IMPLICIT BIAS STUDIES ANNOTATED BIBLIOGRAPHY

Extensive research has been done on the presence of implicit bias in the American population against black people. The nature of implicit bias is that it is predominately subconscious and consequently is often uncorrelated with explicit commitment to egalitarian values. As defenders, we must be conscious of our own bias, conscious of how implicit bias affects our client as they move through the system, and work to overcome it. The following implicit bias studies are intended to expand your knowledge on the issue of implicit bias, both for self-education and to better understand the forces working against your clients of color. The descriptions of studies are pulled virtually verbatim from the articles cited.

I. Establishing the presence of, nature of and extent of implicit bias

George S. Bridges & Sara Steen, Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as Mediating Mechanisms, 63 Am. Soc. Rev. 554 (1998)

Kurt Hugenberg & Galen V. Bodenhausen, *Facing Prejudice: Implicit Prejudice and the Perception of Facial Threat*, 14 Psychol. Sci. 640 (2003)

Jennifer L. Eberhardt et al., Seeing Black: Race, Crime, and Visual Processing, 87 J. Personality & Soc. Psychol. 876 (2004)

Sandra Graham & Brian S. Lowery, *Priming Unconscious Racial Stereotypes About Adolescent Offenders*, 28 Law & Hum. Behav. 483 (2004)

Theodore Eisenberg & Sheri Lynn Johnson, *Implicit Racial Attitudes of Death Penalty Lawyers*, 53 DePaul L. Rev. 1539 (2004)

Kurt Hugenberg & Galen V. Bodenhausen, *Ambiguity in Social Categorization: The Role of Prejudice and Facial Affect in Race Categorization*, 15 Psychol. Sci. 342 (2004)

Joshua Correll et al., Across the Thin Blue Line: Police Officers and Racial Bias in the Decision to Shoot, 92 J. Personality & Soc. Psychol. 1006 (2007)

Phillip Atiba Goff et al., Not Yet Human: Implicit Knowledge, Historical Dehumanization, and Contemporary Consequences, 94 J. Personality & Soc. Psychol. 292, 302 (2008)

Sophie Trawalter et al., *Attending to Threat: Race-Based Patterns of Selective Attention*, 44 J. Experimental Soc. Psychol. 1322, 1322 (2008)

Jeffrey J. Rachlinski et al., *Does Unconscious Racial Bias Affect Trial Judges?*, 84 Notre Dame L. Rev. 1195 (2009)

Phillip Atiba Goff et al., *The Essence of Innocence: Consequences of Dehumanizing Black Children*, 106 J. Personality & Soc. Psychol. 526 (2013)

II. Overcoming Implicit Bias

Nilanjana Dasgupta & Anthony G. Greenwald, On the Malleability of Automatic Attitudes: Combating Automatic Prejudice with Images of Admired and Disliked Individuals, 81 J. Personality & Soc. Psychol. 800 (2001)

Saaid A. Mendoza, Peter M. Gollwitzer & David M. Amodio, *Reducing the Expression of Implicit Stereotypes: Reflexive Control Through Implementation Intentions*, 36 Personality & Soc. Psychol. Bull. 512 (2010)

I. Establishing the Presence of, Nature of and Extent of Implicit Bias

George S. Bridges & Sara Steen, Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as Mediating Mechanisms, 63 Am. Soc. Rev. 554, 561 (1998)

Purpose

- To determine if court officials perceive and judge minority offenders as compared to white counterparts.
- To determine if court officials perceive minorities as more likely than white youths to commit future crimes.
- To determine the perceived causes of crime by youth by the court officials making decisions.

Methodology

- The study analyzed 233 narrative reports written by probation officers in 3 counties in a western state.
- Compared narratives based on age, race and sex of the juvenile offenders; and severity of offense, pretrial detention and prior offenses to control for those variables.

Results

• Reports on black youths were more likely to include negative internal attributions (negative personality assessments) than reports for white youth, whereas reports

- on white youth included more environmental attributions (blaming behavior on negative environmental factors).
- Black youths were judged to have a higher risk of reoffending than white youths.
- Probation officers were more likely to recommend sentences beyond the normal sentencing range when the report included negative internal attributions.

• Provides evidence that probation officers are also affected by implicit bias, and offers some hints as to how to frame issues (based on environmental attributions) that may sway a probation officer's disposition recommendation.

Kurt Hugenberg & Galen V. Bodenhausen, Facing Prejudice: Implicit Prejudice and the Perception of Facial Threat, 14 Psychol. Sci. 640 (2003)

STUDY 1

Purpose

• To determine if stereotypes influence perceptions of facial affect.

Methodology

- 24 white university students participated in the study.
- Researchers constructed a brief movie clip in which a target's facial expression morphed from unambiguous hostility to unambiguous happiness. Participants watched four movies and indicated when the hostile expression was no longer perceivable.
- Participants also took an explicit bias test and an implicit bias test.

Results

• Participants with higher levels of implicit bias took longer to perceive the black face change from hostile to friendly, but not for white faces.

Relevance

• Implicit bias means people may be more likely to interpret black clients' facial expressions as hostile.

STUDY 2

Purpose

• To test the hypothesis in Study 1 by reversing the order of change from hostile to friendly to friendly to hostile, ensuring that people with implicit bias were not just more indecisive when it came to the black faces.

Methodology

• Same methodology as in Study 1, but instead of morphing from unhappy to happy, the faces morphed from happy to unhappy.

Results

• Individuals high in implicit prejudice perceived the onset of hostility much earlier for black faces than did low-prejudice participants. However, response times for white faces were unrelated to implicit-prejudice scores.

Relevance

• Confirms the conclusions in study 1.

Jennifer L. Eberhardt et al., Seeing Black: Race, Crime, and Visual Processing, 87 J. Personality & Soc. Psychol. 876, 886 (2004)

STUDY 1

Purpose

- To test whether stereotypes about certain groups are "bidirectional"—*i.e.*, that is not only that thinking of a stereotyped group "black Americans" conjures up ideas about crime, but also that thinking about crime conjures up images of black Americans.
- Study 1: to establish that exposure to black faces can decrease the perceptual threshold for recognizing crime-relevant objects.

Methodology

- Subjects were 41 white male UC- Berkley and Stanford students.
- Subjects were primed with 50 black male or 50 white male faces, and then asked to complete an "unrelated" task of looking at objects, both crime-related and neutral, on a computer screen that initially were severely degraded and became less degraded in small increments (in 41 picture frames). The participants' task was to indicate (with a button push) the moment at which they could detect what the object was.

Results

In comparison with white face primes, black face primes dramatically reduced the
number of frames needed to accurately detect crime-relevant objects, and
exposure to black primes facilitated the detection of crime-relevant objects
compared with the no-prime condition. In contrast, exposure to white primes
inhibited the detection of crime-relevant objects compared with the no-prime
condition. As predicted, there was no significant effect of race prime on crimeirrelevant objects.

• People are more likely to see "crime-related" objects when associating the object with a black face than with a white face.

STUDY 2

Purpose

• To examine the extent to which the association between black people and crime would produce an attentional bias toward black male faces.

Methodology

- 52 white male Stanford students participated.
- Researchers activated the concept of crime by subliminally priming participants with crime-relevant objects. Immediately following this priming procedure, participants were introduced to the dot-probe task. During this task, two faces (one black and the other white) were simultaneously displayed on the computer screen. These faces quickly disappeared and were replaced by a dot probe in the visual location of either face. The participants' task was to locate the dot probe as quickly as possible.

Results

• When the dot probe was in the black face location, participants primed with the crime-relevant images were found the dot faster than participants who were not primed. Whereas, when the dot was in the white face location, the crime prime caused the dot detection to be slower than those who had not been primed.

Relevance

• This study further supports that stereotypes associate black people with crime subconsciously.

STUDY 3

Purpose

• To test whether attentional biases stayed consistent even when the content of the prime was positive associations with black faces.

Methodology

- Participants were 75 white male Stanford students.
- Participants were primed with words associated with basketball, and then two
 faces (one black and the other white) were simultaneously displayed on the
 computer screen. These faces quickly disappeared and were replaced by a dot
 probe in the visual location of either face. The participants' task was to locate the
 dot probe as quickly as possible.

Results

- Though participants showed no significant attentional bias toward either face when they were not primed, they were significantly faster to find the dot in the black face location than in the white face location when primed with basketball-relevant words. However, priming did not negatively affect the speed at which the dot was located behind the white faces as compared to no-prime.
- The participants also were screened for explicit bias, and differences in explicit racial attitudes did not affect the results.

Relevance

• Stereotypic associations other than crime can lead to visual tuning effects.

STUDY 4

Purpose

• To test whether stereotypical associations may cause police officers' attention to linger on a black face when primed with words associated with crime, how attentional bias affects the memory of faces displayed, and to establish if stereotypes cause peoples' memories to remember faces as more "stereotypically black" when primed with words associated with crime.

Methodology

- 57 police officers practicing in an urban area volunteered to be part of the study.
- Police officers were primed with words associated with enforcing the law against violent criminals. 10 faces, 5 black and 5 white, were rated by another group for "stereotypicalness." The participants were then asked to participate in a dot-probe task.
- After performing the dot-probe task, participants were given the surprise face-recognition memory task. Participants were exposed to a black face lineup and a White face lineup. For each lineup, participants were asked to identify the face that had been displayed during the dot-probe task. For each lineup, all five faces of one race—the target and four distracters— were presented on the computer screen simultaneously. The order in which participants saw the black and white lineups was randomly determined, as was the location of each face on the screen. Participants were asked to indicate their choice in the first lineup, then the second lineup, and were then debriefed.

Results

- When the dot probe was in the location of the black face, officers primed with the crime-relevant words were faster to find the dot than officers who were not primed and were also faster to find the dot than behind white face locations.
- Officers primed with crime were slower to find the dot behind the white face than officers who had not been primed with crime-related words.
- When unprimed, participants found the dot faster when it was in the White face location than the black face location.

• During the facial recognition task, participants were more likely to falsely identify a face that was more stereotypically black than the target when they were primed with crime than when they were not primed. Thus, thoughts of violent crime led to a systematic distortion of the black image.

Relevance

• This study suggests that not only do stereotypes bring attention to black subjects when officers are primed with crime-related words, they are also likely to misidentify a face, especially to remember the face as more stereotypically black. This supports the conclusion that black people who appear most stereotypically black may be most vulnerable to false identifications in real criminal lineups. This type of false identification may be likely even when the actual perpetrator is present in the lineup and even when the eyewitness was visually drawn to the perpetrator's face at the time of the crime.

STUDY 5

Purpose

• To test the hypothesis that police officers view more stereotypically black faces as more criminal.

Methodology

- 182 police officers from the same police department as in Study 4 voluntarily participated in the study.
- In small groups, officers were shown a series of faces (of Stanford students or employees) of the same race. One third of the officers were asked to participate in a stereotypicality measure, rating each face as more or less stereotypical as white or black. Another third of the officers were told that some of the faces they would be shown would be criminals and were asked to determine whether the face they were shown "looked criminal." The final third undertook an attractiveness test, rating how attractive each picture was in order to control the fact that black and white faces used in the study were rated similarly.

Results

- Black and white faces rated similarly attractive.
- More black faces rated high in stereotypicality were judged as criminal than black faces rated low in stereotypicality. This did not occur in the white face groups.
- Additionally, significantly more black faces rated high in stereotypicality were judged as criminal than white faces rated high in stereotypicality.
- Highly stereotypical black faces were more likely to be judged criminal than any other group in the study.

Relevance

• These results provide additional evidence that police officers associate black people with the specific concept of crime.

• Moreover, these results shed light on the face- recognition memory errors made by police officers in Study 4. In that study, police officers were more likely to falsely identify a black face that was more stereotypically black than the target when primed with crime than when not primed with crime. Thinking of crime may have led officers to falsely identify the more stereotypically black face because more stereotypically black faces are more strongly associated with the concept of crime than less stereotypically black faces.

Sandra Graham & Brian S. Lowery, *Priming Unconscious Racial Stereotypes About Adolescent Offenders*, 28 Law & Hum. Behav. 483 (2004)

STUDY 1

Purpose

• To illustrate how unconscious racial stereotypes affect police officers in their interactions with juvenile offenders.

Methodology

- 105 ethnically diverse police officers participated in the study.
- The officers were initially primed with words related to the category *Black* or neutral with respect to ethnicity. Then they were asked to read a police report in which the ethnicity of the defendant was not given in two scenarios in which the circumstances of low-level offense property and assault crimes were given. They were then asked a series of questions about their impressions of the alleged suspect, inferences about suspect culpability and likelihood of reoffending, and judgments about how they would handle the situation if they were called to the scene.

Results

- Police officers in the race prime condition were less likely to judge the offender as immature (by virtue of adolescence) and more likely to perceive him as culpable and deserving of punishment.
- In contrast, consciously held beliefs and attitudes about race did not influence attribution-related judgments, suggesting that researchers were successful in activating implicit racial bias outside of the respondent's conscious awareness.

Relevance

• Police officers are affected by implicit bias, which has a deep impact on the juvenile justice system as they have wide discretion regarding the involvement of a youth in the juvenile justice system to begin with.

STUDY 2

Purpose

• To study the effect of implicit bias on probation officers in their interactions with juvenile offenders.

Methodology

• Researchers repeated the methodology used in Study 1 with police officers, however changed the options for punishment severity to be options available to probation officers.

Results

- Probation officers in the race prime condition judged the alleged offender to be less immature and more violent, and their global trait ratings were more negative. Those primed with the racial category also viewed the offender as more culpable, more likely to reoffend, and more deserving of punishment.
- Consciously held racial attitudes had negligible effects on attribution-related judgments about hypothetical adolescent offenders.

Relevance

• Probation officers are affected by implicit bias.

Theodore Eisenberg & Sheri Lynn Johnson, *Implicit Racial Attitudes of Death Penalty Lawyers*, 53 DePaul L. Rev. 1539 (2004)

Purpose

• To establish the extent to which capital defense attorneys are affected by implicit biases.

Methodology

• Administered a paper version of the IAT to habeas lawyers, capital defense trial lawyers, and law students.

Results

• Results in this population mirrored the results found in the general population, indicating that capital defense attorneys are affected by implicit bias just like everyone else.

Relevance

• Defense attorneys are also affected by implicit bias, despite explicit commitment to egalitarian values.

Kurt Hugenberg & Galen V. Bodenhausen, Ambiguity in Social Categorization: The Role of Prejudice and Facial Affect in Race Categorization, 15 Psychol. Sci. 342 (2004)

Purpose

• To test if racial bias resulted in people identifying racially ambiguous faces as African American when they were making hostile faces, but as Caucasian when they were making happy faces.

Methodology

- 20 white university students participated.
- Participants were shown a series of racially ambiguous computer-generated faces and were asked to categorize each target as either Caucasian or African American. Each of the 15 faces was presented twice: once with a clearly happy facial expression and once with a clearly angry facial expression. Participants then completed measures of their explicit attitudes toward Caucasians and African Americans and finally completed an implicit association task.

Results

• The study found that the relationship between prejudice and categorization as African American was most strongly related when the faces were making a hostile expression, and much less likely to categorize as African American when making a happy face.

Relevance

• Biased people, both implicit and explicitly so, associate blackness with hostility.

STUDY 2

Purpose

• To replicate and extend the findings of Study 1.

Methodology

- Same as Study 1, but 57 white university students participated.
- The implicit and explicit biases were measured in a separate session, and the study included not only a speed dichotomous categorization test but also a non-speed categorization task.

Results

• "As implicit prejudice increased, categorization decisions were more powerfully influenced by targets' facial affect."

Relevance

• "Blackness" is associated with perceived hostility, which works bi-directionally in terms of interpreting ambiguous behavior as hostile when faced with a person raced as black, while also more likely to identify someone as black when we interpret behavior as hostile.

Joshua Correll et al., Across the Thin Blue Line: Police Officers and Racial Bias in the Decision to Shoot, 92 J. Personality & Soc. Psychol. 1006 (2007)

STUDY 1

Purpose

• To establish if police officers are better at the shoot-don't shoot task of identifying suspects who pose actual threats or not in a simulated game. The researchers hypothesized that the race of a suspect would affect the speed but not the accuracy of police decisions in the game.

Methodology

• Three samples of participants completed a 100-trial video game simulation in which armed and unarmed white and black men appeared in a variety of background images. Participants were instructed that any armed target posed an imminent threat and should be shot as quickly as possible. Unarmed targets posed no threat and should be flagged accordingly by pushing the don't-shoot button, again as quickly as possible. The speed and accuracy with which these decisions were made served as our primary dependent variables, and performance was compared across three samples: officers from the Denver Police Department, civilians drawn from the communities those officers served, and a group of officers from across the country attending a 2-day police training seminar.

Results

- On average, officers were simply quicker to make correct shoot/ don't-shoot decisions than were civilians.
- Second, they were better able to differentiate armed targets from unarmed targets.
- Officers may show less bias than civilians in their final decisions.
- Participants seemed to have greater difficulty (indexed by longer latencies) responding to stereotype-incongruent targets (unarmed black targets and armed white targets), rather than to stereotype- congruent targets. The magnitude of this bias did not differ across the three samples.
- Bias increased as a function of the community's size, crime rate, and the proportion of black residents and other ethnic minority residents. Police in larger, more dangerous and more racially diverse environments are presumably much more likely to encounter black criminals, reinforcing the stereotypic association between race and crime. By contrast, officers with little exposure to black people may be less likely to rehearse this association.
- The expertise that police bring to a shoot/don't-shoot situation may not eliminate the difficulty of interpreting a stereotype-inconsistent target, but it does seem to minimize the otherwise robust impact of target race on the decision to shoot.

Relevance

• The race of a suspect does affect a police officer's decision making, although they are very accurate in their shoot or don't shoot decisions given enough time.

STUDY 2

Purpose

• To study whether police officers maintain their accuracy in the shoot-don't shoot simulation game when they are given much less time in which to make the decision in order to facilitate and analyze more errors.

Methodology

• Officers and civilians underwent the shoot-don't shoot simulation and were given much less time in which to make a decision. Failure to make a decision in time resulted in a 20 point deduction.

Results

- Civilians consistently set a lower threshold for the decision to shoot (c) than did the officers, and this difference was particularly evident for black targets.
- Officers and community members both experienced difficulty processing stereotype-incongruent targets.
- Community members showed a clear tendency to favor the shoot response for black targets (relative to both white targets and relative to a neutral or balanced criterion of zero). Police, however, showed no bias in their criteria.

Relevance

• The race of a suspect does affect a police officer's decision making, although they are very accurate in their shoot-don't shoot decisions given enough time.

STUDY 3

Purpose

• To study if training helps reduce inaccuracies in shoot-don't shoot simulations through allowing participants to practice, to confirm the theory that training is what differentiates officers from civilians in accuracy rates.

Methodology

• 58 student civilian participants played the shoot-don't shoot game twice on 2 days separated by 48 hours.

Results

- Although civilians still exhibited shooter bias, bias decreased in the latter round each day.
- There appeared to be no carry over in bias reduction from Day 1 to Day 2.
- Across repeated plays of the video game simulation, these developing "experts" continued to struggle with the stereotype-incongruent targets, responding more slowly on incongruent (compared with congruent) trials.

Relevance

• Police training and on-the-job experience in complex encounters may allow officers to more effectively exert executive control in the shoot-don't-shoot task, essentially overriding response tendencies that stem from racial stereotypes.

Phillip Atiba Goff et al., Not Yet Human: Implicit Knowledge, Historical Dehumanization, and Contemporary Consequences, 94 J. Personality & Soc. Psychol. 292, 302 (2008)

STUDY 1

Purpose

• To test the hypothesis that there is an implicit association between black people and apes and to establish how widely that implicit association is held.

Methodology

- 121 male undergraduates participated in the study.
- Participants were subliminally primed with black faces, white faces, or a nonface control image. Next, they were presented with degraded images of animals (line drawings of apes and non-apes), which they were asked to identify as quickly as possible. For each animal, image quality was improved in small increments (frame by frame), making the animal increasingly easy to identify. For both white and non-white study participants, researchers predicted that exposure to the black male faces would facilitate identification of the ape images, whereas exposure to the white male faces would not.

Results

• Simple exposure to black faces reduced the number of frames participants required to accurately identify ape images. This black—ape facilitation effect was observed among white and non-white participants alike. And this effect was not moderated by participants' explicit racial attitudes or their motivation to control prejudice. Surprisingly, participants not only exhibited a black—ape facilitation effect but also exhibited a white—ape inhibition effect as well.

STUDY 2

Purpose

• To establish if priming participants with apes would result in an attentional bias to black faces, establishing that black people and apes are bi-directionally associated.

Methodology

 Participants were presented with two faces on the computer screen simultaneously (one black and one white face). These faces disappeared, and a dot probe appeared in the place where one of the faces used to be. The participant was asked to locate the dot probe as quickly as possible on the computer and to use one of two response keys to indicate whether it was on the left or the right of a centered focus dot. Researchers used the time it took participants to locate the dot probe as a proxy for visual attention. Researchers predicted the participants would be especially fast at finding the dot probe when it was in the location of the Black face and they had been primed with apes.

Results

• When white participants were not primed, they appeared to display an in-group preference—that is, their attention was directed to white faces more so than black faces. When subliminally primed with ape images, however, black faces captured their attention.

STUDY 3

Purpose

• To test whether the bias shown associating apes and black faces in the previous two studies had to do with out-group bias rather than a subconscious association between black people and apes.

Methodology

- 49 white male college students participated.
- Participants were presented with the same dot-probe task as in Study 2. They were presented, however, with a black male face and an Asian male face (rather than black and white faces). Second, to ensure that any arresting properties of color were removed, the faces were converted to line drawings. Again, it was hypothesized that participants' attention would be diverted to the black male face when primed with apes. However, in the absence of an ape prime, given the lack of an in-group member, it was hypothesized that participants' attention would be equally distributed.

Results

• The attentional bias toward black faces observed in the ape-prime condition did not appear to be driven by a generalized out-group bias. Rather, results indicated an association between black people in particular and apes that is determining where people look.

STUDY 4

Purpose

To test whether the black—ape association is driven by implicit anti-black attitudes or explicit knowledge of the association rather than by implicit knowledge.

Methodology

• 69 white male college students participated.

• Participants took two modified Implicit Association Tests. Half the participants were randomly assigned to first take a personalized IAT (Olson & Fazio, 2004). The other half first took an IAT that required them to categorize stereotypically black and white names by race at the same time they categorized animal names as either great apes or big cats. After completing one or the other IAT, participants left the lab and returned no less than 24 hours later to complete the second IAT (*i.e.*, whichever IAT they had not taken previously).

Results

• As predicted, participants were faster to categorize target words when *Black* was paired with *ape* than when *Black* was paired with *feline*. This bias toward pairing *Black* and *ape* was virtually unchanged when covarying for participants' scores on the personalized IAT, indicating that individuals' implicit anti- black bias was not responsible for the black—ape association.

STUDY 5

Purpose

• To establish if the activation of the association between black people and apes in contemporary society lead people to condone violence against black targets, despite individual differences in anti-black prejudice?

Methodology

- 121 white male college students participated.
- Researchers subliminally primed participants with words associated with apes or big cats, and were asked them to view a videotape of a group of police officers beating a suspect whom the participants were led to believe was black or white. Researchers predicted that the participants primed with the ape words would be the most likely to condone violence directed at the suspect, but only when they thought the suspect was black.

Results

- Participants who believed the suspect to be white perceived the police as no more justified in using violence when primed with apes than when primed with big cats. However, participants who believed the suspect to be black perceived the police as more justified in using violence when they had been primed with apes.
- Participants who had been primed with big cats did not think the police more
 justified in beating the white or the black suspect, participants who were primed
 with apes thought that the police were more justified in beating the black suspect
 than the white suspect.

STUDY 6

Purpose

• To examine whether metaphorical representations comparing black people to apes

in the public media impacts the way people conceive black people and issues surrounding black people.

Methodology

- Researchers examined death-eligible cases between 1979 and 1999 in Philadelphia, Pennsylvania. From this data set, they extracted 153 cases for which we had both mug shots of the defendant and press coverage of the case in the *Philadelphia Inquirer*.
- Each article was coded for the presence of 54 words that connoted bestial or subhuman qualities. The words were presented to raters who read each word in context (taken from sentences in the newspaper articles). Raters were asked to "think of an animal" that was associated with the target word in each sentence, in order to establish the presence of words associated with apes.
- Each death-eligible case was then given a score for the total number of ape words used to describe it in the press and a score for the total number of articles that covered the case.

Results

- Black defendants were described in the press with more ape-relevant words than were white defendants.
- When controlling for the total number of articles, defendant socioeconomic status, victim socioeconomic status, aggravating circumstances, mitigating circumstances, and crime severity, black defendants who were put to death were more likely to have apelike representations in the press than were those whose lives were spared.

Relevance

• Establishes that in the press an association is drawn between black people and apes; and explains the impact of this dehumanization on the tolerance for and seeking of punishment.

Sophie Trawalter et al., *Attending to Threat: Race-Based Patterns of Selective Attention*, 44 J. Experimental Soc. Psychol. 1322, 1322 (2008)

STUDY 1

Purpose

- To investigate whether the association between black men and threat would result in biased patterns of selective attention, such that black male targets would capture the attention of white social perceivers more than white male targets.
- To determine whether the stereotypical association between young black men and danger become so robust that photographs of black men are attentionally privileged, similar to other threatening stimuli (e.g., spiders, snakes, angry faces).

Methodology

- 24 White college students participated in the study.
- Participants underwent a dot-probe task that juxtaposed faces of black men and white men. In the dot-probe task, participants must detect the location of a probe that is initially hidden from view behind one of two stimuli that are simultaneously presented on a computer screen, but subsequently revealed when the two stimuli disappear. A short response latency to detect the probe suggests that participants' attention had been oriented, albeit sometimes unconsciously, to the stimulus that previously obscured it. By contrast, a relatively long response latency suggests that participants' attention had been oriented to the stimulus that had not obscured the probe.

Results

- The results provide preliminary evidence that white perceivers initially attend to black rather than white male targets that are presented without their awareness.
- Participants did reveal a pro-black attentional bias in the first half of the task (32 critical trials), consistent with predictions and with the mountain of evidence that young black men are stereotypically associated with violence and danger.

Relevance

• More empirical evidence that black men garner more attention than white males and are associated with crime on a subconscious level.

STUDY 2

Purpose

• To examine the extent to which researchers could attenuate the attentional bias effect by reducing the threat value of the black male targets.

Methodology

- 24 white college students participated.
- Because direct eye contact may be associated with threat and interacts with race to create a heightened "threat" to observers and therefore creates an exaggerated attentional bias, researchers exposed subjects to images in which the subjects' gaze was averted in a similar dot-probe task as described in Study 1.

Results

 Participants revealed a significant attentional bias for black faces with direct eyegaze, but not for black faces with averted eye-gaze.

Relevance

• Provides further evidence that black males are implicitly associated with threat.

Purpose

• To determine if trial judges are affected by implicit bias.

Methodology

- 133 judges from 3 jurisdictions participated in the study, diverse in terms of gender and race.
- Judges were asked to complete a race Implicit Association Test (IAT), two hypothetical vignettes in which the race of the defendant was not explicitly identified but was subliminally primed; and another hypothetical vignette in which the race of the defendant was made explicit.

Results

- The IAT demonstrated a strong white preference in white judges, while the black judges exhibited no preference overall.
- When a judge was primed with words associated with black people, the decision regarding disposition of a respondent correlated with their IAT scores. Judges who exhibited a white preference on the IAT gave harsher sentences to respondents when they had been primed with black-associated words than with neutral words, whereas judges who exhibited a black preference on the IAT gave less harsh sentences when they had been primed with black-associated words than with neutral words.
- When the race of the respondent and the victim were made explicit, IAT scores
 predicted nothing among the white judges. Among the black judges, however, a
 black preference on the IAT was associated with a willingness to acquit the black
 defendant.

Relevance

- Judges, like the rest of us, carry implicit biases concerning race.
- These implicit biases can affect judges' judgment, at least in contexts where judges are unaware of a need to monitor their decisions for racial bias.
- When judges are aware of a need to monitor their own responses for the influence of implicit racial biases, and are motivated to suppress that bias, they appear able to do so.

Phillip Atiba Goff et al., *The Essence of Innocence: Consequences of Dehumanizing Black Children*, 106 J. Personality & Soc. Psychol. 526 (2013)

STUDY 1

Purpose

- To determine the extent to which we dehumanize black children, testing the following hypotheses:
 - o That black boys are seen as less "childlike" than their white peers,
 - o That the characteristics associated with childhood will be applied less

- when thinking specifically about black boys relative to white boys, and;
- That these trends would be exacerbated in contexts where black males are dehumanized by associating them (implicitly) with apes.

Methodology

- 123 students from a public university participated in the study, 96% of which were female.
- Participants were asked a series of questions about how innocent children were in general without specifying race and how innocent white and black children were.

Results

• For every age group after the age of 9 (i.e., 10 –13 through 22–25), black children and adults were rated as significantly less innocent than white children and adults or children and adults generally. The analyses revealed no differences in ratings of innocence between white people and people generally, either within an age group or overall.

Relevance

• Supports the proposition that the general population sees black children as less innocent than white children.

STUDY 2

Purpose

- To examine whether perceptions of innocence differed by target race and the severity of crimes committed.
- To examine whether dehumanization contributes to the perception of black children as less innocent.

Methodology

- 59 students from a large public university participated.
- Participants were shown a series of pictures of white, black or Latino children and were asked to estimate the child's age, culpability, the attitude of the participant about black people, and asked to take an IAT.

Results

- Participants overestimated the age of black felony suspects to a greater degree than that of black misdemeanor suspects. There was no difference in age errors between white suspects, nor between Latino suspects.
- Participants rated black felony suspects as older than white felony suspects or Latino felony suspects, but revealed no such effects for misdemeanor suspects.
- Black felony suspects were seen as 4.53 years older than they actually were, this would mean that boys would be misperceived as legal adults at roughly the age of 13 and a half.
- Black people were rated as more culpable than Latinos, and Latinos were rated as more culpable than white people.

- Black felony suspects were viewed as significantly more culpable than either white felony suspects or Latino felony suspects.
- A simple correlation found that age errors were moderately related to ratings of culpability such that the older a child was rated, the more culpable the child was seen to be
- The dehumanization IAT significantly predicted age overestimations of black children. The more readily participants implicitly associated black people with apes, the higher their age overestimation for both black misdemeanor suspects and black felony suspects.
- The dehumanization IAT significantly predicted perceptions of the culpability of Black children. The more readily participants implicitly associated black people with apes, the higher their culpability ratings for both black misdemeanor suspects.
- Implicit anti-black dehumanization predicted ratings of white culpability in that the more participants associated apes with black people, the less they found white targets culpable for criminal misdeeds.

• Black children are seen as older and more culpable than their counterparts.

STUDY 3a

Purpose

• To establish if implicit dehumanization facilitates racial disparities in real-world policing contexts.

Methodology

- 60 police officers from a large urban police department participated.
- Used the same methodology as Study 2.

Results

- Participants overestimated the age of black felony suspects to a greater degree than that of black misdemeanor suspects, as well as all other suspects.
- White targets were rated as less culpable when associated with felonies, whereas black targets were rated as significantly more culpable when associated with felonies. There was no difference in culpability for Latinos across crime type.
- There was a difference between white targets suspected of felonies and both black targets and Latino targets. No differences emerged between black and Latino felony suspects or between any misdemeanor suspects.
- The older an officer thought a child was, the more culpable that child was rated for their suspected crime.
- The more quickly participants associated black people with apes, the higher was their age overestimation for both black misdemeanor suspects and black felony suspects.
- The dehumanization IAT significantly predicted perceptions of the culpability of black children. The more readily participants implicitly associated black people

- with apes, the higher were their culpability ratings for both Black misdemeanor suspects and black felony suspects.
- Implicit dehumanization of black people was a significant predictor of racial disparities in the use of force against child suspects, even controlling for other measures of bias. The more officers implicitly associated black people with apes, the more officers had used force against black children relative to children of other races.

• Police officers are also subject to dehumanizing black youth.

STUDY 3b

Purpose

• To replicate the findings of Study 3a with a larger sample size.

Methodology

- 116 police officers from a large police department participated in the study.
- Participants completed the ATB Scale, the personalized IAT, and the dehumanization IAT. Participants then completed a survey regarding children, age, race and culpability.

Results

• Results were the same as found in Study 3a.

Relevance

• See Study 3a.

STUDY 4

Purpose

• To establish if the presence of dehumanizing associations contributes to the racial disparities in the juvenile justice system.

Methodology

- 82 students from a large public university participated.
- Participants were primed with names of apes or of great cats.
- Participants were then asked to complete an "essentialism scale" to determine
 whether a population views social categories as essentialized. The scale was
 accompanied by a picture of a black or white child to focus the survey taker on
 black or white children.
- Participants were then asked to read crimes scenarios and to conduct an age and culpability assessment.

Results

• White children were seen as a more essentialized group than were black children.

- The ape prime led to lower ratings of black childhood essentialism than did the cat prime, whereas prime had no effect on the essentialism ratings of white children.
- Black targets were perceived as older than were white targets.
- After an ape prime, participants underestimated white suspects' age when they
 were suspected of a felony relative to a misdemeanor, whereas black suspects had
 significantly greater age overestimations when suspected of a felony relative to a
 misdemeanor.
- Black targets were perceived as more culpable than were white targets.
- Targets were seen as more culpable after participants were primed with apes than after they were primed with great cats.
- Similar to the patterns of age overestimation, implicit dehumanization was associated with an increased culpability gap between felony and misdemeanor suspects for black people but was associated with the opposite for white people, leading to the perceptions of reduced culpability for white children.
- The study found a moderately strong relationship between age errors and ratings of culpability such that the older participants rated a target, the more culpable they were rated for their suspected crimes.
- Perceptions of essentialism fully explain the effect of the ape prime on the age overestimations of black felony suspects.

• This study offers more proof that black children are not equally "afforded the privilege of innocence—resulting in violent inequalities."

II. Overcoming Implicit Bias

Nilanjana Dasgupta & Anthony G. Greenwald, On the Malleability of Automatic Attitudes: Combating Automatic Prejudice with Images of Admired and Disliked Individuals, 81 J. Personality & Soc. Psychol. 800 (2001)

Purpose

• To establish whether exposure to pictures of admired or disliked members of a group can reduce automatic preference for white over black Americans.

Methodology

- 48 non-black college students participated
- Participants were shown pictures of either admired black and disliked white individuals (pro-black exemplar condition), disliked black and admired white individuals (pro-white exemplar condition), or nonracial exemplars (control condition). Participants' task was to correctly identify the person (or object) seen in the pictures. After exemplar exposure, implicit racial attitudes were measured

with the IAT and explicit racial attitudes were assessed. 24 hours later, the implicit attitudes were measured again.

Results

- Exposure to positive black examples had a substantial impact on automatic racial associations, and the impact on the implicit bias results lasted for 24 hours.
- Exposure to positive black examples had no impact on explicit biases reported immediately or 24 hours later.

Relevance

• This study offers another model in terms of how to combat implicit racial bias.

Saaid A. Mendoza, Peter M. Gollwitzer & David M. Amodio, *Reducing the Expression of Implicit Stereotypes: Reflexive Control Through Implementation Intentions*, 36 Personality & Soc. Psychol. Bull. 512 (2010)

STUDY 1

Purpose

• To establish the extent to which implicit bias is controllable when someone makes a deliberate effort to do so be being told to not focus on the negative stereotype, rather than trying to change the automatic associations made by participants.

Methodology

- 74 non-black native English-speaking undergraduates participated.
- Participants were asked to complete a shoot/don't shoot task, but before they participated in the task were told explicitly to repeat and re-type: "You should be careful not to let other features of the targets affect the way you respond. In order to help you achieve this, research has shown it to be helpful for you to adopt the following strategy: If I see a person, then I will ignore his race!"

Results

- Participants were more likely to shoot unarmed black targets than unarmed white targets, and more likely to not shoot armed white targets than armed black targets.
- The group given special instructions performed with significantly greater accuracy than the group without the instructions.
- Although the instructions helped the accuracy of decision-making in general, it had a greater effect on accuracy of decisions made regarding black targets.

Relevance

• Strategies exist that can help defenders and other system actors to successfully combat their automatic implicit biases.

STUDY 2

Purpose

• To establish if explicitly focusing on the goal of a particular task can reduce implicit racial bias.

Methodology

- 92 non-black native English-speaking college students participated.
- Participants were asked to perform a shoot-don't shoot task, but before were instructed either to adopt one of the two of the following strategies: "I will always shoot a person I see with a gun!" and "I will never shoot a person I see with an object!" or "If I see a person with a gun, then I will shoot!" and "If I see a person with an object, then I will not shoot!"

Results

- Participants were more likely to shoot unarmed black targets than unarmed white targets, and more likely to not shoot armed white targets than armed black targets.
- The participants who were instructed using the "if-then" structure of instructions performed more accurately on the task than those instructed with no strategy or with the simple goal strategy.

Relevance

• This study gives us guidance on the types of strategies most effective for overcoming implicit bias by intentionally addressing the bias rather than through other methods of altering unconscious associations.