Intersection of race and socio-economic status on criminal judgments: high status reduces blame for Black juveniles but increases blame for White juveniles

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Introduction: Both Black juveniles and low-socioeconomic status (SES) juveniles are disproportionately represented in the U.S. legal system. Yet minimal experimental work has teased apart how a juvenile's race and SES interact when affecting judgments about guilt, blame, and punishment.

Methods: Two vignette experiments ($N = 1074$) varied a juvenile defendant's race (Black or White) and SES (low or high) in two types of crimes (stereotypically Black or stereotypically White).

Results: Race and SES interacted: across crime type, high-SES White juveniles were assigned more guilt and blame whereas high-SES Black juveniles were assigned less guilt and blame than their low-SES counterparts. Low-SES Black juveniles were also judged relatively harshly when their guilt was certain or when excluding participants who guessed the study was about race or SES. Moreover, stereotype-related judgments such as likelihood of recidivism and character mediated these effects.

Discussion: These surprising results highlight the need to investigate the intersection between race and SES. Potential explanations including aversive racism, social ecology, and changing stereotypes are considered.

KEYWORDS

race, socio-economic status, jury decision-making, legal judgments, stereotypes, juvenile justice

Introduction

Racial minorities and people from disadvantaged socio-economic backgrounds are consistently overrepresented in the U.S. criminal justice system (Carson and Kluckow, 2023; Western, 2019). These disparities extend to juveniles (Engen et al., 2002; Kempf-Leonard, 2007; Puzzanchera et al., 2022; Rodriguez, 2011; Thornberry, 1973). Compared to White and higher-SES juveniles, mock jurors and other decision-makers judge Black juveniles and lower-SES juveniles in a criminal context to be more blameworthy and more deserving of punishment for the same crimes based on the same evidence (Farnum and Stevenson, 2013; Sommers and Marotta, 2014; Stevenson and Bottoms, 2009).

Most research, however, treats race and SES separately, despite the two being confounded. Black people in the United States are substantially more likely than their White counterparts to be low-SES (Creamer, 2020), and race and SES interact when influencing stereotypes, categorization,

and discrimination (Dupree et al., 2021; Mattan et al., 2019; Moore-Berg and Karpinski, 2019). This intersection potentially convolutes how race and SES affect legal outcomes. For example, meta-analyses of real-world court data have found inconsistent effects for race, leading some to suggest that confounds including SES may produce racial disparity in some contexts but not others (Sampson and Lauritsen, 1997; Zane and Pupo, 2021; Tapia, 2010). The following studies thus experimentally manipulated race and SES to examine their unique and interactive effects on juvenile criminal judgments.

Black people and people of low SES are linked with pervasive negative stereotypes, including criminality

People spontaneously categorize others based on obvious features such as race and SES, and such categories are automatically associated with traits and stereotypes (Devine, 1989; Sekaquaptewa and Espinoza, 2004). Unfortunately, the associations with Black people and low-SES people are often negative. Compared to White people, for instance, media outlets have historically disproportionately portrayed Black people as criminals (Dixon and Linz, 2000), and news outlets may disproportionately reveal negative information about Black suspects such as prior arrests (Dixon and Linz, 2002). Similarly, low-SES people are often portrayed as immoral, lazy, and prone to criminal behavior (Bullock et al., 2001; Rose and Baumgartner, 2013). In turn, people consistently stereotype Black people and poor people as being lazy, incompetent, and animal- or trash-like (Durante et al., 2017; Loughnan et al., 2014; Woods et al., 2005).

In criminal contexts, people appear to automatically attach these negative stereotypes, which in turn leads to more negative evaluations and punitive judgments. Compared to their White and higher-SES juvenile counterparts, people believe Black juveniles and low-SES juveniles are: more likely to have previously offended (Engen et al., 2002), more likely to offend again in the future (i.e., to recidivate; Bridges and Steen, 1998; Graham and Lowery, 2004), more likely to have negative character traits (e.g., hostility), more adult-like (Graham and Lowery, 2004; Sagar and Schofield, 1980; Goff et al., 2014), and more knowledgeable about crime and the criminal system (Devine and Baker, 1991).

Black juveniles and low-SES juveniles are more likely to enter the criminal justice system

Black people and low SES people also experience more negative real-world consequences, even as youth. In 2019, compared to White youths, Black youths were 2.4 times more likely to be arrested and 4.4 times more likely to be taken into custody (Office of Juvenile Justice Delinquency Prevention, 2022). As juveniles move through the justice system, Black youths are less likely to be diverted, more likely to be transferred to adult criminal court, and more likely to receive harsher sentences for the same types of

crime (Abrams et al., 2021; Bryson and Peck, 2020; Lehmann, 2018; Puzzanchera et al., 2022). Poor youths suffer a comparable fate. Low-SES juveniles are more likely to be arrested, tried, convicted, and given harsher sentences than their higher SES counterparts (Farnum and Stevenson, 2013; Ludwig et al., 2001).

It is likely that true rates of criminality account for some of these disparities (Rekker et al., 2015; Gunuboh, 2023). But criminality rates do not account for all. For example, although Black youths and White youths use marijuana at similar rates, in 2018 Black youths were 3.6 times more likely to be arrested for marijuana possession (American Civil Liberties Union, 2020). And experimental work finds that people judge Black defendants and poor defendants to be more guilty and assign them harsher sentences, at least for stereotype-consistent crimes, even when provided the same evidence (Mazzella and Feingold, 1994; Jones and Kaplan, 2003).

Race and SES are confounded

Of course race and SES intersect. Compared to White people, Black people have 40% lower median household incomes and are more than twice as likely to live in poverty (U. S. Census Bureau, 2021). Black people are also less likely to complete high school and college (U. S. Census Bureau, 2022). Moreover, media disproportionately portray poor people as also being Black (Clawson and Trice, 2000; van Doorn, 2015), and decision-makers may non-consciously assume that White people are middle class whereas Black people are lower class (see, e.g., Bertrand and Mullainathan, 2004; Williams et al., 2016). Indeed, prior researchers have argued that minority overrepresentation in the courts may be at least partly a result of the association between being Black and poor [Rodriguez, 2011; Weeks and Lupfer, 2004 (discussing the Race X Social Class Interactive Model)].

Social ecology research suggests that SES may even be the primary driver of race effects on stereotypes and judgments. According to a Life History-based framework, home ecology—that is, one's environment, especially its level of stability and harshness—is a primary dimension that people use to stereotype others (Neuberg and Sng, 2013). Specifically, people assume that one's ecology affects their life choices, such that people from desperate, unpredictable ecologies are more likely to adopt more short-sighted behavioral strategies, including criminality. And Black race may serve as a heuristic for harsh ecology.

But simply providing cues about a person's ecology can largely override any effect of race. Work by Williams et al. (2016) finds that in the absence of information about social ecology, Black people are evaluated as more likely to get angry quickly, more physically aggressive, and more likely to engage in criminal behavior than White counterparts. But when provided information about the Black person's ecology, these race differences disappear. And Black people who are described as being from stable backgrounds are judged as likely as White people to engage in life strategies like long-term planning and investing in education. Conversely, White people are judged to be as likely as Black people to commit "stereotypically Black" crimes when they are described as being from desperate ecologies (Williams, 2023).

Aversive racism, race, and SES

Another way that SES may impact the relationship between race and criminal judgments is by providing people a non-racial reason to judge Black people more harshly. Specifically, the theory of Aversive Racism proposes that (at least within the United States) there is a strong norm against racism, and thus some people are motivated to override any judgments or behavior that could appear racist. Participants may especially want to appear unprejudiced and therefore correct any racial biases in studies evaluating Black people in legal contexts (Smalarz et al., 2023).

One way to achieve this goal is to rely on non-racial justifications for what are actually race-based evaluations (Gaertner and Dovidio, 2005; Sommers and Ellsworth, 2000). Specifically, such individuals may use low-SES as an "excuse" to justify negative evaluations of Black defendants, though they would not use low-SES to evaluate White defendants. This is consistent with findings that people are generally aware of the need to override racial stereotypes and even able to effectively do so in some circumstances, but when race is compounded with other stereotype-consistent information people may be less capable of overcoming their biases. For example, inmate records reveal that Black criminals may receive harsher sentences when they also possess more Afrocentric features like a broad nose and dark skin (Blair et al., 2004), and experimental work finds that describing Black defendants as lower SES increases guilty verdicts (de Lima et al., 2019).

Stereotypes may be changing

Adding yet more complexity, people's associations with race and SES may be slowly changing with time. First, negative associations with Black people may be decreasing. Between 2007 and 2016, Implicit Attitude Tests (IATs) showed that preference for White (vs. Black) people decreased, even among older participants and political conservatives (Charlesworth and Banaji, 2019). Moreover, current events like economic changes (Bianchi et al., 2018) or celebrity statements (Ravary et al., 2019) can quickly, if temporarily, alter relevant IAT scores.

Relatedly, media may be increasingly showing positive—or at least more varied–representations of Black people. For decades, TV often portrayed Black characters as one of two extremes: the good-for-nothing criminal or the respectable, assimilated successful character like Dr. Cosby. But a recent increase in cable channels and online streaming networks has opened the door to a richer variety of shows about Black people, including Black people of varied socio-economic status (Leonard and Robbins, 2021). At the same time, mainstream news outlets may be ignoring crime involving Black people; in contrast to older findings, an analysis of 146 news programs between 2008 and 2012 found that Black people were *under-represented* as both crime perpetrators and victims (Dixon and Williams, 2015). The 2010's—thanks in part to the growing ubiquity of camera phones (Alston, 2024)—also saw an increase in news coverage and visceral videos showing egregious law enforcement violence against Black people, many of whom were innocent of any crime and posed no threat, including the killings of Michael Brown, Eric Garner, George Floyd, Walter Scott, and Tamir Rice.

Last, it is possible that negative stereotypes are beginning to develop about historically counter-stereotypical defendants: high-SES White people. High-SES people have historically been stereotyped as competent but cold (Durante et al., 2017). When asked to generate stereotypes about a "rich person," survey work Ragusa (2015) found that about 18% fell into the "materialistic" cluster which included descriptions like conspicuous consumption and luxury items, and about 16% of stereotypes fell into the cluster of "greedy" traits like entitled, out-of-touch, and selfish.

Recent media may be strengthening these negative stereotypes. For example, the last 15 years have seen numerous news stories about wealthy White men and boys committing crime, including the Sandy Hook school shooter and the majority of other mass killers (2012); teen Ethan Couch who stole beer, killed four people with his car, and asserted an "affluenza" defense (2013), sex trafficker Jeffrey Epstein and his wealthy associates (2015), sexual predator Harvey Weinstein's abuses of power (2017), and the college admissions bribery scandal (2019). Hit movies like *The Wolf of Wallstreet* (the true story of a corrupt stock broker, 2013) and TV shows like *Succession* (about a cold media tycoon and his dysfunctional family, 2018) portray their wealthy White characters as casually cruel, out-of-touch, selfish, and willing to break rules to get what they want.

Crime type also matters

Crime type may also moderate the relationships between race, SES, and legal judgments, because Black people and White people are associated with different types of crimes (Mazzella and Feingold, 1994; Jones and Kaplan, 2003). This may occur because mock jurors seek more confirmatory evidence and less counter-confirmatory information for stereotype-consistent crimes (Jones and Kaplan, 2003) or because people are more likely to recall stereotype-consistent information, even when that information was never provided or inaccurate (Skorinko and Spellman, 2013).

Specifically, people report believing that Black adults are more likely to commit crimes like assault and auto theft, whereas White people are more likely to commit fraud and child molestation. And experimental work finds that defendants may be judged more harshly for stereotype-consistent crimes [Gordon et al., 1988; Mazzella and Feingold, 1994 (a meta-analysis)]. An analysis of over 180,000 real criminal cases in Florida found that, compared to each other, Black defendants received longer sentences for manslaughter, robbery, carjacking, arson, and resisting arrest, whereas White defendants received longer sentences for sexual offenses and child abuse (Lehmann, 2020).

Aims of the experiments

The current investigation directly examines how race and SES interact to influence blame and punishment judgments for juveniles. Specifically, in two experiments—the second a near-exact confirmatory replication—participants read vignettes about a juvenile being charged with a crime. Race (Black or White), SES

(relatively high or relatively low), and crime type (stereotypically White vs. Black) were manipulated. Participants made judgments about the juvenile's guilt (Experiment 1 only), blame, and punishment. We also measured stereotype-related perceptions of the juvenile that may account for disparate blame and punishment judgments, including the juvenile's perceived knowledge about crime, likelihood of recidivating, likelihood of having committed past crimes, and personal traits like maturity and character. All data, analysis syntax, and materials as well as additional tables and graphs can be openly accessed at the Open Science Framework (OSF) at: https://osf.io/xtkve/#!.

Preliminary pilot testing for stereotypical crime types and names

Prior to Experiment 1, 50 participants recruited from Amazon Turk (70% White, 10% Black) rated 10 crimes (e.g., stealing from a store, assault and battery) for how likely they were to be committed by a Black person and a White person (see Supplementary material at: https://osf.io/xtkve/#!view_only=a7dd7db7250b4a97a2fde8522e779bbb/for materials and raw data). Based on this pilot testing, armed robbery was chosen as a stereotypically Black crime (76% rated it as slightly, mostly, or almost always Black). Arson was chosen as a stereotypically White crime (78% rated it as slightly, mostly, or almost always White). These findings were consistent with prior, more robust work finding that armed robbery is viewed as a "Black crime" whereas arson is viewed as a "White crime;" (Esqueda, 1997).

The same participants rated 15 names (e.g., Charles, Dylan) for how "stereotypically Black" or "stereotypically White" (1 = Very Black, 3 = Neutral, 5 = Very White) they were. Dominique was chosen as a stereotypically Black name (76% labeled it as slightly or very Black), and Scott was chosen as a stereotypically White name (76% labeled it as slightly or very White).

Experiment 1

Participants read vignettes about a juvenile who stood trial for allegedly committing a crime. They then judged the juvenile's criminal guilt, blameworthiness, and punishment level as well as potential stereotype-based mediators, including the juvenile's knowledge about crime, likelihood of recidivating, likelihood of having committed past crimes, and character.

Experiment 1 explored five hypotheses.

- *Possibility 1: Crime Type may Moderate.* Given prior research finding that people judge stereotype-consistent crimes more harshly than stereotype-inconsistent ones, Black (vs. White) suspects may be judged more harshly for a stereotypically Black crime whereas White (vs. Black) suspects may be judged more harshly for a stereotypically White crime.
- *Possibility 2: Additive Main Effects of Race and SES.* Given negative evaluations and outcomes for both Black people and poor people, race and SES may have additive main effects. Specifically, Black juvenile and low-SES juvenile suspects may be judged more harshly than their White and higher-SES

counterparts, and low-SES Black defendants may be judged most harshly.

- *Possibility 3: SES may Moderate Race Effects.* Given evidence from social ecology and aversive racism research that low SES may drive negative race stereotypes or provide an excuse to blame Black people more harshly, only low (vs. high) SES Black people may be judged more harshly than their White counterparts. Low-SES White people may even be judged more harshly than their high-SES Black counterparts.
- *Possibility 4: High-SES White Defendants may Receive High Blame.* Given recent media showcasing negative examples of wealthy White men and boys, as well as stereotype research showing that wealthy White people are often associated with greed and selfishness, it is possible that high-SES White juveniles may be judged *more* harshly than their low-SES or Black counterparts.
- *Possibility 5: Stereotype-Related Evaluations of Defendants may Mediate Effects of Race and SES.* Given that negative stereotypes such as criminality, short-sightedness, and selfishness are associated with certain groups of people, stereotype-based evaluations may underlie the relationships between race, SES, and criminal judgments.

Participants and checks

Four hundred eighty-five participants recruited through Amazon Mechanical Turk completed the study. Amazon Turk has been shown to provide quality data on par with other sample types (for a review, see Paolacci and Chandler, 2014). Participants ranged in age from 18 to 79 years of age (*Mean* = 38) and were 40% female and 69% White. The majority reported completing at least some college (82%) and making between $10,000 and $50,000 per year (52%). Approximately 15% of participants reported having completed jury service in the past, and ∼31% reported some contact with the justice system, ranging from being a social worker to a defendant (see Supplementary material on the OSF for detailed demographic information).

Our original data analysis plan was to exclude anyone who, when prompted, guessed the study was about race or SES as well as anyone who failed to accurately recall what kind of neighborhood the defendant was from. However, doing so eliminated nearly half of the participants. After considering external feedback we decided to report data including all participants. Appendices A and B show detailed results when excluding such participants. Except where noted, results generally maintain the same patterns and statistics are similar regardless of exclusion criteria.

Design and procedure

A 2 (race: Black, White) x 2 (SES: high, low) x 2 [crime type: stereotypically Black (armed robbery) or White (arson)] between-subjects factorial design was used. Race was manipulated by explicitly describing the juvenile as White or Black and by changing the juvenile's name to Scott (White) or Dominique (Black). SES was manipulated by stating that the juvenile attended a local public high

school, lived in a dangerous part of town, and had unemployed parents (low-SES) or attended a private school, lived in a safe gated community, and had parents who were physicians (high-SES).

Participants read vignettes about a juvenile who stood trial for allegedly committing a crime. They then judged the juvenile's criminal guilt, blameworthiness, and punishment level as well as potential mediators, including the juvenile's knowledge about crime, likelihood of recidivating, likelihood of having committed past crimes, and personal characteristics.

Materials

The vignettes

First, participants read a fictional story about a 17-year-old male who allegedly committed either arson or armed robbery. Each vignette began by explicitly stating the juvenile's race [i.e., "[Name] is a 17 year old [Black/White] male…."]. Next the story provided SES information. In the low-SES condition participants read that the juvenile attends "the local public high school" and "both of his parents are unemployed and [name] currently lives in what is considered a dangerous part of town." In the high-SES condition, they read that he attends "a private school in the next town" and "both of his parents are successful physicians and [name] currently lives in a safe, gated community."

Participants were then asked to imagine that they were jurors in a trial of the juvenile and read a summary of evidence presented at trial. The vignette did not explicitly say that the juvenile was in adult court, but the vignette's jury trial and recommendation for punishment were consistent with U.S. adult, rather than juvenile, court. In the arson vignette, the juvenile was charged with setting fire to a half-finished building in a construction site. In the armed robbery vignette, the juvenile was charged with robbing a man at knife point in an alleyway. For both crimes, the juvenile matched the description given by a witness and was picked up by police officers while he was running down a nearby street. Participants read that, at trial the prosecutor presented inculpatory evidence (e.g., eyewitness testimony, being found with a knife or lighter on him) and the defense attorney presented exculpatory evidence (e.g., no fingerprints).

Pilot testing without race or SES information revealed that participants rated these vignettes as similarly severe ($N = 24$; $M_{Arson} = 5.82$; $M_{Robbery} = 5.50$) and deserving of similar punishment (median punishment of "1–3 months in a correctional facility" for both). See Supplementary material on the OSF for a complete version of both vignettes and the follow up questions.

Primary dependent variables: guilt, blame, and punishment

After reading the vignette, participants assigned guilt, blame, and punishment to the juvenile defendant.

Judgments of guilt

Participants first rendered a verdict of guilty or not guilty [i.e., "Do you believe that [name] is guilty of [the crime]?" (Yes or No)]. Participants' confidence in their guilt judgment

was assessed on a scale from 1 (not at all confident) to 6 (extremely confident).

Judgments of blame

Participants separately rated how responsible and how blameworthy the juvenile was for the alleged crime ("How responsible/blameworthy was [name] for the alleged crime?") on a scale from 1 (not at all responsible/blameworthy) to 6 (extremely responsible/blameworthy). These two questions were averaged together to create a blame score ($\alpha = 0.96$).

Judgments of punishment

Participants then answered "How much time, if any, should [name] serve in a correctional facility (jail, prison, juvenile detention, etc.)?" This question was anchored at 1 (no time) and 9 (more than 5 years). Prior to this scale, participants also answered a free response question asking what punishment the juvenile deserved but these answers were not analyzed for this study.

Stereotypes as potential mediators: perceived knowledge, past and future criminal behavior, and personal traits

Next participants answered questions about stereotype-related judgments that might act as mediators. All potential mediators were measured on a six-point scale where $1 = not\ at\ all\ [attribute]$ and $6 = extremely\ [attribute]$.

Judgments of knowledge

Participants answered six questions about the juvenile's knowledge of the justice system and criminal behavior (e.g., "How knowledgeable, in general, is Scott about setting fires?" "How aware was Dominique that armed robbery is a criminal act for which he could be prosecuted?") and answers ($\alpha = 0.81$) were averaged together to create a measure of criminal knowledge.

Judgments of past and future criminal behavior

Two questions about the likelihood that the juvenile will commit a similar or more serious crime in the future (e.g., "How likely is it that [name] will commit a similar crime in the future?" from Graham and Lowery, 2004; $\alpha = 0.96$) were averaged together to create a measure of future criminal behavior. Two questions about the likelihood that the juvenile has committed a similar or more serious crime in the past (e.g., "How likely is it that [name] committed a more serious crime in the past?" $\alpha = 0.91$) were averaged together to create a measure of past criminal behavior.

Judgments of character traits and maturity

Participants were asked 12 questions assessing their perceptions of the juvenile's personal traits (Graham and Lowery, 2004) regarding three domains: (1) Maturity (four items, e.g., "How naïve is he?" $\alpha = 0.83$), (2) Dangerous Character (four items, e.g., "How aggressive is he?" $\alpha = 0.97$), and (3) Good Character (four items, e.g., "How honest is he?" $\alpha = 0.80$). Participants also evaluated the juvenile's "good judgment," but these results are not addressed in the current paper.

Demographics and follow-up questions

Participants reported their ethnicity, gender, age, level of education, current income, time lived in the U.S., and whether they have been on a jury before. Additionally, they were asked to report (free response) what they believed was the purpose of the study ("What do you think this study is about?") and whether they remembered the ethnicity of the defendant (["What is [name's] ethnicity?"]) and what kind of neighborhood he was from ["What part of town does [name] live in?"]).

Results

See Table 1 for a summary of the primary results including statistics for non-significant findings, B coefficients with confidence intervals, and cell means by race, SES, and race x SES. A series of 2 x 2 ANOVAs were used to assess main effects and interactions unless otherwise indicated.

Potential moderator: crime type

Contrary to our initial hypothesis, two 2 (race: White, Black) x 2 (SES: high, low) x 2 [crime type: White (arson), Black (robbery)] ANOVAs revealed that crime type did not significantly interact with race or SES when predicting judgments of either guilt or blame ($Fs < 1.58$, $ps > 0.209$). Crime type was thus not further analyzed, and the following results collapse across crime type.

Primary dependent variables: guilt, blame, and punishment

Guilt

Overall, <½ of participants rendered a guilty verdict (39%). There was no significant main effect of SES (high: 36%, low: 42%) but unexpectedly participants were more likely to assign guilty judgements to White (46%) vs. Black defendants (32%), $X^2_{(1,484)} = 9.73$, $p = 0.002$.

Moreover, a hierarchical logistic regression including race and SES (Step 1) and their interaction (Step 2) revealed that race and SES interacted while influencing participants' judgments of guilt, Wald = 8.12, $p = 0.004$. High-SES White defendants were the most likely to be judged guilty (50%) whereas high-SES Black defendants were the least likely (23%), $X^2_{(1,484)} = 17.76$, $p < 0.001$. Low-SES White defendants (43%) and low-SES Black defendants (41%) fell in the middle. See Figure 1.

Guilt confidence

There was no significant main effect of race, SES, or their interaction on how confident participants were about their guilt judgments.

Blame

Similar to guilt, there was no significant main effect of SES on blame judgments, but there was a main effect of race, such that overall White defendants ($M = 3.02$, $se = 0.11$) were judged more blameworthy than Black defendants ($M = 2.47$, $se = 0.11$), $F_{(1,481)} = 12.30$, $p < 0.001$.

Race and SES also interacted, $F_{(1,481)} = 9.03$, $p = 0.003$. Pairwise comparisons revealed that SES did not significantly affect punishment of White juveniles, but it did affect judgments about their Black counterparts, such that Black juveniles received harsher punishments when they were low-SES than when they were high-SES, $F_{(1,481)} = 7.89$, $p = 0.005$. Low-SES Black and White juveniles fell in the middle. See Figure 2.

Punishment

Unlike guilt and blame judgments, there were neither significant main effects nor an interaction effect of race and SES on punishment judgments.

Effects of exclusion choices

Results for high-SES White, low-SES White, and high-SES Black juveniles were similar when excluding participants who correctly guessed the study's purpose or who failed to recall what kind of neighborhood the defendant was from. See Appendix A. However, excluding participants who guessed the purpose of the study did change the pattern of guilt and blame ratings for low-SES Black juveniles. Specifically, excluding such participants eliminated the main effects of race on Guilt and Blame judgments, instead creating a crossover interaction pattern in which high-SES white defendants *and* low-SES Black defendants received harsher judgments than their counterparts. See Appendix B.

Stereotypes as potential mediators: perceived knowledge, past and future criminal behavior, and personal characteristics

As expected, higher ratings for the juvenile's criminal knowledge, recidivism, past criminal behavior, and dangerous character as well as lower ratings for good character (but not maturity) predicted higher guilt, blame, and punishment judgments ($|rs| > 0.36$, $ps < 0.001$) for all correlations.

A series of 2 × 2 ANOVAs assessed whether race and SES affected the potential mediators (see Table 1 for cell means, B coefficients, and non-significant statistics. See Supplementary material on the OSF for graphs of race and SES predicting potential mediators). PROCESS software v4.2 (Hayes, 2012) model 7 using 5,000 bootstrap samples (X = Race condition, W (moderator) = SES condition, Y = Guilt or Blame, M = mediator) was used to assess whether the data was consistent with moderated mediations, and the indirect effect of the highest order product is reported.

TABLE 1   Main effects, interactions, and cell values for race and SES predicting guilt, guilt confidence, blame, punishment, knowledge, recidivism and past crime, and character for Experiment 1.

Experiment 1				
	White/high (Percent or M and *se*)		Black/low (Percent or M and *se*)	Statistics (Between-subjects effects and parameter effects)
Guilt				
ME Race	46%		32%	B = 0.58, *se* = 0.19, Wald = 9.65, *p* = 0.002
ME SES	36%		42%	B = −0.23, *se* = 0.19, Wald = 1.54, *p* = 0.215
Interaction	High, White	High, Black	Low, White	Low, Black
	50%	23%	43%	41%	B = −1.10, *se* = 0.39, Wald = 8.12, *p* = 0.004
Guilt confidence				
ME Race	3.56 (0.09)		3.65 (0.09)	$F_{(1,484)} = 0.50$, *p* = 0.482, η^2 = 0.001, B = −0.28, *se* = 0.17, 95% CI [−0.62, 0.05]
ME SES	3.71 (0.09)		3.51 (0.09)	$F_{(1,484)} = 2.71$, *p* = 0.100, η^2 = 0.006, B = 0.003, *se* = 0.17, 95% CI [−0.33, 0.34]
Interaction	High, White	High, Black	Low, White	Low, Black
	3.76 (0.12)	3.65 (0.12)	3.36 (0.12)	3.65 (0.12)	$F_{(1,484)} = 2.62$, *p* = 0.106, η^2 = 0.005, B = 0.39, *se* = 0.24, 95% CI [−0.08, 0.87]
Blame				
ME Race	3.02 (0.11)		2.47 (0.11)	$F_{(1,481)} = 12.30$, *p* < 0.001, η^2 = 0.03, B = 0.08, *se* = 0.22, 95% CI [−0.35, 0.51]
ME SES	2.68 (0.11)		2.82 (0.11)	$F_{(1,481)} = 0.80$, *p* = 0.370, η^2 = 0.002, B = −0.62, *se* = 0.22, 95% CI [−1.05, −0.18]
Interaction	High, White	High, Black	Low, White	Low, Black
	3.19 (0.16)	2.16 (0.16)	2.86 (0.16)	2.78 (0.15)	$F_{(1,481)} = 9.03$, *p* = 0.003, η^2 = 0.019, B = 0.95, *se* = 0.32, 95% CI [0.33, 1.57]
Punishment				
ME Race	2.50 (0.15)		2.22 (0.15)	$F_{(1,476)} = 1.84$, *p* = 0.176, η^2 = 0.004, B = 0.10, *se* = 0.29, 95% CI [−0.47, 0.67]
ME SES	2.22 (0.15)		2.50 (0.15)	$F_{(1,476)} = 1.79$, *p* = 0.181, η^2 = 0.004, B = −0.46, *se* = 0.29, 95% CI [−1.03, 0.11]
Interaction	High, White	High, Black	Low, White	Low, Black
	2.45 (0.21)	1.99 (0.21)	2.55 (0.21)	2.45 (0.20)	$F_{(1,476)} = 0.75$, *p* = 0.388, η^2 = 0.002, B = 0.36, *se* = 0.42, 95% CI [−0.46, 1.17]
Criminal knowledge				
ME Race	3.21 (0.07)		3.26 (0.07)	$F_{(1,474)} = 0.32$, *p* = 0.574, η^2 = 0.001, B = −0.18, *se* = 0.13, 95% CI [−0.44, 0.09]
ME SES	3.21 (0.07)		3.27 (0.07)	$F_{(1,474)} = 0.35$, *p* = 0.555, η^2 = 0.001, B = −0.18, *se* = 0.14, 95% CI [−0.44, 0.09]
Interaction	High, White	High, Black	Low, White	Low, Black
	3.24 (0.10)	3.18 (0.10)	3.18 (0.10)	3.35 (0.09)	$F_{(1,474)} = 1.58$, *p* = 0.210, η^2 = 0.003, B = 0.24, *se* = 0.19, 95% CI [−0.14, 0.62]
Recidivism				
ME Race	3.00 (0.10)		2.52 (0.09)	$F_{(1,473)} = 12.84$, *p* < 0.001, η^2 = 0.027, B = 0.022, *se* = 0.19, 95% CI [−0.34, 0.39]
ME SES	2.60 (0.10)		2.92 (0.09)	$F_{(1,473)} = 6.12$, *p* = 0.014, η^2 = 0.013, B = −0.78, *se* = 0.19, 95% CI [−1.15, −0.42]
Interaction	High, White	High, Black	Low, White	Low, Black
	3.06 (0.14)	2.13 (0.13)	2.94 (0.13)	2.91 (0.13)	$F_{(1,473)} = 11.68$, *p* < 0.001, η^2 = 0.024, B = 0.91, *se* = 0.27, 95% CI [0.39, 1.43]

(Continued)

TABLE 1 (Continued)

Experiment 1			
	White/high (Percent or M and *se*)	Black/low (Percent or M and *se*)	Statistics (Between-subjects effects and parameter effects)
Past crime			
ME Race	2.77 (0.09)	2.45 (0.09)	$F_{(1,473)} = 6.38, p = 0.012, \eta^2 = 0.013$, B = $-0.12, se = 0.18$, 95% CI $[-0.46, 0.23]$
ME SES	2.50 (0.09)	2.72 (0.09)	$F_{(1,473)} = 3.26, p = 0.071, \eta^2 = 0.007$, B = $-0.66, se = 0.18$, 95% CI $[-1.00, -0.32]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	2.87 (0.13)	2.12 (0.13)	2.66 (0.13)	2.78 (0.12)	$F_{(1,473)} = 11.89, p < 0.001, \eta^2 = 0.025$, B = 0.87, $se = 0.25$, 95% CI $[0.37, 1.36]$
Maturity (higher scores indicate less mature/younger)			
ME Race	2.88 (0.07)	3.06 (0.07)	$F_{(1,468)} = 3.43, p = 0.065, \eta^2 = 0.007$ B = -0.25, $se = 0.14$, 95% CI $[-0.52, 0.02]$
ME SES	2.86 (0.07)	3.08 (0.07)	$F_{(1,468)} = 5.05, p = 0.025, \eta^2 = 0.011$ B = -0.29, $se = 0.14$, 95% CI $[-0.56, -0.02]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	2.80 (0.10)	2.92 (0.10)	2.96 (0.10)	3.21 (0.10)	$F_{(1,468)} = 0.43, p = 0.513, \eta^2 = 0.001$ B = 0.13, $se = 0.20$, 95% CI $[-0.26, 0.52]$
Dangerous character			
ME Race	2.63 (0.10)	2.14 (0.10)	$F_{(1,468)} = 12.17, p < 0.001, \eta^2 = 0.026$ B = 0.03, $se = 0.19$, 95% CI $[-0.34, 0.41]$
ME SES	2.31 (0.10)	2.46 (0.10)	$F_{(1,468)} = 1.32, p = 0.252, \eta^2 = 0.003$ B = -0.61, $se = 0.19$, 95% CI $[-0.99, -0.23]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	2.77 (0.14)	1.84 (0.14)	2.48 (0.14)	2.45 (0.13)	$F_{(1,468)} = 10.52, p = 0.001, \eta^2 = 0.022$, B = 0.89, $se = 0.28$, 95% CI $[0.35, 1.44]$
Good character			
ME Race	3.17 (0.07)	3.59 (0.07)	$F_{(1,468)} = 19.14, p < 0.001, \eta^2 = 0.040$, B = $-0.19, se = 14$, 95% CI $[-0.46, 0.08]$
ME SES	3.39 (0.07)	3.37 (0.07)	$F_{(1,468)} = 0.06, p = 0.805, \eta^2 < 0.001$, B = 0.26, $se = 0.14$, 95% CI $[-0.01, 0.53]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	3.06 (0.10)	3.72 (0.10)	3.27 (0.10)	3.46 (0.09)	$F_{(1,468)} = 5.91, p = 0.015, \eta^2 = 0.013$, B = $-0.47, se = 0.19$, 95% CI $[-0.86, -0.09]$

Fs and Bs calculated with a univariate ANOVA predicting respective dependent variable. Bs sometimes have different p-values than Fs.

Criminal knowledge

Contrary to our initial hypothesis, there were no significant main effects and no interaction of race and SES on judgments of criminal knowledge.
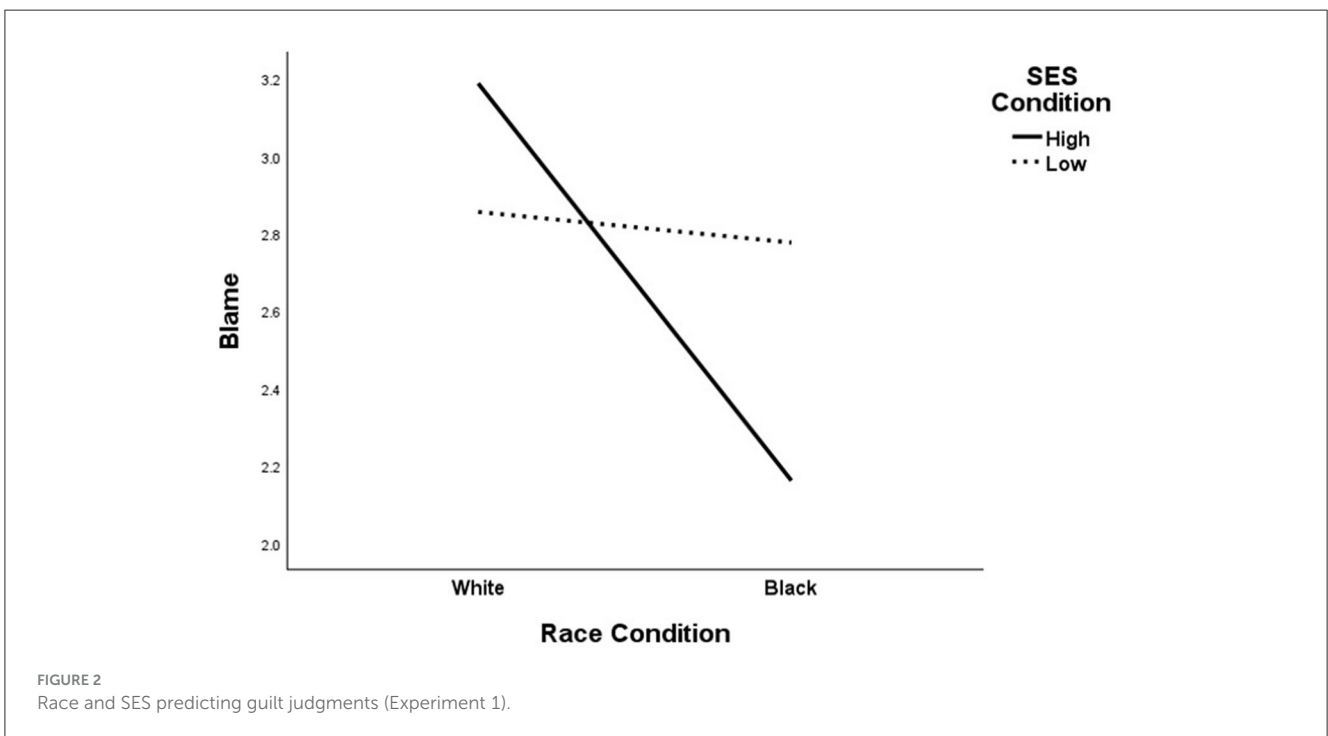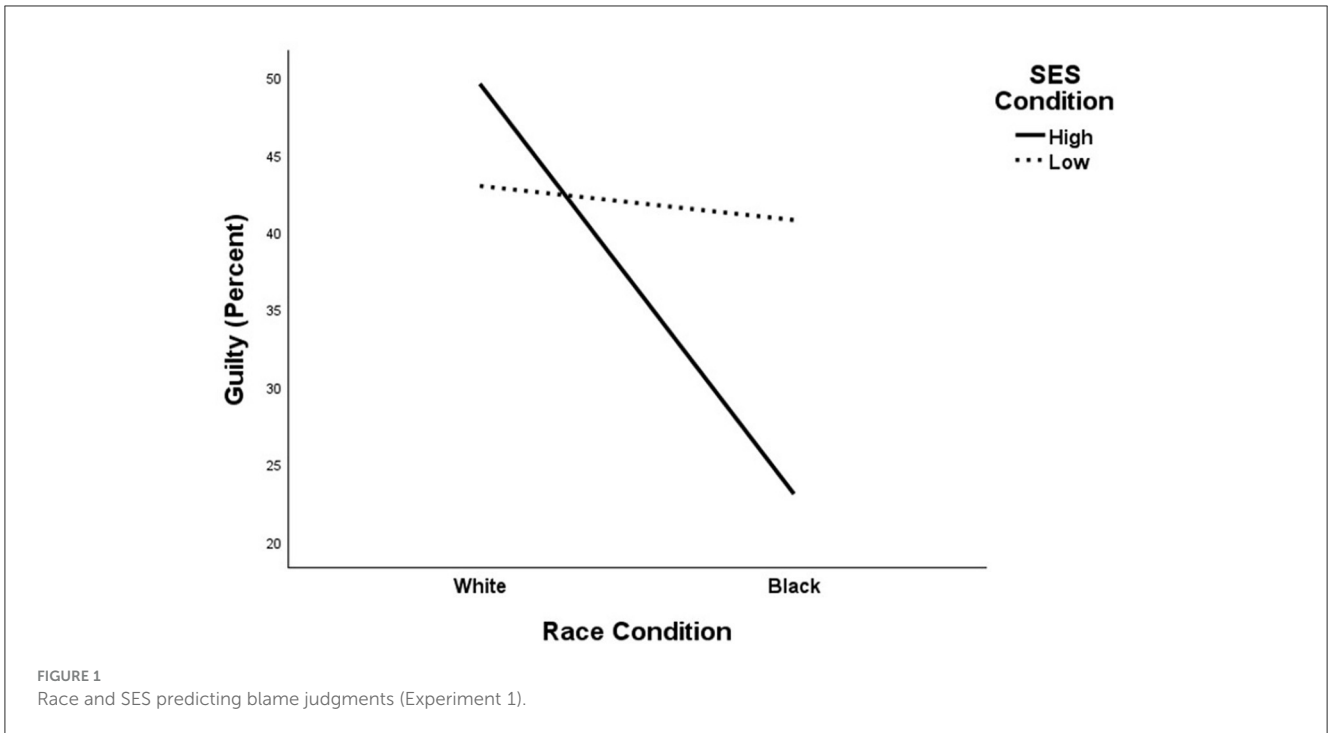
Recidivism

Unexpectedly, there was a main effect of race on recidivism, such that overall White juveniles ($M = 3.00$, $se = 0.10$) were judged to be *more* likely to recidivate than their Black counterparts ($M = 2.52$, $se = 0.09$), $F_{(1,473)} = 12.84$, $p < 0.001$. There was a main effect of SES too, such that low-SES juveniles ($M = 2.92$, $se = 0.09$) were judged to be more likely to recidivate than high-SES juveniles ($M = 2.60$, $se = 0.10$) $F_{(1,473)} = 6.12$, $p = 0.014$.

There was also a significant race x SES interaction on recidivism, $F_{(1,473)} = 11.68$, $p < 0.001$. High-SES Black juveniles ($M = 2.13$, $se = 0.13$) were judged to be less likely to recidivate than low-SES Black juveniles ($M = 2.91$, $se = 0.13$), whereas SES had the opposite (although not significant) effect on White juveniles. Moderated mediation analyses revealed that when SES was high (but not low), being White (compared to Black) increased guilt and blame ratings through increasing recidivism ratings (guilt: indirect effect = 1.25, $se = 0.26$, 95% CI [0.78, 1.80]; blame: indirect effect = -0.80, $se = 0.16$, 95% CI [-1.10, -0.49]).

Past criminal behavior

A similar pattern emerged for judgments about past criminal behavior. Again there was a main effect of race, such that White

FIGURE 1
Race and SES predicting blame judgments (Experiment 1).

FIGURE 2
Race and SES predicting guilt judgments (Experiment 1).

defendants ($M = 2.77$, $se = 0.09$) were judged as more likely to have committed past crimes than their Black counterparts ($M = 2.45$, $se = 0.09$), $F_{(1,473)} = 6.38$, $p = 0.012$, $p = 0.012$. Though there was no significant main effect of SES ($p = 0.071$), there was a race x SES interaction, $F_{(1,473)} = 11.89$, $p < 0.001$. For Black juveniles, high-SES defendants were judged to be less likely to

recidivate than low-SES defendants, but this pattern reversed for White juveniles.

Moderated mediation analyses revealed that when SES was high, being White increased guilt and blame ratings through increasing ratings of likelihood of past criminal behavior (guilt: indirect effect $= 1.08$, $se = 0.26$, 95% CI [0.59,

1.63]; blame: indirect effect = −0.69, se = 0.15, 95% CI [−0.98, −0.40]).

Maturity

There was no main effect of race on maturity judgments. There was a significant main effect of SES such that low-SES defendants were judged to be younger (M = 3.08, se = 0.07) than high-SES defendants (M = 2.86, se = 0.07), $F_{(1,468)}$ = 5.05, p = 0.025. There was no significant interaction between race and SES.

Dangerous character

There was a main effect of race on judgments of the juvenile's dangerous character, such that White defendants (M = 2.62, se = 0.10) were judged to be more dangerous than their Black counterparts (M = 2.14, se = 0.10), $F_{(1,468)}$ = 12.17, p < 0.001. There was no main effect of SES, but there was a significant race x SES interaction, $F_{(1,468)}$ = 10.52, p = 0.001. Low SES increased ratings of dangerous character for Black juveniles whereas it decreased ratings of dangerous character for White juveniles.

Moderated mediation analyses revealed that when SES was high (but not low), being White increased guilt and blame ratings through increasing ratings of dangerous character (guilt: indirect effect = 1.31, se = 0.29, 95% CI [0.78, 1.92]; blame: indirect effect = −0.81, se = 0.16, 95% CI [−1.12, −0.48]).

Good character

There was a main effect of race on judgments of the juvenile's good character, such that Black juveniles were judged to have higher good character (M = 3.59, se = 0.07) than their White counterparts (M = 3.17, se = 0.07), $F_{(1,468)}$ = 19.14, p < 0.001. There was no main effect of SES, but there was an interaction between race and SES, $F_{(1,468)}$ = 5.91, p = 0.015.

Moderated mediation analysis revealed that when SES was high (but not low), being White increased guilt and blame ratings through decreasing ratings of good character (guilt: indirect effect = 1.31, se = 0.29, 95% CI [0.78, 1.92]; blame: indirect effect = −1.01, se = 0.15, 95% CI [−1.01, −0.41]).

Effects of exclusion choices

Generally, results were similar when excluding participants who correctly guessed the study's purpose or who failed to recall what kind of neighborhood the defendant was from. See Appendix A. However, excluding such participants did eliminate the race by SES interaction when predicting good character. Moreover, similar to Guilt and Blame judgments, excluding participants who guessed the purpose of the study did change the pattern of some ratings for low-SES Black juveniles. Specifically, excluding such participants created a crossover interaction pattern in which low-SES Black defendants and high-SES white defendants received the harshest judgments for recidivism, past crime, and dangerous character. See Appendix B.

Summary and discussion of Experiment 1

Experiment 1 failed to support the hypotheses that crime type would moderate criminal judgments. There were no interactions between crime type and race or SES on judgments of guilt, confidence, blame, or punishment. Our findings also failed to find evidence that race and SES had main effects that added to each other. Low-SES Black juveniles did *not* receive the harshest judgments.
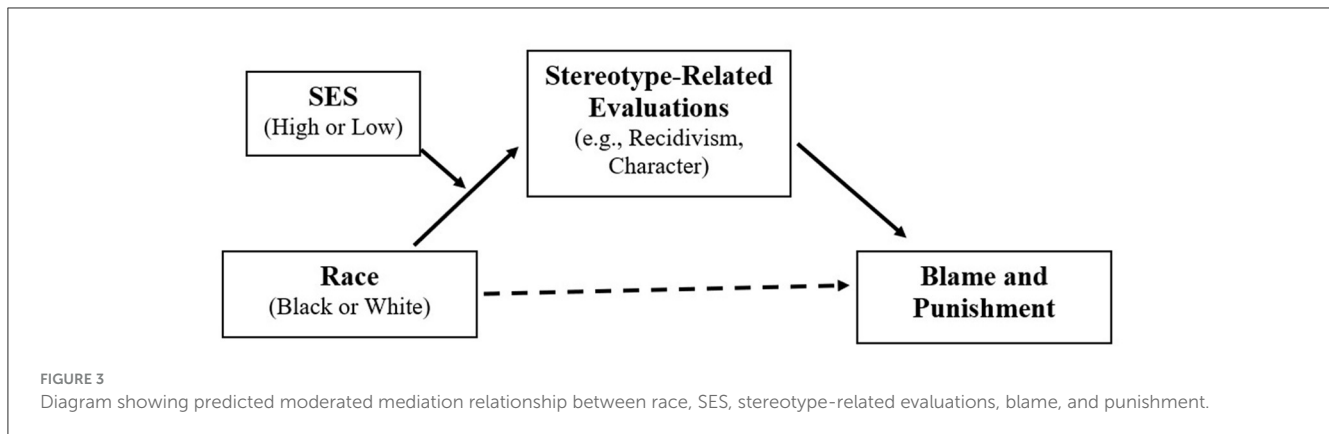
Instead, these results generally support the hypothesis that SES and race interact when affecting judgments. Specifically, high-SES White juveniles were assigned more guilt and blame than their low-SES and Black counterparts, whereas high-SES Black participants received the lowest judgments for guilt and blame. Unexpectedly, however, this pattern did not apply to punishment judgments. Instead, regardless of race, low-SES juveniles received non-significantly higher punishment.

These results provide evidence for the hypothesis that race and SES also interact when affecting stereotype-related evaluations, and such evaluations underly the effects of race and SES on criminal judgments. Specifically, moderated mediation results were consistent with a model in which race and SES affected blame ratings through affecting judgments about the defendant's recidivism, past criminal behavior, dangerous character, and good character (but not criminal knowledge).

The finding that high-SES White juveniles also received harsh judgments is consistent with the possibility that negative stereotypes may exist for wealthy White boys, bolstered by media coverage of wealthy White males acting badly. Such associations may be biasing judgments of high-SES White juvenile defendants, just as the association between Black people and criminality has historically affected judgments. The finding that low-SES Black and White juveniles received harsher judgments than high-SES Black juveniles is consistent with theories of social ecology (which suggests that low SES, rather than race per say, is the basis for negative judgments).

Finally, it is perhaps surprising that participants did not judge low-SES Black juveniles to be more guilty or blameworthy than their low-SES White counterparts, except when excluding participants who guessed the study was about race or SES. However, again, this finding is consistent with social ecology theory. That is, people may base their judgments primarily on SES, such that low-SES defendants are evaluated more harshly than middle- or upper-class defendants regardless of race (except, our data suggests, in the special case of high-SES white males).

Another possibility is that people are increasingly skeptical of legal cases against Black defendants, perhaps because of increased awareness of historical bias. Thus, they may be more likely to believe that evidence against a Black defendant is less reliable than evidence against a Black defendant, in turn suppressing guilt and blame judgments for Black defendants. Indeed, when excluding participant who guessed the study was about race or SES, low-SES

FIGURE 3
Diagram showing predicted moderated mediation relationship between race, SES, stereotype-related evaluations, blame, and punishment.

Black defendants did receive higher guilt, blame, and punishment judgments than low-SES White defendants. People who are aware of race and SES bias issues may both be more likely to guess a study is about those issues *and* more likely to tamper down their negative judgments for low-SES Black juveniles.

Experiment 2

Because of the surprising nature of Experiment 1's findings, Experiment 2 was a near-exact replication intended to ensure the reliability of these results (see Open Science Collaboration, 2015). Experiment 2 used the same crime fact-patterns and evidence against the juvenile except for one primary change: Experiment 2's vignettes explicitly stated that the juvenile was guilty. This is because our vignette introduced a potential confound with SES. Specifically, participants may have assumed that the high-SES juveniles were caught in a high-SES area where criminals are relatively uncommon. Thus, participants may have judged the high-SES White juvenile defendants to be more guilty simply because there would be fewer alternative suspects nearby. This scenario also eliminated the possibility that participants feared police or prosecutor bias and were more skeptical of evidence against a black defendant.

We again checked the possibility that crime type could moderate the effects of race and SES. But given the findings of Experiment 1, we discarded the hypotheses that race and SES simply would be additive. Experiment 2 moved forward with the following confirmatory hypotheses.

- *SES will Moderate Race Effects.* High-SES will protect Black juveniles from harsh judgments, such that high-SES Black juvenile defendants will receive lenient judgements compared to their low-SES counterparts.
- *High-SES White Defendants will Receive High Blame.* High-SES White juveniles will be judged *more* harshly than their low-SES or Black counterparts.
- *Stereotype-related Evaluations will Mediate the Effects of Race and SES.* Judgments regarding criminal knowledge, criminality, and personal character will mediate the relationship that race and SES have on blame and punishment.

See Figure 3 for a diagram showing the predicted moderated mediation relationship between race, SES, stereotype-related evaluations, blame, and punishment.

Participants

Five hundred eighty-nine participants completed the study. As in Experiment 1, ∼25% of participants correctly guessed that the study was about race or SES and about 25% failed to accurately recall the defendant's neighborhood. But all participants were included in the analyses reported below unless otherwise indicated. As shown in Appendices C, D, demographics and results were similar regardless of whether such participants were excluded from analysis.

Participants in the United States were recruited using Amazon Mechanical Turk. Participants ranged in age from 18 to 82 years of age (*Median* = 33) and were 51% female and 75% White. The majority reported completing at least some college (88%) and half made between $10,000 and $50,000 per year. Approximately 17% of participants reported having completed jury service in the past, and 32% reported some contact with the justice system, ranging from being a social worker to a defendant. See Supplementary material on the OSF for detailed demographic information and sample sizes per condition.

Design, procedures, and materials

The design, procedure, and materials for Experiment 2 were nearly identical to Experiment 1. The primary difference was that the juvenile was explicitly stated as being guilty (i.e., participants read that "[name] admitted to [the crime]" and "[name] never denied [the crime]"). Thus, there were no questions regarding guilt (some participants also rated how "causal" the juvenile was and how good their judgment was, though these results were not analyzed for this paper). Additionally, the punishment measure was separated into two questions. The "juvenile punishment" question read: "How much time, if any, should Scott/Dominique serve in a juvenile correctional facility (juvenile detention, boot camp, etc.)?" and the "adult punishment" question read: "How much time, if any, should Scott/Dominique serve in an adult correctional facility (jail,

prison, etc.)?" Both punishment variables were anchored at 1 (*no time*) and 9 (*more than 5 years*).

Results

As in Experiment 1, mean composite scores were created for blame (α = 0.90), criminal knowledge (α = 0.81), recidivism (α = 0.93), past criminal behavior (α = 0.82), dangerous character (α = 0.94), maturity (α = 0.79), and good character (α = 0.66). Results generally replicated the findings of Experiment 1. As hypothesized, race and SES interacted when predicting blame. Additionally, stereotype-based mediating variables tended to follow a pattern in which high-SES increased negative judgments for White juveniles but decreased negative judgments for Black juveniles. Primary results, including statistics for non-significant findings, -B coefficients, etas-squared, confidence intervals, and cell means, are available in Table 2.

Primary dependent variables: blame and punishment

Crime type

A preliminary 2 (race: Black, White) x 2 (SES: low, high) x 2 (crime type: armed robbery, arson) ANOVA again revealed that crime type did not significantly moderate blame or punishment ratings ($Fs = 0.256$–3.02, $ps = 0.083$–0.613). Thus, the following results collapse across crime type.

Blame

There was no significant main effect of race or SES on blame judgments, but an interaction effect was found, $F_{(1,588)} = 6.86$, $p = 0.009$. A crossover effect emerged in which high-SES white juveniles *and* low-SES Black juveniles received harsher judgments than their counterparts. High-SES non-significantly reduced blame judgments for Black defendants but increased blame for White defendant, $F_{(1,588)} = 7.33$, $p = 0.007$, $\eta^2 = 0.012$. See Figure 4.

Punishment: juvenile

There was no main effect of race or SES on punishment in a juvenile system, and only a non-significant crossover interaction between race and SES ($p = 0.051$).

Punishment: adult

There was no main effect of race on punishment in the adult system, but there was a main effect of SES. High-SES defendants ($M = 2.50$, $se = 0.13$) received longer punishment recommendations than low-SES defendants ($M = 2.05$, $se = 0.13$), $F_{(1,581)} = 5.94$, $p = 0.015$. There was also an interaction between race and SES, $F_{(1,581)} = 4.01$, $p = 0.046$. Pairwise comparisons revealed that but high (vs. low) SES increased punishment for White juveniles but SES did not affect punishment for Black juveniles, $F_{(1,581)} = 9.88$, $p = 0.002$. See Figure 5.

Effects of exclusion choices

Generally, results were similar when excluding participants who correctly guessed the study's purpose or who failed to recall what kind of neighborhood the defendant was from. Regardless of exclusion criteria, a pattern emerged in which high-SES White defendants and low-SES black defendants received harsher judgments than their counterparts for blame and punishment (though differences were not always significant). See Appendices C, D.

Stereotypes as potential mediators: perceived knowledge, past and future criminal behavior, and personal traits

As expected, higher ratings for the potential mediators criminal knowledge, recidivism, past criminal behavior, and dangerous character as well as lower ratings for maturity and good character predicted higher blame ($|rs| = 0.09$–0.27, $ps = <0.001$–0.039). All potential mediators also predicted rating of juvenile punishment and adult punishment ($|rs| = 0.11$–0.43, $ps = <0.001$–0.008), except for maturity.

Again, a series of 2 × 2 ANOVAs assessed whether race and SES affected the potential mediators, and PROCESS software v4.2 (Hayes, 2012) model 7 using 5,000 bootstrap samples (X = Race condition, W (i.e., the moderator) = SES condition, Y = Guilt or Blame, M = mediator) was used to assess moderated mediations. See Table 2 for cell means and non-significant statistics. See Supplementary material on the OSF for graphs of all potential moderators.

Criminal knowledge

There were no significant main effects of race or SES on criminal knowledge, but there was a significant race x SES interaction, $F_{(1,581)} = 4.64$, $p = 0.032$. Low SES increased perceived knowledge for Black juveniles but decreased perceived knowledge for White juveniles. Moderated mediation analysis revealed that being Black had a stronger influence on blame judgments when SES was low (vs. high) through increasing ratings of criminal knowledge (blame: indirect effect = 0.07, $se = 0.04$, 95% CI [0.01, 0.15]; juvenile punishment: indirect effect = 0.16, $se = 0.09$, 95% CI [0.01, 0.36]; adult punishment: indirect effect = 0.23, $se = 0.12$, 95% CI [0.02, 0.48]).

Recidivism

There was no main effect of race on recidivism judgments, but there was a main effect of SES. Low-SES juveniles ($M = 3.95$, $se = 0.07$) were judged more likely to recidivate than high-SES juveniles ($M = 3.61$, $se = 0.07$), $F_{(1,581)} = 13.73$, $p < 0.001$. There was no significant race by SES interaction.

Past criminal behavior

There was no main effect of race on judgments of past criminal behavior, but there was a main effect of SES. Low-SES juveniles (M

TABLE 2 Main effects, interactions, and cell values for race and SES predicting guilt, guilt confidence, blame, punishment, knowledge, recidivism and past crime, and character for Experiment 2.
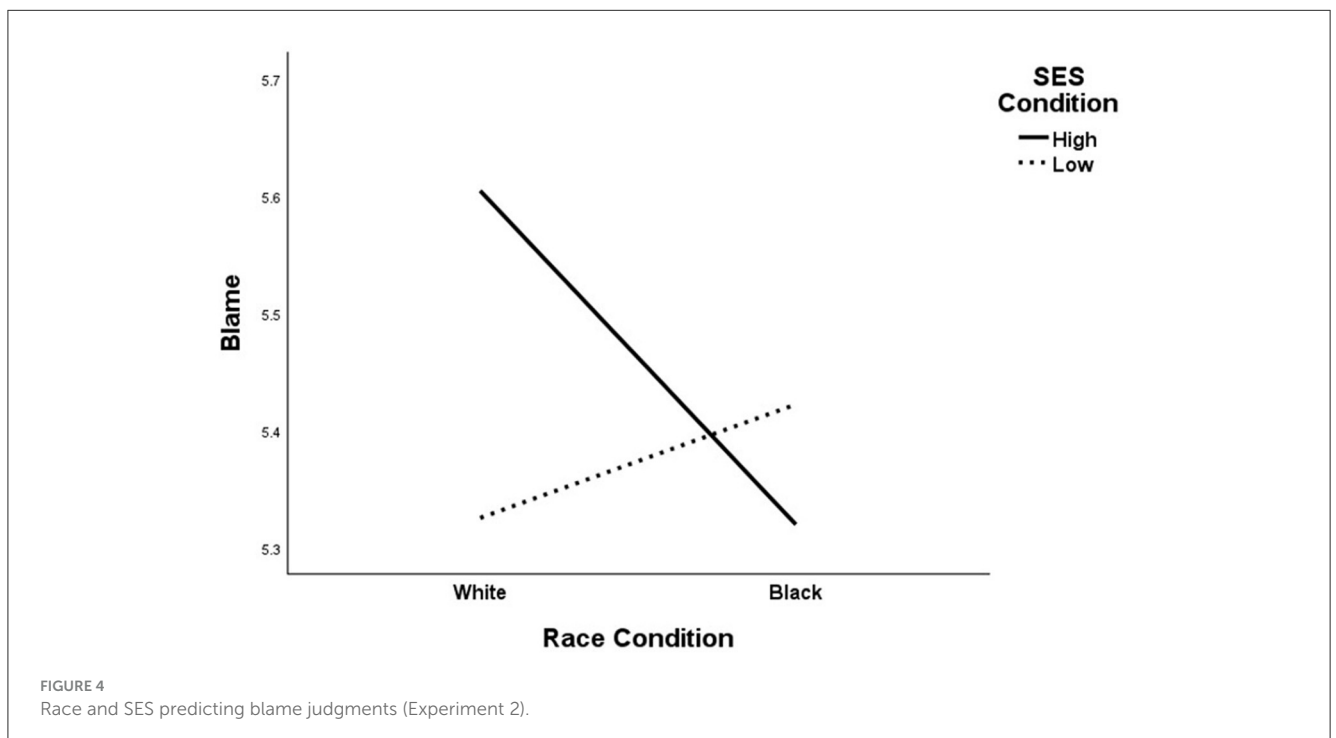
	Experiment 2			
	White/high (Percent or M and se)		Black/low (Percent or M and se)	Statistics (Between-subjects effects and parameter effects)
Blameworthy				
ME Race	5.47 (0.05)		5.37 (0.05)	$F_{(1,588)} = 1.66$, $p = 0.198$, $\eta^2 = 0.003$ B $= -0.10$, $se = 0.10$, 95% CI $[-0.30, 0.11]$
ME SES	5.46 (0.05)		5.37 (0.05)	$F_{(1,588)} = 1.47$, $p = 0.226$, $\eta^2 = 0.003$, B $= -0.10$, $se = 0.10$, 95% CI $[-0.31, 10]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	5.61 (0.07)	5.32 (0.07)	5.33 (0.07)	5.42 (0.07)	$F_{(1,588)} = 6.86$, $p = 0.009$, $\eta^2 = 0.012$, B $= 0.38$, $se = 0.15$, 95% CI $[0.10, 0.67]$
Punishment-Juvenile time				
ME Race	3.55 (0.13)		3.51 (0.13)	$F_{(1,581)} = 0.04$, $p = 0.841$, $\eta^2 < 0.001$, B $= -0.32$, $se = 0.26$, 95% CI $[-0.82, 0.19]$
ME SES	3.52 (0.13)		3.53 (0.13)	$F_{(1,581)} = 001$, $p = 0.979$, $\eta^2 < 0.001$, B $= -0.36$, $se = 0.26$, 95% CI $[-0.86, 0.15]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	3.72 (0.18)	3.33 (0.18)	3.37 (0.18)	3.69 (0.18)	$F_{(1,581)} = 3.82$, $p = 0.051$, $\eta^2 = 0.007$, B $= 0.71$, $se = 0.36$, 95% CI $[-0.004, 1.42]$
Punishment—Adult time				
ME Race	2.38 (0.13)		2.17 (0.13)	$F_{(1,581)} = 1.22$, $p = 0.270$, $\eta^2 = 0.002$, B $= -0.17$, $se = 0.26$, 95% CI $[-0.68, 0.35]$
ME SES	2.50 (0.13)		2.05 (0.13)	$F_{(1,581)} = 5.94$, $p = 0.015$, $\eta^2 = 0.010$, B $= 0.08$, $se = 0.26$, 95% CI $[-0.44, 0.60]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	2.79 (0.19)	2.21 (0.19)	1.97 (0.19)	2.13 (0.19)	$F_{(1,581)} = 4.01$, $p = 0.046$, $\eta^2 = 0.007$, B $= 0.74$, $se = 0.37$, 95% CI $[0.01, 1.47]$
Knowledge				
ME Race	3.47 (0.06)		3.52 (0.06)	$F_{(1,581)} = 0.30$, $p = 0.582$, $\eta^2 = 0.001$, B $= -0.23$, $se = 0.12$, 95% CI $[-0.47, 0.01]$
ME SES	3.51 (0.06)		3.48 (0.06)	$F_{(1,581)} = 0.14$, $p = 0.707$, $\eta^2 < 0.001$, B $= -0.15$, $se = 0.12$, 95% CI $[-0.39, 0.09]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	3.58 (0.09)	3.45 (0.09)	3.37 (0.09)	3.60 (0.09)	$F_{(1,581)} = 4.64$, $p = 0.032$, $\eta^2 = 0.008$, B $= 0.37$, $se = 0.17$, 95% CI $[0.03, 0.71]$
Recidivism				
ME Race	3.75 (0.07)		3.80 (0.07)	$F_{(1,581)} = 0.27$, $p = 0.602$, $\eta^2 < 0.001$, B $= -0.22$, $se = 0.13$, 95% CI $[-0.48, 0.04]$
ME SES	3.61 (0.07)		3.95 (0.07)	$F_{(1,581)} = 13.73$, $p < 0.001$, $\eta^2 = 0.023$, B $= -0.52$, $se = 0.13$, 95% CI $[-0.77, -0.26]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	3.67 (0.09)	3.55 (0.09)	3.84 (0.09)	4.06 (0.09)	$F_{(1,581)} = 3.44$, $p = 0.064$, $\eta^2 = 0.006$, B $= 0.34$, $se = 0.19$, 95% CI $[-0.02, 0.71]$
Past crime				
ME Race	3.47 (0.07)		3.40 (0.07)	$F_{(1,581)} = 0.64$, $p = 0.423$, $\eta^2 = 0.001$, B $= -0.11$, $se = 0.13$, 95% CI $[-0.37, 0.15]$
ME SES	3.30 (0.07)		3.58 (0.07)	$F_{(1,581)} = 9.19$, $p = 0.003$, $\eta^2 = 0.016$, B $= -0.46$, $se = 0.13$, 95% CI $[-0.72, -0.21]$
Interaction	High, White	High, Black	Low, White	Low, Black	
	3.43 (0.09)	3.17 (0.09)	3.52 (0.09)	3.63 (0.09)	$F_{(1,581)} = 3.85$, $p = 0.050$, $\eta^2 = 0.007$, B $= 0.37$, $se = 0.19$, 95% CI $[0.00, 0.73]$

(Continued)

TABLE 2 (Continued)

Experiment 2					
	White/high (Percent or M and *se*)		Black/low (Percent or M and *se*)		Statistics (Between-subjects effects and parameter effects)
Maturity (higher scores indicate less mature)					
ME Race	3.14 (0.06)		3.28 (0.06)		$F_{(1,577)} = 2.38$, $p = 0.123$, $\eta^2 = 0.004$, B = 0.02, *se* = 0.13, 95% CI [−0.24, 0.27]
ME SES	3.07 (0.06)		3.34 (0.07)		$F_{(1,577)} = 8.84$, $p = 0.003$, $\eta^2 = 0.015$, B = −0.11, *se* = 0.13, 95% CI [−0.37, 0.14]
Interaction	High, White	High, Black	Low, White	Low, Black	
	2.93 (0.09)	3.22 (0.09)	3.35 (0.09)	3.34 (0.09)	$F_{(1,577)} = 2.96$, $p = 0.086$, $\eta^2 = 0.005$, B = −0.31, *se* = 0.18, 95% CI [−0.67, 0.04]
Dangerous character					
ME Race	3.49 (0.08)		3.39 (0.08)		$F_{(1,577)} = 0.88$, $p = 0.349$, $\eta^2 = 0.002$, B = −0.05, *se* = 0.16, 95% CI [−0.35, −0.25]
ME SES	3.34 (0.08)		3.55 (0.08)		$F_{(1,577)} = 3.61$, $p = 0.058$, $\eta^2 = 0.006$, B = −0.36, *se* = 0.15, 95% CI [−0.66, −0.06]
Interaction	High, White	High, Black	Low, White	Low, Black	
	3.47 (0.11)	3.21 (0.11)	3.52 (0.11)	3.57 (0.11)	$F_{(1,577)} = 1.94$, $p = 0.164$, $\eta^2 = 0.003$, B = 0.30, *se* = 0.22, 95% CI [−0.12, 0.73]
Good character					
ME Race	2.97 (0.05)		3.02 (0.05)		$F_{(1,577)} = 0.46$, $p = 0.500$, $\eta^2 = 0.001$, B = 0.16, *se* = 0.11, 95% CI [−0.05, 0.37]
ME SES	3.04 (0.05)		2.95 (0.05)		$F_{(1,577)} = 1.40$, $p = 0.237$, $\eta^2 = 0.002$, B = 0.30, *se* = 0.11, 95% CI [0.09, 0.51]
Interaction	High, White	High, Black	Low, White	Low, Black	
	2.91 (0.07)	3.17 (0.07)	3.03 (0.08)	2.87 (0.08)	$F_{(1,577)} = 8.10$, $p = 0.005$, $\eta^2 = 0.014$, B = −0.42, *se* = 0.15, 95% CI [−0.72, −0.13]

Fs and Bs calculated with a univariate ANOVA predicting respective dependent variable. Bs sometimes have different p-values than Fs.

FIGURE 4
Race and SES predicting blame judgments (Experiment 2).

FIGURE 5
Race and SES predicting judgments for adult punishment (Experiment 2).
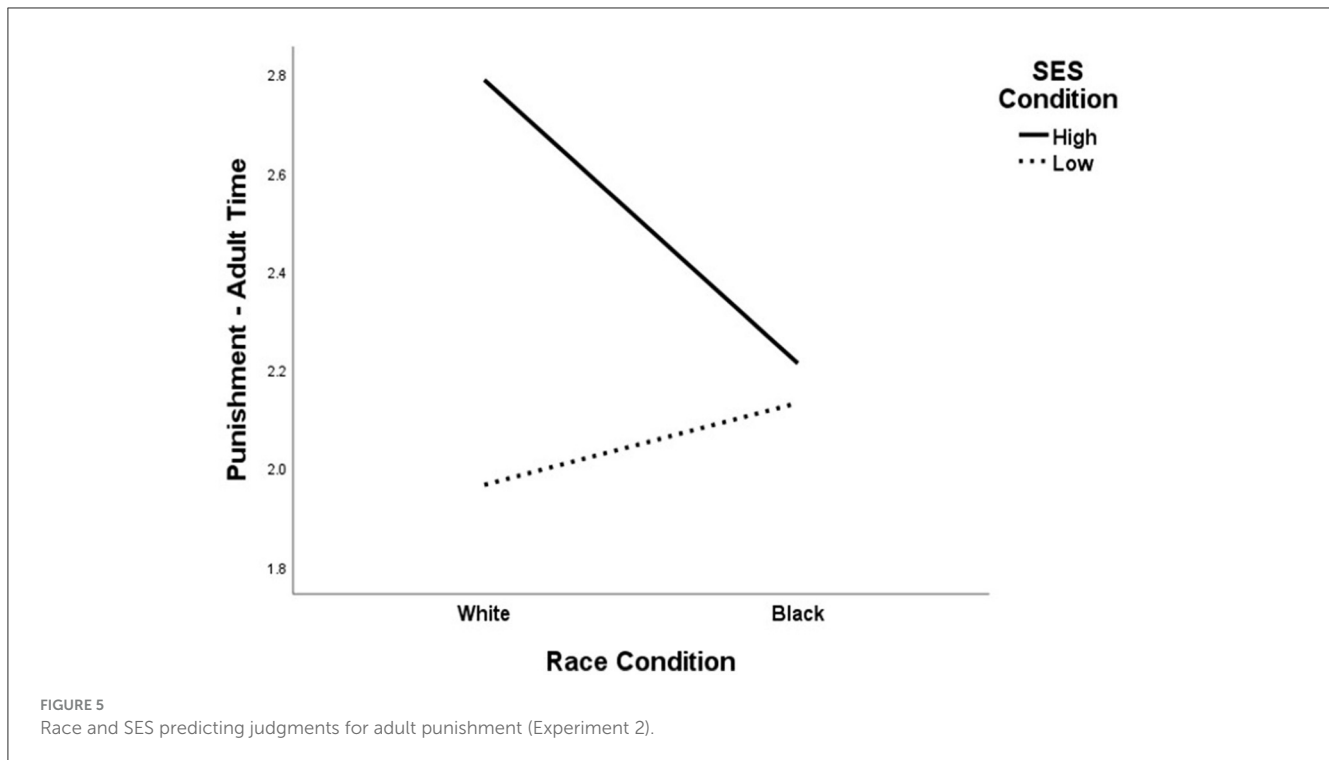
= 3.58, $se = 0.07$) were judged more likely to have committed prior crimes than high-SES juveniles ($M = 3.30$, $se = 0.07$), $F_{(1,581)} = 9.19$, $p = 0.003$. Again, race and SES interacted such that low SES increased recidivism judgments for Black juveniles but decreased recidivism judgments for White juveniles, $F_{(1,581)} = 4.85$, $p = 0.050$. Moderated mediation analysis, however, estimated that past criminal behavior did not significantly mediate the relationship between race, SES, and blame or punishment.

Maturity

There was no main effect of race on maturity judgments, but there was a main effect of SES. Low-SES juveniles ($M = 3.34$, $se = 0.07$) were judged to be younger-seeming than high-SES juveniles ($M = 3.07$, $SD = 0.06$), $F_{(1,577)} = 8.84$, $p = 0.003$. There was no significant interaction between race and SES.

Dangerous character

There were neither significant main effects of race or SES nor an interaction on judgments regarding dangerous character.

Good character

There was no main effect of race or SES on judgments of good character. There was however an interaction, $F_{(1,577)} = 8.10$, $p = 0.005$. Pairwise comparisons revealed that low SES (vs. high SES) reduced ratings of good character for Black juveniles, $F_{(1,574)} = 8.09$, $p = 0.005$, $\eta^2 = 0.014$, but not for White juveniles. Moderated mediation analyses revealed that for high-SES (but not low-SES) juveniles, being Black decreased ratings for blame, juvenile punishment, and adult punishment through increasing

ratings for good character (blame: indirect effect $= -0.06$, $se = 0.03$, 95% CI $[-0.11, -0.01]$; juvenile punishment: indirect effect $= -.10$, $se = .05$, 95% CI $[-.22, -.02]$; adult punishment: indirect effect $= -.15$, $se = .07$, 95% CI$[-.29, -.03]$).

Effects of exclusion choices

Generally, results were similar when excluding participants who correctly guessed the study's purpose or who failed to recall what kind of neighborhood the defendant was from. Regardless of exclusion criteria, a pattern emerged in which high SES reduced negative evaluations for Black defendants but increased negative evaluations for White defendants. See Appendices C, D.

Summary and discussion of Experiment 2

Experiment 2 generally replicated the main findings of Experiment 1, supporting our three confirmatory hypotheses. See Table 3 for a summary of results for both Experiments.

Consistent with our first confirmatory hypothesis, rather than simply adding to one another, race and SES frequently interacted. High-SES generally boosted negative judgments for White juveniles but decreased negative judgments for Black juveniles.

Consistent with our second confirmatory hypothesis, high-SES White juveniles were assigned more blame and adult punishment than their counterparts (though juvenile punishment differences were non-significant). These findings suggest that negative stereotypes may be affecting high-SES White males similarly to how they have historically affected low-SES Black males.

TABLE 3 Summary of how race, SES, and their interaction affected guilt, guilt confidence, blame, punishment (general, juvenile, and adult), and stereotype-based evaluations (criminal knowledge, recidivism, past criminal behavior, dangerous character, maturity, and good character) across both experiments.

| | Dependent variables | | | | | | | Stereotype-based evaluations/potential mediators | | | | | | | | | | | |
| | Guilt | Guilt confidence | Blame | | Punishment | | | Criminal knowledge | | Recidivism | | Past criminal behavior | | Dangerous character | | Maturity (higher = younger) | | Good character | |
	Exp. 1	Exp. 1	Exp. 1	Exp. 2	General (Exp. 1)	Juvenile (Exp. 2)	Adult (Exp. 2)	Exp. 1	Exp. 2	Exp. 1	Exp. 2	Exp. 1	Exp. 2	Exp. 1	Exp. 2	Exp. 1	Exp. 2	Exp. 1	Exp. 2
Race	Y[a]	-	Y[a]	-	-		-	-	-	Y[a]	-	Y[a]	-	Y[a]	-	-	-	Y[b]	-
SES	-	-	-	-	-	-	Y[c]	-	-	Y[d]	Y[d]	-	Y[d]	-	-	Y[d]	Y[d]	-	-
Race x SES	Y	-	Y	Y	-	-	Y	-	Y	Y	-	Y	Y	Y	-	-	-	Y	Y

[a]White juvenile received higher ratings. [b]White juvenile received lower ratings. [c]High-SES juvenile received higher ratings. [d]High-SES juvenile received lower ratings.

Unlike in Experiment 2, however, low-SES Black defendants received harsher judgments than their low-SES White counterparts for blame, juvenile punishment, and stereotype-related evaluations, even when including participants who guessed the purpose of the study (though some of these differences were not significant). This is consistent with the possibility that people may distrust police evidence against Black people more, thus decreasing guilt and blame judgments for Black defendants when facts are uncertain. However, when the facts are clear (due to the defendant's immediate undisputed confession), people may judge low-SES Black defendants particularly harshly.

Consistent with our third confirmatory hypothesis, we again found evidence that stereotype-based evaluations drive disparate blame and punishment judgments. Race and SES interacted when affecting judgments of criminal knowledge, past criminal behavior, and good character. And moderated mediation analyses were consistent with a model in which race and SES influenced blame and punishment judgments through their impact on criminal knowledge and good character ratings.

Interestingly, however, the stereotype-based judgments that significantly mediated the relationship between race, SES, blame, and punishment in Experiment 2 (criminal knowledge and good character) sometimes differed from those in Experiment 1 (recidivism, past crime, dangerous character, and good character). This could be a result of the fact patterns differing. For example, in Experiment 1, recidivism and dangerous character may have been important in evaluating whether this person actually committed the crime or should be punished to deter future crime. In Experiment 2, however, the juvenile readily admitting guilt might have highlighted his good character, in turn reducing the relevance of deterring future bad conduct.

General discussion

Across two experiments we found that race and SES interact when affecting judgments about a juvenile's criminal behavior, including guilt (measured in Experiment 1 only) and blame. Regardless of crime type, high-SES boosted culpability for White defendants but decreased it for Black defendants compared to their low-SES counterparts. Similarly, race and SES interacted when influencing stereotype-relevant evaluations including criminal knowledge, recidivism, past criminal behavior, and character (though which evaluations were affected varied between Experiment 1 and 2). In turn, moderated mediation analysis supported a model in which the relationship between race, SES, and legal judgments is mediated by such stereotype-relevant evaluations.

Methodologically, these findings highlight the importance of assessing confounds and moderators when studying race and SES. They also provide an explanation for the sometimes-inconsistent effects of race on blame-related judgments noted by previous researchers (Zane and Pupo, 2021), including our own failure to find a consistent simple main effects of race or SES.

What is less clear

Punishment

Punishment judgments showed a less clear pattern than guilt and blame. In Experiment 1, despite receiving higher guilt and blame judgments, high-SES White defendants received similar or even non-significantly *less* punishment than their low-SES counterparts. In Experiment 2, race and SES interacted, such that high-SES White defendants received the longest juvenile (though p = .051) and adult sentences. However, high-SES Black defendants also were assigned longer adult sentences than their low-SES counterparts. Further research should examine why guilt and blame judgments do not directly map onto punishment judgments. One possibility is that punishment serves not only as retribution but also as a deterrent. And certain types of people—for example those of different race or SES or those who exhibit behavior such as truthfulness–may be more or less likely to need deterrence.

Low-SES defendants

While high SES always reduced negative judgments for Black (compared to White) juvenile defendants, the effect of low SES was less clear. Consistent with Social Ecology theory, Experiment 1 found that low-SES White and low-SES Black juveniles received similar guilt, blame, and punishment judgments, and these judgments were harsher than their high-SES Black counterparts. However, in Experiment 2, a pattern emerged in which low-SES Black juveniles were judged more harshly (if not always significantly so) than their low-SES White counterparts on every measure. Moreover, when excluding participants who guessed the research was about race or SES in Experiment 1 (and who thus might be more likely to decrease any negative judgments of low-SES Black defendants), a similar pattern emerged: low-SES Black defendants were assigned more guilt, blame, and punishment than low-SES White defendants.

These findings suggest that low SES does not account for all race effects. Instead, people who are less aware of race and class biases may judge low-SES Black defendants more harshly than low-SES White defendants (see Experiment 1 exclusions). Or people may judge low-SES Black defendants more harshly when their guilt is not in question (Experiment 2). Further work is needed to tease this apart.

Possible explanations for the race x SES interaction

Low SES and race

Our findings are at least partly consistent with the theory of aversive racism (Gaertner and Dovidio, 2005; Sommers and Ellsworth, 2001). Low SES may provide a non-race based "excuse," intentionally or not, to judge Black people more harshly than White people (Experiment 2). Or it may suggest that people are less able to override their stereotyped judgments when stereotype-consistent information—such as admitted guilt–is also provided (e.g., Blair et al., 2004; Experiment 2).

However, low-SES White defendants sometimes received judgments on par with their low-SES Black counterparts (e.g., in

Experiment 1), and higher than their high-SES Black counterparts (Experiments 1 and 2). Such findings are consistent with social ecology research finding that people stereotype others based on their assumed home ecology (Neuberg and Sng, 2013). Race is often used as a heuristic for a harsh ecology, but when SES is explicitly stated it can override race effects (Williams, 2023).

High-SES White defendants

Less theory explains why high-status White juveniles were also judged relatively harshly. One possibility is that Americans are increasingly associating high-status White people with crime or other negative stereotypes, perhaps due to increasing depictions of wealthy White people (especially males) behaving badly. For decades White people have been stereotyped as inhumane and cold (Durante et al., 2017). Negative associations with White wealth might signal a cultural change in stereotypes, analogous to changes in Implicit Attitude Scores during the 2010's (Charlesworth and Banaji, 2019).

Conversely, high-SES White people may not be associated with criminality generally—or at least not with street crimes like arson and armed robbery—and instead may be expected to always act lawfully. If this is true, then wealthy White defendants may be judged more harshly precisely because their behavior violates perceived norms. Numerous social attribution models, for example, propose that individuals are judged as more causal, blameworthy, and even immoral when their behavior violates norms (Eriksson et al., 2015; Kelley, 1973). The more unexpected the person's behavior is, the more likely it is to be attributed internally to that person rather than to his environment or other external pressures. In short, they are judged to be uniquely bad. Future work should examine this possibility, for example, by assessing whether perceived norms or endorsement of stereotypes mediate these findings.

Similarly, people may reasonably believe that high-SES White people have no good reason to engage in criminal behavior. Their basic needs are met. They likely have access to many positive activities and services if needed. They probably don't face race- or class-based rejections or difficulties. Therefor they may be judged more blameworthy for their actions.

Counter-stereotypical juveniles

Yet a third possibility is that low-SES White and high-SES Black defendants receive relatively lenient judgments because counter-stereotypical defendants prompt information analysis or reliance on general event schemata. Specifically, the low-SES White and high-SES Black juvenile stories may have contrasted with people's expectations that White people are high SES and Black people are low SES (e.g., Weeks and Lupfer, 2004). This in turn may have prompted people to more closely and critically evaluate those stories, as surprise often spurs information search (Sherman et al., 2000; Wong and Weiner, 1981). Or it may have prompted them to rely more on event schemata, that is, their expectations for how a typical person (rather than a particular subset of persons) would behave in a particular situation (Green et al., 1985). Given that this was a case about a juvenile, increased information search or reliance on event schemata may have supported the conclusion that reasonable

doubt existed and (regardless of guilt) juveniles are generally less culpable for their actions (Schwartz et al., 1992). Future work more systematically manipulating information processing, the weight of the evidence, and event schemata may help clarify what processes are occurring.

Timing of the study

The data for these experiments was collected at a time (2014–2015) when the U.S. media was covering a series of cases about police officers harming Black men and juveniles (e.g., Michael Brown in Ferguson, Missouri; Eric Garner in New York City). This may have led some to believe that the legal system treats Black men unfairly, in turn making them more skeptical of evidence against Black defendants.

At the same time, media was covering news of misbehaving White males. In December of 2013, for example, a judge sparked outrage for giving affluenza teen Ethan Couch what many believed was an unjustly light sentence. Just weeks later the blockbuster film *The Wolf of Wallstreet* was released. A few months after that, news broke that a young white man entered a church in Charleston, South Carolina and murdered nine Black worshippers.

Since our data were collected, race issues have been regularly reflected in news and politics—ranging from the movement for Black Lives Matter to movements against Diversity, Equity, and Inclusion (DEI) policies. Further research should investigate how the current political and media climate influences stereotypes and judgments, and how long such changes last (Bianchi et al., 2018; Ravary et al., 2019).

Implications

While high-SES White juveniles may be deemed more blameworthy than other groups, they likely do not face the same systematic unfair adjudication of justice that their low-SES and Black counterparts do. We are unfamiliar with any research suggesting that high-SES individuals are over-represented in the legal system at any step of the process.

Instead, it seems possible that disparate treatment is occurring at the system level rather than the individual juror level. For example, compared to low-SES and Black people, high-SES and White people may be less likely to be the targets of heavy surveillance, less likely to be arrested in the first place, less likely to be affected by comparatively harsh laws (e.g., crack vs. powder cocaine laws), and more likely to be able to afford higher quality legal representation [see, e.g., Green, 2003; Hagan, 1973 (regarding societal-level disparate treatment of racial minorities)]. As such, race and SES disparities in the legal system may be the result of factors that occur before a case even gets to the jury decision-making stage.

If this is true, then the relative lack of accountability for delinquent high-SES White juveniles may be lessening public trust in and respect for the legal system (Robinson, 2013). Future work should empirically examine these possibilities.

Limitations and directions for future research

Study design

These results are of course limited. First, our experimental procedure allowed us to collect a large amount of data while controlling confounds. But it differed in many ways from a judge or jury decision-making context in the real world. The information and "trier-of-fact experience" provided to our participants was limited—they simply read a summary of testimony and arguments rather than, for instance, evaluating witness' full accounts and cross-examinations, listening to opening and closing arguments, receiving judicial instructions, and deliberating in a group. Additionally, the fact pattern (e.g., a formal trial with prosecutor and defense) mirrored adult court, though in the United States juveniles are generally tried in a less formal juvenile court where judges make decisions about guilt, sentencing, and so forth. It is possible that judges in juvenile court would be more aware of the defendant's juvenile status and change their decisions accordingly. In the real world, such enriched information and experience could limit or otherwise change biases based on race or status. Future work should thus replicate these findings with more realistic procedures.

Additionally, the ordering of our dependent measures were not counterbalanced and our theoretical mediators (e.g., criminal knowledge, character) were not manipulated. Thus, it is possible that the judgments occurred simultaneously or that the first judgments affected the latter, rather than vice versa as we have theorized.

Middle-class women

Our study compared two extremes of the socio-economic spectrum: a family where both parents were unemployed and living in a rough neighborhood vs. a family where both parents were physicians who could afford a house in a gated community and private school. Of course the vast majority of people, at least in the United States, live somewhere in the middle. Similarly, the defendant in both studies was a male, whereas over half the world population is not. Future work should examine how race affects middle-class defendants (e.g., Bonam et al., 2020) and female or non-binary defendants (e.g., Gadson and Lewis, 2022). White middle-class juveniles, for example, may not activate the morally-suspect, selfish, spoiled stereotypes often attached to high-SES white people. Black middle class girls may not activate the hopeless criminal stereotypes associated with low-SES Black boys.

Guessing purpose and recall checks

Guessing the study purpose

It is also noteworthy that about a quarter of participants guessed that the study was about race or SES. We believe this is not unique to our study, as our design is similar to many prior mock juror studies that clearly convey the demographic information, either with a picture of the

defendant or with information about race or SES embedded within a fact pattern. And these numbers may be magnified because participants were explicitly asked to speculate about the purpose.

But such speculation about purpose is unlikely to account for our results. First, participants only rated one juvenile, making comparative ratings difficult. But even more importantly, if anything, guessing the purpose would likely have reduced the effects of race and SES rather than creating them. This is because participants generally do not want to appear racist or classist [Dovidio and Gaertner, 2004; Sommers and Ellsworth, 2001 (finding that when participants are aware that an experiment involves race or social class they may be more likely to curtail their biases)]. Indeed, removing participants who guessed the purpose of these studies did not wash out our effects. Instead, result patterns were similar except for in Experiment 1, where removing such participants led to *harsher* judgments for low-SES Black participants compared to low-SES White defendants.

Given that guessing the purpose may temper explicit biases, it is perhaps more remarkable that race and SES still influenced judgments. Future work should measure participants' beliefs about the purpose of jury studies, to more clearly establish how guessing study's purpose affects decision-making (e.g., Smalarz et al., 2023).

Failing to recall information

Additionally, about a quarter of participants did not explicitly recall what kind of neighborhood the juvenile lived in. Therefore, they may have not been aware of the juvenile's SES or may have failed to pay detailed attention to the vignette. Again, however, regardless of whether such participants are included or not, result patterns remained substantially unchanged (see Appendices A, C). These findings add to evidence that race and class may impact judgments even beyond people's explicit recognition of race or SES (see generally Fazio, 2001) and that people may fail to accurately recall specific information and instead rely on general schemas (Skorinko and Spellman, 2013).

Conclusion

These findings are a step toward better understanding how and why legal judgments against juveniles may differ based on legally irrelevant factors like race and socioeconomic status. By experimentally varying race and SES we found, perhaps surprisingly, that high-SES White defendants were judged even more harshly than low-SES Black defendants. We also found evidence that small differences in fact patterns can influence the interaction between race and SES. We live in an age when regular people are becoming more knowledgeable about biases against certain groups, and stereotypes may be changing. Understanding the process by which race, SES, and stereotypes influence guilt, blame, and punishment judgments may help us move toward a more just and more respected legal system.

Data availability statement

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found at: https://osf.io/xtkve/#!.

Ethics statement

The studies involving humans were approved by University of Virginia Institutional Review Board for Social and Behavioral Sciences. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/frsps.2024.1456591/full#supplementary-material

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