 30). *The gap between the number of Blacks and whites in prison is shrinking.* Pew Research Center. https://www.pewresearch.org/fact-tank/2019/04/30/shrinking-gap-between-number-of-blackBlacks-and-whitewhites-in-prison/

Greenwald, A. G., Oakes, M. A., & Hoffman, H. G. (2003). Targets of discrimination: Effects of race on responses to weapons holders. *Journal of Experimental Social Psychology*, *39*, 399–405. doi:10.1016/S0022-1031(03)00020-9

Greenwood, B. N., Hardeman, R. R., Huang, L., & Sojourner, A. (2020). Physician–patient racial concordance and disparities in birthing mortality for newborns. *Proceedings of the National Academy of Sciences*, *117*(35), 21194-21200.

Gross, S. R., Possley, M., Otterbourg, K., Stephens, K., Paredes, J., & O'Brien, B. (2022). *Race and Wrongful Convictions in the United States 2022. https://www.law.umich.edu/special/exoneration/Documents/Race%20Report%20Preview.pdf*

Hagan, J., Shedd, C., & Payne, M. R. (2005). Race, ethnicity, and youth perceptions of criminal injustice. *American sociological review*, *70*(3), 381-407.

Hamovitch, L., Zannella, L., Rempel, E., & Burke, T. M. (2022). Laypersons' misconceptions as a barrier to understanding plea bargaining's innocence problem. *Psychology, Crime & Law*, 1-22.

Harris, A., Ash, E., & Fagan, J. (2020). Fiscal Pressures and Discriminatory Policing: Evidence from Traffic Stops in Missouri. *Journal of Race, Ethnicity, and Politics,* 5(3), 450-480. doi:10.1017/rep.2020.10

Harrison, P. M., & Beck, A. J. (2006). Prisoners and jail inmates at midyear in 2005 (Bureau of Justice Statistics, NCJ 213133). Retrieved from U.S. Department of Justice, Office of Justice Programs website: http://bjs.ojp.usdoj.gov.

Heaton, P., Mayson, S., & Stevenson, M. (2017). The downstream consequences of misdemeanor pretrial detention. *Stanford Law Review*, *69*, 711.

Helm, R. K., Reyna, V. F., Franz, A. A., & Novick, R. Z. (2018). Too young to plead? Risk, rationality, and plea bargaining's innocence problem in adolescents. *Psychology, Public Policy, and Law*, *24*(2), 180.

Henderson, K. (2019). Defense attorneys and plea bargains. *V., Edkins, A. Redlich,(Eds.), A system of pleas: Social science's contributions to the real legal system*, 37-55.

Herzog, S. (2003). The relationship between public perceptions of crime seriousness and support for plea-bargaining practices in Israel: a factorial survey approach. *Journal of Criminal Law & Criminology*, *94*, 103.

Hessick III, F. A., & Saujani, R. M. (2001). Plea bargaining and convicting the innocent: The role of the prosecutor, the defense counsel, and the judge. *BYU Journal of Public Law*, *16*, 189.

Hessick, C. B. (2021). *Punishment without trial: Why plea bargaining is a bad deal.* Abrams

Hodson, G., Hooper, H., Dovidio, J. F., & Gaertner, S. L. (2005). Aversive racism in Britain: Legal decisions and the use of inadmissible evidence. *European Journal of Social Psychology*, *35*(4), 437-448.

Hoffman, K. M., Trawalter, S., Axt, J. R., & Oliver, M. N. (2016). Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proceedings of the National Academy of Sciences*, *113*(16), 4296-4301.

Hollander-Blumoff, R. (2007). Social psychology, information processing, and plea bargaining. *Marquette Law Review*, 91, 163–182.

Human Rights Watch. (2000). Punishment and prejudice: Racial disparities in the war on drugs. *Human Rights Watch Report: United States, 12(2),* G1202.

Hunt, J. S. (2015a). Race in the justice system. In B. L. Cutler, & P. A. Zapf (Eds.), *APA handbook of forensic psychology, Vol. 2: Criminal investigation, adjudication, and sentencing outcomes; APA handbook of forensic psychology, Vol. 2: Criminal investigation, adjudication, and sentencing outcomes.* (pp. 125-161, 545 Pages). American Psychological Association, American Psychological Association. https://doi.org/10.1037/14462-005https://doi.org/10.1037/14462-005

Hunt, J. S. (2015b). Race, ethnicity, and culture in jury decision making. *Annual Review of Law and Social Science*, *11*, 269-288.

Innocence Project. (2023). *Exonerate the innocent*. https://innocenceproject.org/exonerate/

Jackson, J., McKay, T., Cheliotis, L., Bradford, B., Fine, A., & Trinkner, R. (2023). Centering race in procedural justice theory: Structural racism and the under- and overpolicing of

Black communities. *Law and Human Behavior, 47*(1), 68 - 82. https://doi.org/10.1037/lhb0000524

Johnson, B. D., & Richardson, R. (2019). Race and plea bargaining. *A system of pleas: social sciences contributions to the real legal system*, 83-106.

Johnson, S. L., Blume, J. H., Eisenberg, T., & Hans, V. P. (2011). The Delaware death penalty: An empirical study. *Iowa Law Review*, *97*, 1925.

Johnson, T. (2019). Public perceptions of plea bargaining. *American Journal of Criminal Law*, *46*, 133.

Kang, J. et al. (2011). Implicit bias in the courtroom. *UCLA Law Review*, *59*, 1124.

Kaplan, J., Cutler, B. L., Leach, A. M., Marion, S., & Eastwood, J. (2020). Perceptions of coercion in interrogation: comparing expert and lay opinions. *Psychology, Crime & Law*, *26*(4), 384-401.

Kassin, S. M., Goldstein, C. C., & Savitsky, K. (2003). Behavioral confirmation in the interrogation room: On the dangers of presuming guilt. *Law and human behavior*, *27*(2), 187-203.

Kellough, G., & Wortley, S. (2002). Remand for plea. Bail decisions and plea bargaining as commensurate decisions. *British Journal of Criminology*, *42*(1), 186-210.

Khogali, M., Jones, K., & Penrod, S. (2018). Fairness for all? Public perceptions of plea bargaining. *Applied Psychology in Criminal Justice*, *14*(2), 136-153.

Kovera, M. B. (2019). Racial disparities in the criminal justice system: Prevalence, causes, and a search for solutions. *Journal of Social Issues*, *75*(4), 1139-1164.

Kramer, G. M., Wolbransky, M., & Heilbrun, K. (2007). Plea bargaining recommendations by criminal defense attorneys: Evidence strength, potential sentence, and defendant preference. *Behavioral Sciences & the law*, *25*(4), 573-585.

Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: a literature review. *Quality & quantity*, *47*(4), 2025-2047.

Kutateladze, B. L., Andiloro, N. R., Johnson, B. D., & Spohn, C. C. (2014). Cumulative disadvantage: Examining racial and ethnic disparity in prosecution and sentencing. *Criminology*, *52*(3), 514-551.

Landes, W. M. (1971). An economic analysis of the courts. *The Journal of Law and Economics*, *14*(1), 61-107.

Levinson, J. D., & Young, D. (2009). Different shades of bias: Skin tone, implicit racial bias, and judgments of ambiguous evidence. *West Virginia Law Review*, *112*, 307.

Lynch M, Haney C. 2009. Capital jury deliberation: effects on death sentencing, comprehension, and discrimination. *Law Human and Behavior.* 33:481–96. doi: 10.1007/s10979-008-9168-2

Lyon, A. D. (2011). Race bias and the importance of consciousness for criminal defense attorneys. *Seattle University Law Review*, *35*, 755.

Marques, J. M., & Paez, D. (1994). The ‘black sheep effect’: Social categorization, rejection of ingroup deviates, and perception of group variability. *European review of social psychology*, *5*(1), 37-68.

Mauer, M. (2010). The impact of mandatory minimum penalties in federal sentencing. *Judicature*, *94*, 6.

McAllister, H. A. (1990). Effects of Eyewitness Evidence on Plea-Bargain Decisions by Prosecutors and Defense Attorneys 1. *Journal of Applied Social Psychology*, *20*(18), 1461-1473.

Mitchell, O. (2005). A meta-analysis of race and sentencing research: Explaining the inconsistencies. *Journal of Quantitative Criminology*, 21, 439–466. doi:10.1007/s10940-005-7362-7.

Mitchell, T. L., Haw, R. M., Pfeifer, J. E., & Meissner, C. A. (2005). Racial bias in mock juror decision-making: a meta-analytic review of defendant treatment. *Law and Human Behavior*, *29*(6), 621.

National Registry of Exonerations. (2022). *Exoneration by Race/Ethnicity and Crime* [Interactive Map]. https://www.law.umich.edu/special/exoneration/Pages/ExonerationsRaceByCrime.aspx

Nederhof, A. J. (1985). Methods of coping with social desirability bias: A review. *European journal of social psychology*, *15*(3), 263-280.

Nellis, A. (2021, October 13). *The color of justice: Racial and ethnic disparity in state prisons.* The Sentencing Project. https://www.sentencingproject.org/publications/color-of-justice-racial-and-ethnic-disparity- in-state-prisons

Nix, J., Campbell, B. A., Byers, E. H., & Alpert, G. P. (2017). A bird's eye view of civilians killed by police in 2015: Further evidence of implicit bias. *Criminology & Public Policy*, *16*(1), 309-340.

Paternoster, R., & Brame, R. (2008). Reassessing race disparities in Maryland capital cases. *Criminology*, *46*(4), 971-1008.

Peter-Hagene, L. (2019). Jurors' cognitive depletion and performance during jury deliberation as a function of jury diversity and defendant race. *Law and Human Behavior, 43*(3), 232–249. https://doi.org/10.1037/lhb0000332

Petersen, N. (2020). Do detainees plead guilty faster? A survival analysis of pretrial detention and the timing of guilty pleas. *Criminal Justice Policy Review*, *31*(7), 1015-1035.

Petty, R. E., & Wegener, D. T. (1993). Flexible correction processes in social judgment: Correcting for context-induced contrast. *Journal of Experimental Social Psychology*, *29*(2), 137-165.

Pfeifer, J. E., & Bernstein, D. J. (2003). Expressions of modern racism in judgments of others: The role of task and target specificity on attributions of guilt. *Social Behavior and Personality: an international journal*, *31*(8), 749-765.

Plant, E. A., & Peruche, B. M. (2005). The consequences of race for police officers' responses to criminal suspects. *Psychological Science*, *16*, 180–183. doi:10.1111/j.0956-7976.2005.00800.x

Prowse, G., Weaver, V. M., & Meares, T. L. (2020). The state from below: Distorted responsiveness in policed communities. *Urban Affairs Review*, *56*(5), 1423-1471.

Rakoff, J. (2014, November). Why innocent people plead guilty. *The New York Review of Books*. https://www.nybooks.com/articles/archives/2014/nov/20/why-innocent-people-plead-guilty/

Redlich, A. D. (2016). The validity of pleading guilty. *Advances in Psychology and Law: Volume 2*, 1-26.

Redlich, A. D., & Bonventre, C. L. (2015). Content and comprehensibility of juvenile and adult tender-of-plea forms: Implications for knowing, intelligent, and voluntary guilty pleas. *Law and Human Behavior*, *39*(2), 162.

Redlich, A. D., & Summers, A. (2012). Voluntary, knowing, and intelligent pleas: Understanding the plea inquiry. *Psychology, Public Policy, and Law*, *18*(4), 626.

Redlich, A. D., Bushway, S. D., & Norris, R. J. (2016). Plea decision-making by attorneys and judges. *Journal of Experimental Criminology*, *12*(4), 537-561.

Redlich, A. D., Summers, A., & Hoover, S. (2010). Self-reported false confessions and false guilty pleas among offenders with mental illness. *Law and Human Behavior*, *34*, 79-90.

Redlich, A. D., Wilford, M. M., & Bushway, S. (2017). Understanding guilty pleas through the lens of social science. *Psychology, Public Policy, and Law*, *23*(4), 458.

Reid, J. C., & Craig, M. O. (2021). Is it a rally or a riot? Racialized media framing of 2020 protests in the United States. *Journal of Ethnicity in criminal Justice*, *19*(3-4), 291-310.

Reifman, A., Gusick, S. M., & Ellsworth, P. C. (1992). Real jurors' understanding of the law in real cases. *Law and Human Behavior*, *16*(5), 539-554.

Richardson, L. S., & Goff, P. A. (2012). Implicit racial bias in public defender triage. *Yale Law Journal*, *122*, 2626.

Richmond, T. (2019, August 18). *Former homicide convict seeks $5.7 million in compensation.* Milwaukee Journal Sentinel. https://www.jsonline.com/story/news/2019/08/18/former-milwaukee-homicide-convict-seeks-5-7-million-state/2047182001/

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In *Advances in experimental social psychology* (Vol. 10, pp. 173-220). Academic Press.

Sadler, M. S., Correll, J., Park, B., & Judd, C. M. (2012). The world is not Black and White: Racial bias in the decision to shoot in a multiethnic context. *Journal of Social Issues*, *68*, 286–313. doi:10.1111/ j.1540-4560.2012.01749.x

Sanborn Jr, J. B. (1992). Pleading guilty in juvenile court: Minimal ado about something very important to young defendants. *Justice Quarterly*, *9*(1), 127-150.

Schlesinger, T. (2007). The cumulative effects of racial disparities in criminal processing. *JIJIS*, *7*, 261.

Schlesinger, T. (2015). Attenuating Disparities through For Areas of Change. *Criminology & Public Policy*, *14*, 233.

Scott, R. E., & Stuntz, W. J. (1992). Plea bargaining as contract. *Yale Law Review, 101*, 1909-1968.

Skorinko, J. L., & Spellman, B. A. (2013). Stereotypic crimes: How group-crime associations affect memory and (sometimes) verdicts and sentencing. *Victims & Offenders*, *8*(3), 278-307.

Smalarz, L., Eerdmans, R. E., Lawrence, M. L., Kulak, K., & Salerno, J. M. (2023). Counterintuitive race effects in legal and nonlegal contexts. *Law and Human Behavior, 47*(1), 119–136. https://doi.org/10.1037/lhb0000515

Smith, M. R., & Alpert, G. P. (2007). Explaining police bias: A theory of social conditioning and illusory correlation. *Criminal justice and behavior*, *34*(10), 1262-1283.

Smith, R. J., & Levinson, J. D. (2011). The impact of implicit racial bias on the exercise of prosecutorial discretion. *Seattle University Law Review*, *35*, 795.

Sommers, S. R., & Ellsworth, P. C. (2000). Race in the courtroom: Perceptions of guilt and dispositional attributions. *Personality and Social Psychology Bulletin*, *26*(11), 1367-1379.

Sommers, S. R., & Ellsworth, P. C. (2001). White juror bias: An investigation of prejudice against Black defendants in the American courtroom. *Psychology, Public Policy, and Law*, *7*(1), 201.

Sutton, J. R. (2013a). Structural bias in the sentencing of felony defendants. *Social Science Research*, *42*(5), 1207-1221.

Sutton, J. R. (2013b). Symbol and Substance: Effects of C alifornia's Three Strikes Law on Felony Sentencing. *Law & Society Review*, *47*(1), 37-72.

Swencionis, J. K., & Goff, P. A. (2017). The psychological science of racial bias and policing. *Psychology, Public Policy, and Law*, *23*(4), 398.

The Sentencing Project. (2023). *U.S. Criminal Justice Data.* https://www.sentencingproject.org/research/us-criminal-justice-data/

The State of Justice Reform 2017. Vera Institute of Justice. (2020). https://www.vera.org/state-of-justice-reform/2017

Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *Science*, *185*(4157), 1124-1131.

U.S. Census Bureau. (2019, July). QuickFacts: United States [Interactive table]. https://www.census.gov/quickfacts/fact/table/US/PST045219

Ulmer, J., Painter-Davis, N., & Tinik, L. (2016). Disproportional imprisonment of Black and Hispanic males: Sentencing discretion, processing outcomes, and policy structures. *Justice Quarterly*, *33*(4), 642-681.

Unah, I. (2009). Choosing those who will die: The effect of race, gender, and law in prosecutorial decision to seek the death penalty in Durham County, North Carolina. *Michigan Journal of Race & Law*, *15*, 135.

United States Sentencing Commission. (2017). *Demographic Differences in Sentencing*. https://www.ussc.gov/research/research-reports/demographic-differences-sentencing

Viljoen, J. L., Klaver, J., & Roesch, R. (2005). Legal decisions of preadolescent and adolescent defendants: Predictors of confessions, pleas, communication with attorneys, and appeals. *Law and Human Behavior*, *29*, 253-277.

Weaver, K. D. (2001). A Change of Heart or a Change of Law-Withdrawing a Guilty Plea under Federal Rule of Criminal Procedure 32 (e). *Journal of Criminal Law & Criminology*, *92*, 273.

Webster, J. M., Golding, J. M., Malik, S. E., & Riederer, A. M. (2020). Perceptions of plea bargains for driving under the influence (DUI) cases involving alcohol and marijuana. *Psychology, Crime & Law*, *26*(10), 950-966.

Wegener, D. T., & Petty, R. E. (1995). Flexible correction processes in social judgment: the role of naive theories in corrections for perceived bias. *Journal of personality and social psychology*, *68*(1), 36.

Wilford, M. M., & Khairalla, A. (2019). Innocence and plea bargaining. *A system of pleas: Social sciences contributions to the real legal system*, 132-150.

Wilford, M. M., & Wells, G. L. (2018). Bluffed by the dealer: Distinguishing false pleas from false confessions. *Psychology, Public Policy, and Law*, *24*(2), 158.

Wilford, M. M., Frazier, A., Sutherland, K. T., Gonzales, J. E., & Rabinovich, M. (under revision). *Visualizing a plea: Participants find simulated legal scenarios more immersive and engaging than matched vignettes*

Wilford, M. M., Wells, G. L., & Frazier, A. (2021). Plea-bargaining law: The impact of innocence, trial penalty, and conviction probability on plea outcomes. *American Journal of Criminal Justice*, *46*, 554-575.

Wilson, M. J. W. (2016). Defense attorney bias and the rush to the plea. *University of Kansas Law Review*, *65*, 271.

Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology Monographs, 9,* 1–27. http://dx.doi .org/10.1037/h0025848

Zane, S. N., Welsh, B. C., & Drakulich, K. M. (2016). Assessing the impact of race on the juvenile waiver decision: A systematic review and meta-analysis. *Journal of Criminal Justice*, *46*, 106-117.

Zebrowitz, L. A., White, B., & Wieneke, K. (2008). Mere exposure and racial prejudice: Exposure to other-race faces increases liking for strangers of that race. *Social cognition*, *26*(3), 259-275.

Zottoli, T. M., & Daftary-Kapur, T. (2019). Guilty pleas of youths and adults: Differences in legal knowledge and decision making. *Law and human behavior*, *43*(2), 166.

Zottoli, T. M., Daftary-Kapur, T., Winters, G. M., & Hogan, C. (2016). Plea discounts, time pressures, and false-guilty pleas in youth and adults who pleaded guilty to felonies in

New York City. *Psychology, Public Policy, And Law*, *22*(3), 250-259. doi:10.1037/law0000095

2022 Annual Report. The National Registry of Exonerations. (2023, May 8). https://www.law.umich.edu/special/exoneration/Documents/NRE%20Annual%20Report%202022.pdf

Appendices

Appendix A: Pre-Simulation Measures Study 1

[Instructions] Please answer the following demographic questions*

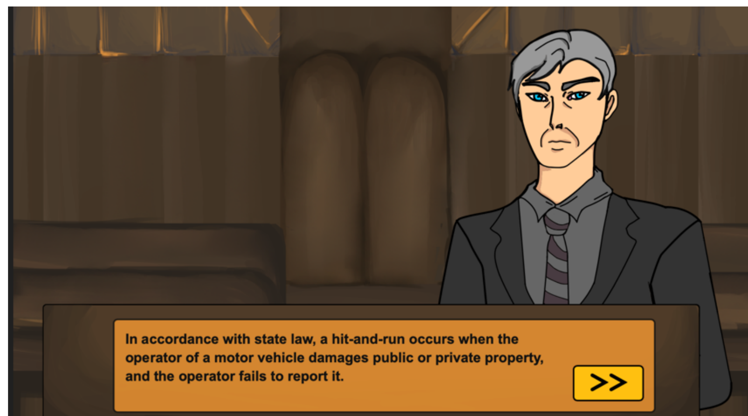
1. What is your age? (Answer box)
2. What is your gender? (Multiple choice)
    a. Male
    b. Female
    c. Non-Binary
    d. Prefer not to answer
3. Which of the following best describes your racial/ethnic background?
    a. American Indian/Alaskan Native
    b. Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)
    c. Black (e.g., African, Haitian, Jamaican, Somali)
    d. Chinese
    e. Filipino
    f. Japanese
    g. Korean
    h. Latin American
    i. South Asian (e.g., Sri Lankan, Pakistani, Indian, Bengali)
    j. South East Asian (e.g., Vietnamese, Indonesian)
    k. White (Caucasian)
    l. Other ____________
4. Are you of Hispanic, Latinx, or Spanish origin?
    a. Yes
    b. No
    c. Prefer not to answer

5. Are you a currently practicing attorney or a retired attorney? (Multiple choice)
    a. Currently practicing
    b. Retired
    c. Other _________
    d. Prefer not to answer
6. Please list all the states in which you currently practice. (Answer box)
7. How long have you been a practicing attorney, in years? (Answer box)
8. How long have you been a defense attorney, in years? (Answer box)
9. Have you ever taken a case to trial? (Yes/No)
10. If yes, approximately how many cases have you taken to trial?
    a. 1-10 cases
    b. 11-20 cases
    c. 21-30 cases
    d. 31-40 cases
    e. 41-50 cases
    f. 51+ cases
11. Are you currently a public defender or a private defense attorney? (Multiple choice)
    a. Public defender
    b. Private defense attorney
    c. Other ___
    d. Prefer not to answer

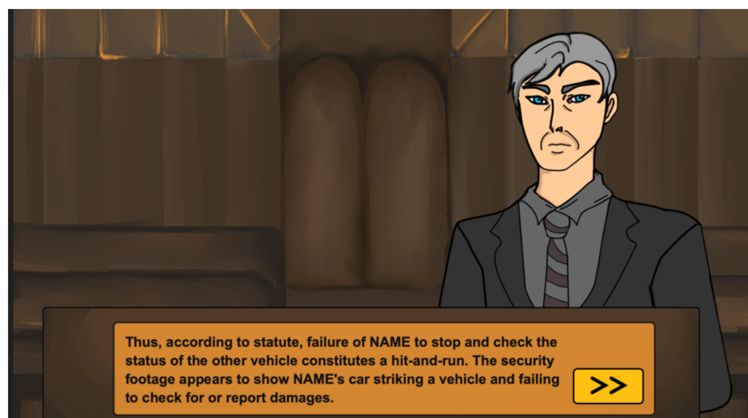
Appendix B: Simulation Screenshots

Hit-and-run scenario (White defendant)

Defendant backing out of parking spot



Prosecutor explaining the charges

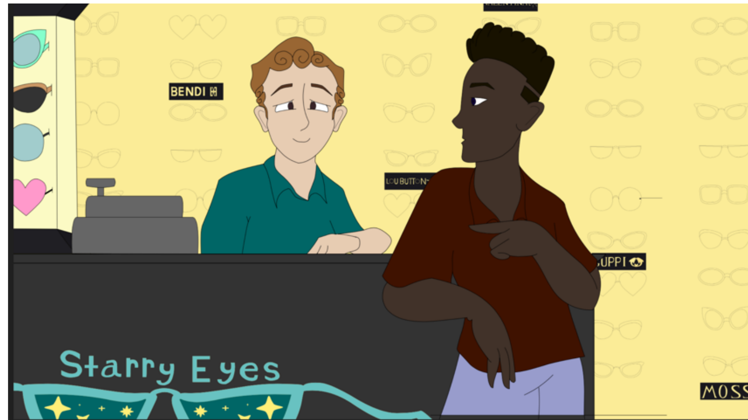


Prosecutor providing evidence

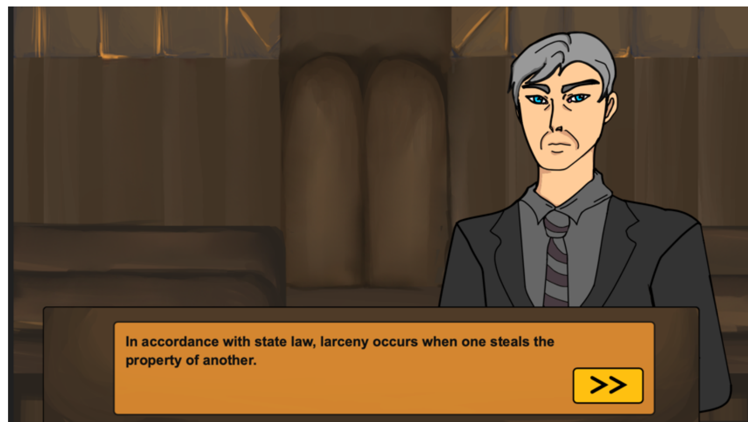
Defendant after being remanded to jail

Meeting with defense attorney

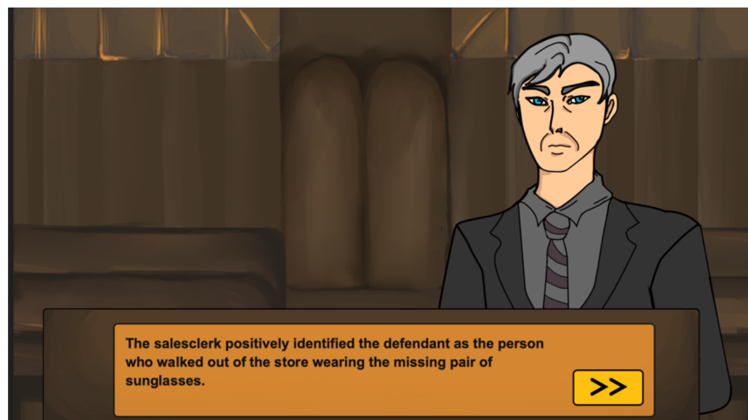
Larceny scenario (Black defendant)



Defendant at the sunglasses store



Prosecutor explaining the charges



Prosecutor providing evidence

Defendant after being remanded to jail

Meeting with defense attorney

Appendix C: Post-Simulation Measures Study 1

Plea Decisions and Recommendations Questionnaire

[Instructions] Please answer the following questions based on the scenario you just completed

1. If you were to take this case to trial, what do you think is the likelihood that you would be successful? (0-100% scale)
2. How beneficial do you think it would be for your client to accept this plea deal? (Note the plea deal: plead guilty for 12 months in jail and a $2,000 fine or risk jail sentence of 24 months and a $3,000 fine at trial) (5-point Likert scale from "Very beneficial" to "Very unbeneficial")
3. Do you think that accepting this plea deal would be in your client's best interest? Yes/No
    a) If no, what sentencing or charging concessions would need to be offered for it to be in your clients best interest?
4. If your client asked for recommendation, how likely are you to recommend that your client take this plea deal? (5-point Likert scale from "Very likely" to "Very unlikely")
5. How certain are you that your client is guilty? (5-point Likert scale from "Absolutely not guilty" to Absolutely guilty")
6. Is this case similar to the type of cases you usually deal with. (5-point Likert scale from "Very Similar" to "Not at all Similar")
7. How much would the personal characteristics (e.g. physical, psychological, socioeconomic, background of any kind etc.) of a defendant in a similar situation influence your plea recommendation? (5-point Likert scale from "A great deal" to "Not at all")
8. Do you think there are any personal characteristics (e.g. physical, psychological, socioeconomic, background of any kind etc.) of a defendant in a similar situation that would influence your colleagues' (other legal actors) recommendation for a plea deal? (No/Yes)
9. If this were a Caucasian/Black defendant, do you think a jury would treat them the same way? (Yes/No) Why or why not?
10. If this were a female defendant, do you think a jury would treat them the same way? (Yes/No) Why or why not?
11. If this were a juvenile defendant, do you think a jury would treat them the same way? (Yes/No) Why or why not?
12. How would you rate the evidence against your client? (5-point Likert scale from "Very weak" to "Very strong"
13. What was the race of the client in this case?
    a) Black
    b) Asian
    c) White (Caucasian)
    d) Hispanic
    e) Arab
    f) I do not remember
    g) I was not paying attention

[Instructions] Please answer the following questions based your experience as an attorney

1) How important is each of the following in deciding whether to recommend your client take a plea deal (5-point Likert scale from “Completely unimportant” to “Completely important”):

    - Likelihood of conviction based on the evidence
    - Severity of the sentence in plea compared to sentence if convicted
    - Impression that your client may not present well to a jury
    - Defendant’s previous convictions for a similar offense to the current
    - Defendant’s prior record
    - Defendant’s willingness to go to trial
    - Presence of a confession
    - Presence of an eyewitness
    - Whether the defendant was granted bail
    - Seriousness of the crime
    - The crime involved a gun
    - Defendant’s age
    - Personal relationship with the prosecutor
    - Personal relationship with the judge
    - You think that the defendant is guilty
    - Current caseload

2) How do you typically communicate your plea/trial success recommendation to your clients? (Multiple choice)
    a) A numeric evaluation (0-100%),
    b) A verbal evaluation (e.g. great chance, poor chance),
    c) A combination
    d) Other (open-ended)

3) What proportion of your trials ended with acquittals (as opposed to guilty verdicts or charges being dismissed)?
    a) 0-25%
    b) 26-50%
    c) 51-75%
    d) 75-100%
    e) I have never taken a case to trial
    f) I have never taken a case to trial and gotten an acquittal

4) What percentage of your cases end with a guilty plea or a plea deal? (0-100% scale)

Appendix D: Pre-Simulation Measures Study 2

[Instructions] Please answer the following demographic questions

1. What is your age? (Answer box)
2. What is your gender? (Multiple choice)
    a. Male
    b. Female
    c. Non-Binary
    d. Prefer not to answer
3. Which of the following best describes your racial/ethnic background?
    a. American Indian/Alaskan Native
    b. Arab/West Asian (e.g., Armenian, Egyptian, Iranian, Lebanese, Moroccan)
    c. Black (e.g., African, Haitian, Jamaican, Somali)
    d. Chinese
    e. Filipino
    f. Japanese
    g. Korean
    h. Latin American
    i. South Asian (e.g., Sri Lankan, Pakistani, Indian, Bengali)
    j. South East Asian (e.g., Vietnamese, Indonesian)
    k. White (Caucasian)
    l. Other ____________
4. Are you of Hispanic, Latinx, or Spanish origin?
    a. Yes
    b. No
    c. Prefer not to answer

Appendix E: Post-Simulation Measures Study 2

Plea Decisions and Recommendations Questionnaire

[Instructions] Please answer the following questions based on the scenario you just completed

1. If your friend were to take this case to trial, what do you think is the likelihood that he would be successful? (0-100% scale)
2. How beneficial do you think it would be for your friend to accept this plea deal? (Note the plea deal: plead guilty for 12 months in jail and a $2,000 fine; or, risk a jail sentence of 24 months and a $3,000 fine) (5-point Likert scale from "Very unbeneficial" to "Very beneficial")
3. Do you think that accepting this plea deal would be in your friend's best interest? Yes/No
    a) If no, what sentencing or charging concessions would need to be offered for it to be in your friend's best interest?
4. If your friend asked for a recommendation from you, how likely are you to recommend that your friend take this plea deal? (5-point Likert scale from "Very unlikely" to "Very likely")
5. How certain are you that your friend is guilty? (5-point Likert scale from "Absolutely not guilty" to Absolutely guilty")
6. In order to show that you are paying attention, please select the number "3" (multiple choice #1-4)
7. How much would the personal characteristics (e.g. physical, psychological, socioeconomic, background of any kind, etc.) of a friend in a similar situation influence your plea recommendation? (5-point Likert scale from "A great deal" to "Not at all")
8. Do you think there are any personal characteristics (e.g. physical, psychological, socioeconomic, background of any kind etc.) of a friend in a similar situation that would influence their defense attorney's recommendation for a plea deal?
9. If this were a Caucasian/Black defendant, do you think a jury would treat them the same way? (Yes/No) Why or why not?
10. If this were a female defendant, do you think a jury would treat them the same way? (Yes/No) Why or why not?
11. If this were a juvenile defendant, do you think a jury would treat them the same way? (Yes/No) Why or why not?
12. How would you rate the evidence against your friend? (5-point Likert scale from "Very weak" to "Very strong")
13. What was the race/ethnicity of your friend in this case?
    a) Black
    b) Asian
    c) White (Caucasian)
    d) Hispanic
    e) Arab
    f) I do not remember
    g) I was not paying attention

14. In order to show that you are paying attention, please select the number "2" (multiple choice #1-4)
15. Imagine it was you in this situation, how likely would you be to accept the plea offer? (5-point Likert scale from "Very unlikely" to "Very likely")
16. Imagine it was you in this situation, would you accept the plea offer? (Yes/No)
17. How beneficial do you think it would be for you to accept this plea deal? (5-point Likert scale from "Very unbeneficial" to "Very beneficial")
18. Do you think that accepting this plea deal would be in your best interest? Yes/No
    a) If no, what sentencing or charging concessions would need to be offered for it to be in your best interest?

[Instructions] Please answer the following questions about plea deals more generally (i.e., these questions are not specific to the simulated scenario you were presented).

19. How important do you think each of the following should be when a defense attorney is advising their client about taking a plea deal (5-point Likert scale from "Completely unimportant" to "Completely important"):

    - The likelihood of conviction at trial based on the evidence
    - The severity of the sentence offered for the plea compared to the sentence if convicted at trial
    - The impression that your client may not present well to a jury
    - Defendant's previous convictions for similar offenses
    - Defendant's prior record
    - Defendant's willingness to go to trial
    - Presence of a confession
    - Presence of an eyewitness
    - Whether the defendant was granted bail
    - Seriousness of the crime
    - Whether the crime involved a gun
    - Defendant's age
    - Personal relationship with the prosecutor
    - Personal relationship with the judge
    - The attorney believes that the defendant is guilty
    - Current caseload

20. How do you think defense attorneys should communicate their likelihood of success at trial to their clients? (Multiple choice)
    e) A numeric evaluation (0-100%),
    f) A verbal evaluation (e.g. great chance, poor chance),
    g) A combination
    h) Other (open-ended)

Post-Simulation Demographics Questionnaire

[Instructions] Please answer the following questions about you and your personal experiences.

1. Have you previously participated in any studies which used this simulation software?
    a) Yes
    b) No
    c) Not sure

2. Have you ever been convicted of a criminal offense?
    a) No
    b) Yes

Question 3 will only be displayed if the answer to the question, "Have you ever been convicted of a criminal offense?" is "Yes."

3. Which, if any, of the following were the consequences of this event?
    a) I was arrested
    b) I pled guilty to the crime
    c) I was convicted of this crime at trial
    d) I spent time in jail or prison because of this crime
    e) Other [open-ended]
    f) There were no consequences of this event