How the Implicit Bias, Representative Heuristic, and Anchoring Effect Embed Institutionalized Racism into the American Judicial System

Whitney Robertson Stroh *

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Abstract

This paper analyzes research on the conviction process, indicating that judges use their intuition inappropriately through the decision-making process. Even if a judge wants equality and equity in their courtroom, they still are susceptible to biases. Therefore, judges are vulnerable to unconsciously implicating stereotypes and attitudes into decision-making through their inherent reliance on intuition, leading to systematic false judgments or implicit bias. Consequently, representative and anchoring heuristics are enabled, further facilitating discrimination in the judicial system. This paper concludes with several solutions that can help deter unconscious racial bias throughout the judicial system.

1 Introduction

Despite the Equal Protection Clause of the 14th Amendment in the United States Constitution, which explicitly prohibits government-administered racial discrimination, the country's incarceration makeup significantly differentiates on the basis of race. Specifically, although African Americans comprise only 12.4 percent of the U.S. population, they constitute 33 percent of the prison population [Gra19]. This statistic presents the following question: Is racial discrimination in the United States Judicial System, and if so, how prevalent is this discrimination in sentence rulings? Some academics may attribute the disproportionate number of Black people in prison to the fact that they are more likely to be disadvantaged, live in poorer urban areas, and lack access to public services compared to White people. More significant statistical evidence concerning exoneration rates tells a different story though.

According to a 2017 study [Gro17] conducted by the National Registry of Exonerations, Black people are seven times more likely to be wrongly convicted of murder, 3.5 times more likely to be wrongly convicted of sexual assault,

*Westminster School CT, Advised by: Eduardo Gallo, Cambridge University

and 12 times more likely to be wrongly convicted of a drug crime than White people. In a study on Connecticut bail-setting rates, legal scholars Ian Ayres and Joel Waldfogel discovered that judges set bail for Black defendants at a 25 percent higher rate than for similarly situated White defendants [AW94]. In a judicial decision-making analysis through the Sentencing Reform Act of 1984, economist David Mustard found that judges sentenced Black defendants at a 12 percent longer length than those of comparable White defendants [Mus01]. Researchers Samuel Gross, Maurice Possley and Klara Stephens analyzed years of exoneration data, discovering that Black people constitute 47 percent of 1900 listed in the National Registry of Exonerations (as of October 2016) [Gro17]. This data reveals that Black people are disproportionately victimized by police framing and false conviction in proportion to their population, making up the vast plurality of innocent defendants who have been framed and convicted of various crimes, later exonerated.

Ultimately, Americans share a common cultural and historical heritage where racism still plays a dominant societal role. Hence, our shared environment has endowed us with negative ideas associated with non-whites. "To the extent that this cultural belief system has influenced all of us, we are all racists" [Law87]. Moreover, judges are systematically too reliant on cognitive processes that give way to bias in their decisions [G$^+$01].

2 Implicit Bias

2.1 Schemas

People process an enormous amount of information daily. Beyond the typical stream of emails, phone calls, and paperwork that any individual may receive, people also unconsciously notice the temperature and brightness of a room, hunger, and many other sensory inputs. If someone had to accurately and fully process all data collected from external stimuli, most would agree that this would be, at the very least, highly daunting and maybe even impossible [B$^+$03]; [Car08].

Fortunately, humans can face the influx of stimuli on an everyday basis because the human brain is relatively sophisticated. Thus, based on cumulative life experiences, humans acquire schemas that assist them in processing information automatically. This automatic processing preserves cognitive resources [B$^+$03]; [Car08]. For example, once humans master the art of walking, they do not require much time or energy to do it again since they have developed a schema of how to bend their knees and place their feet one after the other without difficulty.

Another example of the schemas people develop is reading. When people observe a group of letters on a page, most will be capable of automatically processing the combination of letters and its meaning. For example, the letters B-L-U-E acknowledge a color. However, if the letters B-L-U-E are spelled in red, processing the word may require more energy and less accuracy under

constrained time because our internalized schemas contradict each other. This contradiction is an example of automaticity interference based on the Stroop Task. Hence, while automatic processing can be helpful, it can also lead to diminished and inaccurate performance [B$^+$03]; [Car08].

2.2 Stereotypes and Attitudes

As we process information, we categorize it and draw connections between new and old information. Similarly, we associate characteristics and emotions with various social groups [B$^+$03]; [Car08]. The characteristics are stereotypes, and the emotions are attitudes. Examples of stereotypes include "Asians are good at math" and "Teenagers enjoy spending time on the internet." An attitude could be a passion for a sport or a dislike for an actor.

Conventional wisdom regards stereotypes and attitudes as explicit biases–the positive or negative conscience preferences towards a social group– because stereotypes and attitudes are supposedly consciously accessible through introspection and viewed as appropriate according to the individual who possesses them. This conventional wisdom has shaped much of U.S. anti-discrimination law.

2.3 Implicit Social Cognition (ISC)

Nonetheless, recent findings prevalent in implicit social cognition (ISC) [L$^+$07] have undermined this conventional line of thinking. Stereotypes and attitudes can also function implicitly because they are not always consciously accessible through introspection. Moreover, because individuals may not be aware that their decisions demonstrate preconceived stereotypes and attitudes, their awareness of processing a stereotype or attitude does not impact their decision-making and behaviors [L$^+$07].

2.4 Automatic Interference

As stereotypes and attitudes continue to be reinforced over time through repeated interactions or new streams of information, the idea of automatic interference triggers implicit biases. Implicit biases are unconscious attitudes towards an individual or group based on personal experiences or stereotypes. As for the judiciary system, when a particular judge is accustomed to seeing young Black men from the same geographical area heavily involved in drug crime, for example, and this judge has been subsequently presented a case where they determine if a young Black man from that same area is guilty of a drug crime, their implicit bias associated with this defendant's racial and demographic background may sway their decision.

3 Demonstrating Implicit Bias

3.1 System 1 and System 2 Decision-Making

The human judgment process needs more general analysis to understand how unconscious bias influences the judgment of well-meaning, "race-blind" judges. A great body of research indicates that people have two distinct kinds of decision-making: intuitive and deliberative [Kah11]. Intuitive decision-making means relying on one's initial instinct, which is emotional. This initial instinct relies on close associations and rapid superficial cognitive processing. Through intuition, if a choice seemingly sounds right and feels right, then it is the right choice. Psychologists refer to this specific kind of decision-making as System 1 reasoning. System 1 creates effortless, confident judgments that function independently outside our conscious awareness. When we choose according to our "gut feeling," we decide quickly and confidently that this decision is correct [Kah11].

However, the concept of decision-making through intuition or deliberation is imperfect because the two can coexist [WR17]. Deliberation sometimes relies on first impressions, so System 1 can overlap with System 2 [WR17]. In addition, cognitive processes begin by requiring System 2 reasoning but can evolve into System 1 [WR17]. For example, basic arithmetic requires effort for children unfamiliar with advanced mathematics [WR17]. Nonetheless, most adults familiar with a higher level of mathematics can process $3 + 6$ with no effort because this problem is very familiar to the average adult, and its repetitiveness has made it intuitive [WR17]. Overall, the distinction between quick, intuitive responses and slow, deliberative reasoning reveals the basis of how human mental processing can be used to understand racial bias.

Hypothetically, professionals–such as judges–learn that they should ignore their intuition and think deliberately, isolating contradicting arguments to reach the logic that best fits a set of legal rules and precedents [WR17]. Thus, judges should assess cases using System 2 processing.

However, studies of judges indicate that they are not System 2 thinkers by nature [G$^+$07]. In one study, Florida trial judges answered three questions that comprise the Cognitive Reflection Test, or CRT [Fre05]. One of the questions was as follows: A bat and a ball cost 1.10 dollars in total. The bat costs 1.00 dollar more than the ball. How much does the ball cost?

The combination of 1.10 dollars and 1.00 dollar enables the intuitive response of 10 cents by subtracting the 1.00 dollar from the 1.10 dollars. However, the answer is 5 cents because if the ball costs 10 cents, then the bat costs 1.10 dollars; together, they would cost 1.20 dollars, which is not the correct total. While the arithmetic in this problem is not complicated, most well-educated adults, including the Florida trial judges, answer it wrong. The judges surveyed answered an average of only 1.23 (out of three) questions correctly [G$^+$01]. In a different study, a group of administrative law judges performed slightly better but only answered 1.33 questions correctly. Today, thousands of judges have taken the CRT and have produced similar results. This data demonstrates that

judges decide using their intuition, even though they are supposed to solely use logical reasoning, and the intuition spurs a blind spot on the CRT questions [G+01].

3.2 The Implicit Association Test (IAT)

Judicial insight can be case-specific, and judges sometimes avoid common errors that intuition creates. More frequently, though, judges rely on misleading intuitive reactions, even when doing so leads to fallacious judgments [G+01]. In a University study, Cornell recruited 133 judges from three separate jurisdictions to determine whether American judges hold implicit racial biases and, if so, whether such biases reflect biased judicial decisions [R+09]. By implicating the Implicit Association Test (IAT), judges revealed their unconscious attitudes, automatic preferences, and hidden biases through time spent classifying concepts into two distinct categories. Judges were not asked to disclose their names but identified with their race, gender, exact title, political affiliation, and years of bench-appointed experience. Table 1 outlines the judges' demographics.

TABLE 1: DEMOGRAPHIC INFORMATION OF THE JUDGES (PERCENTAGE WITHIN GROUP AND NUMBER)

Demographic Parameter		Eastern Jurisdiction (70)	Western Jurisdiction (45)	Optional Conference (18)	Overall (133)
Race	White	52.9 (37)	80.0 (36)	66.7 (12)	63.9 (85)
	Black	42.9 (30)	4.4 (2)	5.6 (1)	24.8 (33)
	Latino	4.3 (3)	11.1 (5)	16.7 (3)	8.3 (11)
	Asian	0.0 (0)	4.4 (2)	11.1 (2)	3.0 (4)
Gender	Male	55.7 (39)	66.7 (30)	50.0 (9)	58.7 (78)
	Female	44.3 (31)	33.3 (15)	50.0 (9)	41.4 (55)
Political Affiliation	Democrat	86.6 (58)	64.4 (29)	64.7 (11)	76.0 (98)
	Republican	13.4 (9)	35.6 (16)	35.3 (7)	24.0 (31)
Average Years of Experience		9.8	10.8	9.3	10.1

The judges selected stereotype-congruent pairings and subsequently selected stereotype-incongruent pairings. A strong White preference was discovered among the White judges, with 87.1 percent showing such preference, as shown in Table 2.

Thus, the White judges performed the stereotype-congruent trial 216 milliseconds faster than the stereotype-incongruent trial. By contrast, the Black judges did not demonstrate a vivid preference. Despite 44.2 percent of Black judges indicating a White preference, their participation in the stereotype-congruent trial was only 26 milliseconds faster than the stereotype-incongruent trial. Ultimately, the comparison of White and Black judges' IAT scores revealed that the White judges showed a significantly greater White preference and therefore are more vulnerable to racial bias [R+09].

TABLE 2: RESULTS OF RACE IAT BY RACE OF JUDGE

Race of Judge (sample size)	*Mean IAT Score in milliseconds (and standard deviation)**		*Percent of Judges with lower average latencies on the white/good versus black/bad round*
	Judges	*Internet Sample*	
White (85)	216 (201)	158 (224)	87.1
Black (43)	26 (208)	39 (244)	44.2

*Note: Positive numbers indicate lower latencies on the white/good versus black/bad round

Social psychologists from hundreds of laboratories have implicated the IAT to collect data on reaction-time measures that indicate implicit biases. The difference in time between intervals is referred to as the implicit association effect and is statistically calculated into standardized units known as the IAT D score [Gre03]. According to these measures, implicit bias is pervading [L$^+$07], significant in magnitude in relation to standardized measures of explicit bias [KL10], and independent of explicit biases (suggesting that they are separate mental constructs) [GN08]. It predicts reality-present behavior [KL10]. Policymakers are keen on countering these behavioral effects–by attempting to change implicit biases and by implementing policies to weaken their impact. Policymakers can reference scientific evidence available in various genres of literature. In psychology journals, John Jost and colleagues responded to criticism [MT06] that the IAT "was missing realistic consequences" by providing a qualitative summary of their literature "Ten Studies that no Manager Should Ignore" [J$^+$09]. Additionally, Anthony Greenwald conducted a meta-analysis of IAT findings, discovering that implicit attitudes measured through this method yield unique types of behavior, including that anti-Black or intergroup discrimination, substantiates beyond explicit bias [G$^+$09].

Explicit biases are attitudes and stereotypes that are consciously available through introspection and endorsed as fitting. If there is no social norm prejudicing these biases within a given context, a person will freely reveal their biases to others [K$^+$12]. If such a norm is present, explicit biases can be concealed. On the contrary, implicit biases are attitudes and stereotypes that are not consciously available through introspection [K$^+$12]. If individuals realize they possess an implicit bias, they can reject it as unfitting [K$^+$12].

3.3 Afrocentricity

As previously mentioned, African Americans are disproportionately treated worse than Whites who committed similar crimes. One way to research this difference is to conduct experimental studies that keep all variables, except race, constant. An experiment that exemplifies this method is when psychologists Irene Blair, Charles Judd, and Kristine Chapleau pulled photographs from a Florida criminal database [B$^+$04] to determine whether race, facial features or

both impacted the sentencing lengths of the selected criminals. Initially, when the researchers measured the seriousness of the primary and additional offenses, the defendant's race had no statistical significance [B$^+$04]. Nonetheless, when the researchers implemented Afrocentricity of facial features–features that are socially perceived to look African such as full lips, a broad nose, darker skin color, and curly hair–into their regression analysis, this variable correlated with sentencing lengths. The more Afrocentric features the defendant had, regardless of race, the harsher their punishment [E$^+$06]. Judges motivated to avoid racial discrimination may be alert to the dangers of treating similarly circumstanced African Americans worse than Whites. By contrast, when judges observe Afrocentric features, stereotypes of criminality can be unconsciously triggered, influencing a judge's chosen sentence length. Without being consciously aware of Afrocentricity, the judges could not consciously control their potential bias [B$^+$04]. This explanation, if correct, provides evidence that stereotypes and attitudes are partially driven by implicit biases and not just by explicit-but-concealed biases [B$^+$04].

3.4 Magnitude of the Implicit Bias

Given this physiological research, it is reasonable to believe that implicit biases influence the degree to which defendants of contrasting races are treated in a courtroom. However, knowing precisely the magnitude of implicit biases throughout the American judicial system is difficult. An estimate, reflective of an entire body of research, emerges from the Greenwald meta-analysis, finding that the IAT can predict 5.6 percent of the variation in behavior across Black-White behavioral spheres [G$^+$09].

To determine whether this percentage of implicit bias prevalence is great or small, policymakers should consider the collective impact of such biases through the integration of time (for an individual case) and overall defendants [R$^+$09]; [KB06]. For a single defendant, implicit biases may surface in different parts of their conviction process, and even repeatedly, in policing, charging, bail, plea bargaining, pretrial motions, evidentiary motions, witness credibility, lawyer persuasiveness, guilt determination, sentencing recommendations, sentencing itself, appeal, et cetera [KB06]. Thus, a small bias at each stage in the conviction process may accumulate into a substantial overall effect.

To reach a more concrete determination of the implicit bias' magnitude, Anthony Greenwald produced a simulation that reveals collective racial disparities through five chronological stages of the conviction process–arrest, arraignment, plea bargain, trial, and sentencing [K$^+$12]. This simulation deems that when someone commits a crime, the probability of their arrest is 0.50 and the probability of conviction at trial is 0.75. The effect size of implicit bias is r=0.1 at each stage [K$^+$12]. Hence, this simulation argues that for a crime with a mean sentence of 5 years and with a standard deviation of 2 years, Black criminals can anticipate a sentence of 2.44 years while White criminals can expect 1.40 years. To understand the complete social impact, this disparity must be applied a second time over all defendants who are vulnerable to racial bias, out of

an estimated 20.7 million state criminal cases [L+07] and 70 thousand federal criminal cases [R+09].

4 Representive Heuristic

4.1 Memory Errors

Lawmakers do not expect jurors to retain every trial fact perfectly in the legal setting, especially in more complex trials. Nonetheless, scholars assume that cognitive limitations are not associated with racial bias. Social cognition research on implicit bias reveals that when racial construct activity interferes with the performance of simple cognitive tasks [BG95], jurors in cases with racially diverse information may unconsciously misremember trial information through systematically biased ways [Sch01]. One scholar Daniel Schacter says that memory errors group into two categories: forgotten information and distorted recollection, or in his words, the "sin of omission" and the "sin of commission" [Sch01]. Both errors can potentially influence how the juries recall and misremember case information. While few memory errors have been investigated within a jury decision-making context, research on the human memory process exists outside the legal setting [Bar03]. These studies have discovered that people are generally unaware of how their memories work and that the act of misremembering can reflect a greater meaning [M+02].

According to Neil C. Macrae and his colleagues, individuals are "unwittingly duped into believing that the contents of consciousness comprise an accurate record of the experienced past, when they do not. Instead, these items are false memories, illusory experiences of events, actions, and utterances that never occurred" [M+02]. Memory researchers have documented various accounts of these false memories. Some have found that people unknowingly rewrite the past to satisfy their egos and support inner theories or beliefs [M+02]. Other researchers have discovered false memories in a greater range of situations [RM95]; [RM99]. An analysis of these standard errors conveys that they are frequent because the human mind relies on stereotypes when encoding and recalling information. Through the representative heuristic, we estimate the likelihood of an event based on stereotypes. Therefore, when people try to remember information, they rely on familiarity and societal expectations to help account for forgotten memories and how likely those memories are.

4.2 Congruent and Incongruent Steryotypes

However, as the representative heuristic makes stereotypes predisposed in the human mind, people recall stereotype-congruent information faster and more efficiently than stereotype-incongruent information [Pag05]. Subsequently, stereotypes trigger memory distortion. In cases of false memories, people are more likely to misremember when they have internalized stereotypes toward the memory's subject [SS13]; [M+02].

Especially in cognitively busy environments, studies have shown that people tend to rely on the representative heuristic [M+02]. In the legal context, the judges and jurors need to absorb a plethora of information. As for the environmental factor, age, multiple jury instructions, detailed factual presentations, complex legal standards, and contradicting testimony [PS06] all can contribute to cognitive depletion. Hence, stereotype-congruent memory errors can easily manifest in a courtroom.

4.3 Source Attribution Errors

There are many false memories, and some are more likely than others to emerge in legal decision-making. The source attribution error may explain how systematic memory bias may contribute to legal decision-making. Source attribution errors occur when someone transfers the source of one memory into another context, generating a false source of another memory. For an eyewitness or crime victim, they may unknowingly do this by associating a memory's subject with another context. For example [Sch01], after the 1995 Oklahoma City bombing, law enforcement understood that one of the subjects was "John Doe 1", or Timothy McVeigh, who eventually was charged with the crime. However, the officers conducted a failed search for a "John Doe 2" who was believed to have accompanied McVeigh and an eyewitness described the suspect as "a young square-faced man with dark hair and a stocky build wearing a blue and White cap" [Sch01]. The eyewitness had misattributed his memory of John Doe 2 to a different memory episode, and he did not exist in the crime's context [Sch01]. Suppose source attribution error affects trial jurors. In that case, it can make jurors incorrectly recall case information by assigning evidentiary facts to the wrong party as the jurors attempt to align case information with the party stereotypes.

4.4 The "Story Model"

Researchers have found that memories play a vital role in decision-making [PH90]. Nancy Pennington and Reid Hastie have created a framework for jury information processing and decision-making that reveals how jurors process information. This "Story Model" has three steps. In the first step, jurors construct a story using the case facts [PH90]. Second, jurors try to memorize and understand the judicial instructions referencing verdict categories [PH90]. Finally, the jurors try to align their "story" with the judicial instructions [Has99]. Thus, story formation plays a vital role in decision-making. As jurors incorporate the stories into the judicial instructions and vote on decisions, memory errors have already influenced these stories [Has99].

4.5 Legal Precedent

This idea of court cases being contaminated with racial biases yields greater social implications beyond a singular case. Through the concept of legal prece-

dent, prior cases that involve similar issues or information serve as an authority for deciding new cases. While a series of cases often establish precedent, singular cases can still serve as precedents. For example, a single statutory interpretation–the process in which courts interpret and apply legislation–by a state's highest court is generally considered an original part of the statute.

Thus, when judges rely on misleading court cases that have bolstered legal precedent and applied such legal precedent to other judgments, the representative heuristic takes place as legal precedent can serve as a reference for future decision-making. Therefore, the representative heuristic broadens the impact of implicit biases, incrementing the force of institutionalized racism in the U.S. judicial system.

5 Anchoring Effect

5.1 Sentence Demands

In the U.S. sentencing environment, a sentence demanded by an attorney or prosecutor can greatly influence a judge's sentencing decision. Evidence supports this [CB96]; [EK81]; [MA97]. In particular, analyses of court files and sentence hearings [EK81]; [MA97] reveal that the final sentence is likely close to the one the prosecutor originally demanded [MA97]. These findings suggest that a proposed sentence can serve as an anchor, or numerical reference point, to the final sentence. While this evidence alludes to the possibility, it does not demonstrate a direct influence of the demanded sentence. To control for the influence of the demanded sentence, a judge must be given identical cases that only vary concerning the demanded sentence [EM91].

Birte Englich and Thomas Mussweiler implemented this strategy in multiple studies to determine whether judges' sentencing decisions are directly influenced by a proposed sentence [EM91]. Their results indicate that the evaluation process of an initial sentencing demand significantly affects the judge's final sentence ruling. However, this influence acts independently to the perceived relevance of the initial sentence demand, as a person lacking legal expertise can still recommend a sentence that yet influences the final verdict [EM91]. Thus, the influence does not correlate with a judge's experience in the field. Ultimately, Englich's and Mussweiler's findings on the impact of judgemental anchoring add to a large body of evidence demonstrating that similar crimes' sentences can significantly differ in length.

5.2 How Race and Ethnicity Correlate with Sentence Proposals

In 2019, the state of Utah conducted a study that analyzed how race and ethnicity correlate with its Pre-sentence Investigation (PSI) report sentencing recommendation. After examining almost 10,000 PSI reports, Utah found a significant

positive relationship between ethnicity and severity in recommended sentence length for offenders of Hispanic origin [NN19].

5.3 Mandatory Minimum Sentences

This is unsurprising as implicit biases and representative heuristics yield racial profiling, and prosecutors unconsciously hold these biases. When biased prosecutorial discretion demands a sentence, which serves as an anchor for the judge's final decision, that final sentence has been infiltrated with racially biased decision-making. According to a University of Michigan Law School report [Sta14], prosecutors file initial charge decisions carrying mandatory minimum sentences 65 percent more often against Black defendants than against other similarly situated defendants. Hence, this forces the judge to decide the sentencing length with at least the prosecutor's enforced sentence minimum. Every state files mandatory minimums [S$^+$06]; [Ton11]and have posed a major contributing factor to the increasing incarceration rates since the 1970s [CA09] [Blu11].

6 Possible Solutions

6.1 Creating Privacy for the Defendant's Identity

As racial bias concerning non-whites stems from knowing a particular individual's race, the judicial system should reconstruct by concealing the defendant's identity from the judges and jurors to prevent stereotyping. One way to implement this could be by changing how the court perceives the defendant. Rather than the court calling the defendant by name, which could reveal their race if it sounds Afrocentric, the court would refer to the defendant as "subject A," the other contributors to the case would be known as "subject B," and so forth. On the same note, the location where the crime hypothetically took place would also remain anonymous, as one town may have a stereotype of having more crime or a dense presence of people of color. In terms of witnessing the case testimonies, the defendant(s) would be behind a screen, hidden from the judges and jurors, and give their testimonies through a microphone.

This idea of blindness in a courtroom is similar to the "blind audition" in the NBC reality television series, "The Voice." In the series, through the sole judgment of listening to the contestants' voices, four celebrity coaches select an amateur singer to compete against one another for a record contract. This audition process has begun to pave the way for gender equality in the music industry, as systemic bias has previously hindered female success in the music industry. Hence, if the government redesigned the judicial system to make the court "blind" to potential stereotypes associated with the defendant(s) of any case, this new conviction process would pave the way for racial equality within the legal system.

6.2 Formal and Self-Checking Procedures

In addition, the U.S. judicial system can implement formal protocols or self-checking procedures to assist judges in identifying and overriding implicit biases. An example of self-checking techniques could be reading instructions to the courtroom that make the decision makers undergo a perspective-taking exercise such as cloaking [GM00]. A cloaking exercise makes someone check for bias by imagining themselves in the perspective of a different, non-stigmatized group, thus providing a second evaluation of the stigmatized group. Through these protocols, decision-makers need sufficient time and cognitive resources to implement these procedures rather than forcing the court to rely on intuitive reasoning processes that yield biased judgments. Therefore, the judiciary needs to increase in population and budget as courts should not feel under time constraints through the decision-making process.

Through the anchoring effect, a demanded sentence proposed to a judge serves as an anchor corresponding with the judge's final sentencing decision, regardless of whether it is relevant to the case. These demands are longer for non-whites because the prosecutor, attorney, or probation officer who suggests them are likely susceptible to implicit biases and representative heuristics favoring racial discrimination in their decision-making. Thus, restructuring the judicial system to eliminate a third party's demanded sentence can also help prevent racial disparities in the judicial system.

7 Conclusion

Case complexity influences the degree of uncertainty in the sentencing process. This uncertainty leads judges to unconsciously resort to simplifying heuristics which can distort the case's outcome [K$^+$82]. For example, a judge can involuntarily base their decisions on racist stereotypes or racial patterns they have witnessed in their career, thus demonstrating implicit bias. In addition, the representative heuristic, which occurs by basing probabilities on stereotypes, makes stereotype-congruent information more easily accessible than stereotype-incongruent information. Therefore, the representative heuristic can trigger memory distortion among judges and juries and shapes misconstrued legal precedents. In addition, demanded sentence lengths serve as anchors for judges, even if the sentences are irrelevant to the case. This anchoring effect increases the severity of people of color's sentencing lengths because prosecutors are subject to implicit biases and the representative heuristic. Moreover, by analyzing and exemplifying how the U.S. judicial system is a breeding ground for the implicit bias, representative heuristic, and anchoring effect, institutionalized racism is reinforced in American society through the legal setting. To advance in racial equality, the conviction process needs structural change.

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