The Science of Credibility: Who do you believe and why?

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This program is intended to build on our understanding of implicit bias and assist judges to develop best practices to identify and address the possible impact of implicit biases in judicial credibility determinations

As judges, we often make credibility findings in proceedings where juries are not at all involved (such as administrative law and immigration law) or where both judges and juries make decisions about the credibility of witnesses (admissibility of evidence, criminal law)

Although "it is the exclusive function of the jury to weigh credibility of witnesses," [1] judicial rulings on summary judgment and appeals of jury verdicts also often reflect a judge's understanding and assumptions about the significance of undisputed facts.

So what is credible?

- "A credible witness is one, who being competent is given evidence, is worthy of belief."[2]
- Credibility involves an overall evaluation of testimony in light of its rationality or internal consistency and manner in which it hangs together with other evidence.[3]

Credibility & Implicit Bias

[1] *United States v. Ramirez-Rodriguez,* 552 F.2d 883, 884 (9th Cir. 1977).

[2] *Secretary of Labor v. St. Joe Minerals Corporation,* 70 O.S.H. Cas. (BNA) (1989).

[3] *See Carbo v. United States,* 314 F.2d 718, 749 (9th Cir. 1963); *See also* Edd Wheeler, *The Courting of Credibility, a Nervous Mistress,* 14 J. NAT'L ASS'N L. JUDGES at 254, 255. (1994), *available at* http://digital commons.pepperdine.edu/naalj/vol14/iss2/4.

It is indisputable that memory is far more complex than the average person understands it to be. Humans do not simply record events in their memory as a videotape recorder that can be replayed upon command.[4] Instead, the mind uses mental shortcuts and neurological encoding to retain, recall, and interpret information. Implicit biases are the unconscious social cognitions that guide the characterization, interpretation, and retention of experiences. These implicit biases are present at all levels of social interaction and consequently threaten all levels of the judicial process.[5]

Implicit biases have been extensively studied and science accepts that biases appear in every aspect of social interaction. For example, science shows that if someone engages in stereotypical behavior, the person who recalls the event just describes what happened; If it is counter-typical, the relayer often feels the need to explain what happened.[6] Implicit bias predicts more negative evaluations of ambiguous actions by an African American, which could influence decision-making in hard cases.[7] Further, a few studies have demonstrated that criminal defendants with more Afro-centric facial features receive in certain contexts more severe criminal punishment.[8] Similarly, White students who strongly identified as American set higher standards for injustice; they thought less harm was done by slavery; and as a result, they felt less collective guilt compared to other white students who identified less with America.[9]

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[4] Elizabeth F. Loftus et al., *Eyewitness Testimony: Civil & Criminal 2-2*, at 12 (4th ed. 2007).

[5] *See,* Jerry Kang*, Implicit Bias: A Primer for Courts,* National Campaign to Ensure the Racial and Ethnic Fairness of America's State Courts, National Center for State Courts (Aug. 2009)

[6] William Von Hippel et al., *The Linguistic Intergroup Bias As an Implicit Indicator of Prejudice,* 33 J. EXPERIMENTAL SOC. PSYCHOL. 490 (1997); Denise Sekaquaptewa et al., *Stereotypic Explanatory Bias: Implicit Stereotyping as a Predictor of Discrimination*, 39 EXPER. SOC. PSYCHOL. 75 (2003).

[7] Laurie A. Rudman & Matthew R. Lee, *Implicit and Explicit Consequences of Exposure to Violent and Misogynous Rap Music*, 5 GROUP PROCESSES & INTERGROUP REL. 133 (2002).

[8] R. Richard Banks et al., *Discrimination and Implicit Racial Bias in a Racially Unequal Society.* 94 CALIF. LAW REV. 1169 (2006); *Irene* V. Blair et. al., *The Influence of Afrocentric Facial Features in Criminal Sentencing*, 15 PSYCHOL. SCI. 674 (2004)

[9] Anca M. Miron et al., *Motivated Shifting of Justice Standards,* 36 PERSONALITY SOC. PSYCHOL. BULL. 768, 769 (2010).

With regards to gender, science has shown that incongruities between perceptions of female gender roles cause evaluators to assume that women will be less competent leaders. Even in studies among law students both male and female found pervasive implicit bias, associating judges with men and women with home and family in Implicit Association Tests.[10]However, implicit bias science also predicted more negative evaluations of agentic women –women who demonstrate assertiveness, competitiveness, or independence- in certain hiring conditions.[11] This suggests that agentic females who are considered competent leaders nevertheless face an implicit bias that penalizes them socially unless they temper their agency with niceness.[12]

Science on implicit attitudes towards individuals with physical disabilities (visual, motor or hearing) or intellectual disabilities based on the Implicit Association Test shows, moderate to strong negative implicit attitudes were found and there was little to no association between explicit and implicit attitudes regarding individuals with disabilities.[13] Individuals' beliefs about the controllability of their future, sensitivity to the concept of disease, and contact with individuals with disabilities appear to be associated with implicit attitudes with a consistent pattern of moderate to strong negative implicit attitudes towards individuals with disabilities.[14]

The reality is that all individuals hold implicit biases, but becoming aware of the existence and impact of implicit bias is the first step to overcoming the detrimental effects of implicit bias on the justice system. Implicit biases not only affect witnesses' recollection, but also pervade every aspect of the justice process.

Biases can shape whether an officer decides to stop an individual for questioning in the first place, elects to interrogate briefly or at length, decides to frisk an individual, and

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[10] Justin D. Levinson & Danielle Young, *Implicit Gender Bias in the Legal Profession: An Empirical Study,* 18 DUKE J. GENDER L. & POL'Y 1 (2010).

[11] Laurie A. Rudman & Peter Glick, *Prescriptive Gender Stereotypes and Backlash Toward Agentic Women*, 57 J. SOC. ISSUES. 743 (2001)(hiring decisions made for masculine or feminized managerial job, finding that a feminized job description promoted hiring discrimination against an agentic female because she was perceived as insufficiently nice)

[12] *Id.*

[13] Michelle C. Wilson & Katrina Scior, *Attitudes towards individuals with disabilities as measured by the Implicit Association Test: a literature review,* 35 RESEARCH IN DEVELOPMENTAL DISABILITIES 294 (Feb. 2014)

[14] *Id.*

concludes the encounter with an arrest versus a warning. These biases could contribute to the substantial racial disparities that have been widely documented in policing.[15]

Science suggests that when subliminally primed with drawings of weapons, participants visually attended to Black male faces more than comparable White male faces. The idea of Blackness triggered weapons and made them easier to see, and the idea of weapons triggered visual attention to Blackness in implicit association tests among police officers. The increased visual attention did not promote accuracy; however, instead, it warped officers' perceptual memories.[16]

When police officers are shown the same bias in favor of shooting unarmed Blacks more often than unarmed Whites that student and civilian populations demonstrated.[17] Also, some statistical evidence suggests that racial minorities are treated worse than Whites in prosecutors' charging decisions.[18]

In Pretrial adjudication, the more gap filling and inferential thinking that a judge has to engage in, the more room there may be for biases to structure the judge's assessment in the absence of a well-developed evidentiary record.[19]

Meta-analysis found that when a juror was of a different race than the defendant there was an impact on verdict and sentencing.[20]

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[15] *See* Jerry Kang et. al., *Implicit Bias in the Courtroom*, 59 UCLA L. REV. 1124 (2012).

[16] Jennifer L. Eberhardt et al., *Seeing Black: Race, Crime and Visual Processing*, 87 J. PERSONALITY & SOC. PSYCHOL. 876 (2004).

[17] E. Ashby Plant & B. Michelle Peruche, *The Consequences of Race for Police Officers' Responses to Criminal Subjects*, 16 PSYCHOL. SCI. 180,181 (2005); *Cf*. 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, 1010-13, 1016-17 (2007)(police officers showed a similar speed bias, but did not show any racial bias in accuracy, concluding that there was no higher error rate of shooting unarmed Backs as compared to Whites).

[18] Ruth Marcus, *Racial Bias Widely Seen in Criminal Justice System; Research Often Supports Black Perceptions*, WASH. POST, A4 (May 12, 1992)(Out of almost 700,000 criminal cases reported, at virtually every stage of pre-trial negotiation, whites were more successful than non-whites).

[19] *Id.*

[20] Tara L. Mitchell et al., *Racial Bias in Mock Juror Decision-Making: A Meta-Analysis Review of Defendant Treatment*, 29 L. & HUM. BEHAV. 621, 627-28 (2005).

In cases that were racially charged, lower rates of juror bias were shown than when race was no an explicit figure in the crime. This is perhaps because jurors in race-central cases want to be fair and respond by being more careful and thoughtful about race and their own assumptions and thus do not show bias in their deliberations and outcomes, but fail to be as vigilant about racial bias influences when race is at issue.[21]

When the race of the defendant is explicitly identified to judges in the context of a psychology study, judges are strongly motivated to be fair, prompting different responses from White judges than Black judges. However, when race is not explicitly identified but implicitly primed, the judges' motivation to be accurate and fair is not on full alert.[22]

Science further suggests that African Americans are treated worse than similarly situated Whites in sentencing. Federal Black defendants were sentenced to 12% longer sentences under the Sentencing Reform Act of 1984, and were disproportionately subject to the death penalty (especially when the black defendant killed a white victim).[23]

Thus, fact finders' implicit biases of the fact finders themselves hamper interpretation and findings of credibility of the already biased witnesses. And, fact finders give disproportionate weight to the confidence of a witness regardless of other variables, which is inconsistence with widely held psychological theory and findings.

The Power Problem

Great men are almost always bad men – Lord Acton

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[21] Sam R. Sommers & Pheobe C. Ellsworth, '*Race Salience' in Juror Decision-making: Misconceptions, Clarifications, and Unanswered Questions*, 27 BEHAV. SCI. & L. 599 (2009).

[22] Rachlinski et al, *Does Unconscious Racial Bias Affect Trial Judges?* 84 NOTRE DAME L. REV. 1195, 1210 (2009)

[23] David B. Mustard, *Racial, Ethnic, and Gender Disparities in Sentencing: Evidence From the U.S. Federal Courts*, 41 J.L. & ECON. 285, 300 (2001)(examining federal judge sentencing under the Sentencing Reform Act of 1984); U.S. Gen. Accounting Office, GAO GGD-90-57, *Report to the Senate and House Committee on the Judiciary, Death Penalty Sentencing: Research Indicates Pattern of Racial Disparities* (1990); David C. Baldus et al., *Racial Discrimination and the Death Penalty in the Post-Furman Era: An Empirical and Legal Overview with Recent Findings from Philadelphia*, 83 CORNELL L. REV. 1638, 1710-24 (1998).

Social power plays a unique role in exacerbating implicit bias in high-powered jurors and especially ALJ or bench trials. This is called the Power Problem.

Power governs the way one perceives, judges, and interacts with others. Incorporating input from others can enhance decision quality, yet often people with power do not effectively utilize advice. There is negative relationship between power and advice taking. Higher power individuals are less accurate in judgment, but also overweigh their own initial judgment. As such, the most powerful decision makers can also be the least accurate.[24]

Power influences judgment by disinhibiting those who have it from social influences and concern for others, buffers the decision-maker from negative consequences of those decisions, discounts advice from others, and by increases the clarity with which the decision-maker views their decisions.[25]

Power affects not only how are brains navigate social situations, but also our physiology – down to the hormones circulating through our blood – responds. Social power makes people think, feel, and react differently.[26] Recent scientific findings suggest a link between feelings of social power and moral cognition. High power is associated with harsher judgment of simple moral issues. "Deontological ethics" is defined as the normative ethical position that judges the morality of an action based on the action's adherence to a rule or rules.[27] When participants were presented with moral vignettes complicated by additional information or moral principles, the association between power and moral judgment disappeared, except when the moral dilemma pit utilitarian and deontological principles against each other.[28] Power was associated with harsher judgment of utilitarian acts.[29] Higher power people judge moral transgressions more

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[24] Kelly E. See et al., *The detrimental effects of power on confidence, advice taking, and accuracy*, ORGANIZATIONAL BEHAVIOR & HUMAN DECISION PROCESSES (2011).

[25] James McGee, *The Power to Judge: Social Power Influences Moral Judgment,* 25 Jury Expert (2013); *See also* Kelly E. See et al., *The detrimental effects of power on confidence, advice taking, and accuracy,* ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES (2011); Nathaniel J. Fast et al., *Power and Over-confidence decision making*, ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION Processes (2011).

[26] James McGee, *The Power to Judge: Social Power Influences Moral Judgment,* 25 Jury Expert 1 (2013).

[27] *Id.*

[28] *Id.*

[29] *Id.*

harshly when transgressions are simple; high power and low power people show no difference in moral condemnation when transgressions are complex, high power people more readily accept deontological v. utilitarian outcomes. If normal people experience stress when committing immoral acts, power may reduce the psychological cost of immoral behavior, and lead to more of it. [30]*.*

Even well meaning egalitarian judges may have strong neurophysiologic reactions to defendants, victims, experts, and attorneys. Precise areas of the brain activate unconsciously in a racially biased manner, and are the same parts of the brain used to determine the basis for appropriate length and incapacitation in prison. Biological measures for pain, empathy, and aggression affect judge's ability to equitably determine retribution, and may unconsciously presume more punishment necessary to effectively deter behavior in certain groups due to a failure to properly encode groups in the judge's prefrontal cortex.[31]

Implicit Bias in Judicial Decision Making

Are these rulings consistent with traditional legal standards and / or scientific research on implicit bias in decision-making?

- In a race discrimination case, the Supreme Court unanimously reversed a court of appeals decision reversing a one million dollar jury verdict by a predominantly white jury, in which the appellate panel said that "The use of 'boy' when modified by a racial classification like 'black' or 'white' is evidence of discriminatory intent," but "the use of 'boy' alone is not evidence of discrimination," when used by a white supervisor speaking to an adult black man. [32] The Supreme Court ruled that the total context of the conversation should be considered by the trier of fact.
- On remand, another jury (with only one black juror) again found liability, but the federal appeals court in Atlanta again held there were no racial overtones when a

[30] *Id.*

[31] Kimberly Papillon, *The Court's Brain: Neuroscience and Judicial Decision Making in Criminal Sentencing*, 49 Ct. Rev. 48 (2013). *See also,* Kimberly Papillon, *The Hard Science of Civil Rights: How Neuroscience Changes the Conversation*, in Implicit Bias: An Overview, Equal Justice Society, available *at* http://equaljusticesociety.org/implicitbias (2013)(citing L.T. Harris & S.T. Fiske, *Dehumanizing the Lowest of the Low: Neuroimaging Responses to Extreme Out-groups,* 17 PSYCHOL. SCI. 847 (2006) (finding that middle class people were neurologically encoded as human, but homeless people failed to be encoded as such))

[32] *Ash v. Tyson Foods, Inc.,* 546 U.S. 545, 456 (Feb. 2006)(*rev'd* 126, Fed. Appx. 529 (11th Cir. 2005).

> white supervisor called an adult black man "boy:" "The usages were conversational," the majority explained and "nonracial in context." Even if "somehow construed as racial," the comments were "ambiguous stray remarks" that were not proof of employment discrimination. [33]

- The Supreme Court recently let stand a Tenth Circuit ruling[34] in an age discrimination case in which an employer memo referring to the "shelf life" of an older employee and his readiness to "hit the bench" did not create a dispute of material fact as to whether the employer's motive was discriminatory.[35]

- The 9th Circuit recently upheld an Immigration Judge's finding that a Petitioner lacked credibility because she failed to testify about threats and physical abuse she had suffered that were previously mentioned in Petitioner's asylum declaration, even though the Petitioner explained that she had been confused by the questions, and tried to reconcile the inconsistencies between the testimony and declaration.[36]

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[33] *Ash v. Tyson Foods, Inc.*, 190 Fed.Appx. 924, 926 (11th Cir. Aug. 2006)(unpublished).

[34] *Roberts v. IBM Corp.,* 733 F.3d 1306 (10th Cir. 2013), *cert. denied*, 82 U.S.L.W. 3655 (U.S. June 23, 2014)(No. 13-1240). Denial of certiorari is of course, not a precedential ruling on the merits. *See, e.g.*, Barber v. Tennessee, 513 U.S. 1184 (1995).

[35] The plaintiff had argued that an instant messaging conversation between two of the company's human resources managers proved age discrimination:

> [T]he pair were discussing whether to eliminate Mr. Roberts's position on the ground that he didn't have enough billable work to justify the expense of paying him. […] [O]ne of the HR managers asked about Mr. Roberts's "shelf life." And it is this question, Mr. Roberts contends, that shows age played a direct role in his eventual discharge. After all, shelf life depends on an item's freshness, at least in the supermarket.

The court found the remark did not constitute direct evidence of age discrimination:

> Once its euphemisms and acronyms are translated into English, the instant message conversation unmistakably suggests that "shelf life" was nothing worse than an inartful reference to Mr. Roberts's queue of billable work.

[36] *Lianhua Jiang v. Holder*, No. 09–70900, 2014 WL 2609914 (9th Cir. June 12, 2014)(stating that factual findings including adverse credibility determinations are reviewed under a substantial evidence standard which is extremely deferential and administrative findings of fact are conclusive unless any reasonable adjudicator would be

- In the 7th Circuit, a judge found no harassment when a male supervisor called a female employee "pretty girl", made grunting sounds when she walked away from him while wearing a leather skirt, and remarked that his office wasn't hot "until you stepped your foot in here"[37]

Control over Judicial Credibility Determinations

Judges are governed by the ABA Model Code of Judicial Conduct. Specifically, "a judge shall perform the duties of judicial office [...] without **bias or prejudice**." [38]

It is under the assumption that trial judges proceed according to ethical standards that so much deference is given to the fact finder.

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compelled to conclude to the contrary). *See also Lopez-Cardona v. Holder*, 662 F.3d 1110 (9th Cir. 2011); *Salaam v. INS*, 299 F.3d 1234 (9th Cir. 2000); *Farah v. Ashcroft, 348* F.3d 1153 (9th Cir. 2003). When a petitioner contends that the IJ's findings are erroneous, the petitioner must establish that the evidence not only *supports* that conclusion, but *compels* it. *Singh v. INS*, 134 F.3d 962, 966 (9th Cir. 1998). An IJ's adverse credibility finding must be upheld so long as even one basis for the finding is supported by substantial evidence. *Rizk v. Holder*, 629 F.3d 1083, 1089-90 (9th Cir. 2011)

[37] *Baskerville v. Culligan Intern. Co.,* 50 F.3d 428 (7th Cir. 1995)(stating that the concept of sexual harassment is designed to protect women from the kind of male attentions that can make the workplace hellish for women, but is not designed to purge the workplace of vulgarity, and that "only a woman of Victorian delicacy – a woman mysteriously aloof from contemporary American popular culture I all its sex-saturated vulgarity – would find Hall's patter substantially more distressing that heat and cigarette smoke).

See Harris v. Forklift Sys., Inc., 510 U.S. 17, 21-22 (1993) (the rule in harassment cases, the trier of fact must determine if the employee was subjectively offended and that a reasonable person in the same ethnic/racial/sexual category would have found the allegedly harassing conduct offensive).

See also, Kathleen Peratis*, Why so Many Victims of Sexual Harassment Stay Silent, Still.* THE ATLANTIC*, available at www.theatlantic.com/sexes/archive/2013/01/why-so-many-victims-of-sexual-harassment-stay-silent-still/266820 (2013).*

[38] "A judge shall not by **words or conduct** manifest bias or prejudice, or engage in harassment, including but not limited to **bias,** prejudice, or harassment" on the basis of race gender, ethnicity, or other factors." *ABA Model Code of Judicial Conduct*. R. 2.3 (2011)(emphasis added).

But, there is no part of the code that addresses unconscious bias. Thus it is imperative that the fact finder understands the nature and reliability of different types of evidence in evaluating its credibility because of the deference given to their findings even at the appellate level. The necessity is heightened by the fact that 75 percent of individuals who were exonerated by DNA evidence were incarcerated, at least in part, due to an erroneous eyewitness identification.[39]

At the appellate level, deference is incongruous between IJs and ALJs.[40] On the one hand, the NLRB requires a "clear preponderances of all the relevant evidence to convince an appellate body that the ALJ was incorrect.[41] On the other hand, an EOIR credibility decision is easily overturned by the appellate body when an IJ fails to clearly explain reasons for the adverse credibility finding, and does not identify specific discrepancies on which the finding is made, AND does not provide an opportunity for the discrepancies to be addressed by the party it is considered a frivolous finding and remanded for reconsideration.[42] Further, deference towards ALJ observations of witnesses as the exclusive basis credibility is strongly discouraged. As such, the "sit and squirm" doctrine found primarily in Social Security Administration hearings in which benefit determinations are based on the ALJ's observations of the plaintiff is nearly obsolete.[43]

Controlling Jurors' Credibility Findings

There are several ways of educating a jury about how to determine what evidence is credible: jury instructions, cross-examination, and expert testimony. The latter two are also factors in judicial credibility determinations.[44]

Jury Instructions

Jury instructions are intended to assist jurors to make informed decisions based on the factors that may legitimately affect credibility determinations. In New Jersey, the

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[39] Jacob L. Zerkle, Note, *I Never Forget a Face: New Jersey Sets the Standard in Eyewitness Identification Reform*, 47 VAL. U. L. REV. 357 (Fall 2012).

[40] *See* REAL ID ACT.

[41] *Molina v. Astrue,* 674 F.3d 1104 (2012); *Turner v. Comm'r of Social Sec.*, 613 F.3d 1217, 1224 & n. 3 (9th Cir. 2010); *Univ. Camera Corp. v. NRLB,* 71 S.Ct. 456 (1951);*Did Bldg. Servs., Inc. v. NLRB,* 915 F.2d 490, 494 (9th Cir. 1990).

[42] *Chandi v. Gonzales*, 2007 WL 1112665 (9th Cir. 2007)

[44] Compare to ethical duties to avoid conscious discrimination and review standards forcing articulation of reasons for judicial credibility determinations.

Supreme Court recently mandated revisions of jury instructions concerning eyewitness identification to take scientific knowledge into account. [45] In Pennsylvania, however, the Supreme Court recently declined to allow expert testimony to explain a claim of "false confession," finding that the testimony would invade the province of the jury.[46]

Current Model Criminal Jury Instructions 1.7/3.9/

Model Civil Jury Instructions 1.11 – Witness Credibility

In deciding the facts, you may have to decide which testimony to believe and which not to believe. You may believe everything a witness says, or part of it, or none. You may take into account:

- The witness's opportunity and ability to see or hear or know the things testified to;
- The witness's memory;
- The witness's manner while testifying;
- The witness's interest in the outcome of the case, if any;
- the witness's bias or prejudice, if any;
- whether other evidence contradicted the witness's testimony;
- the reasonableness of the witness's testimony in light of all the evidence; and
- any other factors that bear on believability.

The weight of the evidence as to a fact does not necessarily depend on the number of witnesses who testify about it.

Comment: The Committee recommends that the jurors be given some guidelines for determining credibility at the beginning of the trial so that they will know what to look for when witnesses are testifying.

Comments to the 9th Circuit Model Jury Instructions states:

> *Since 1989 – the Committee has recommended against the giving of an eyewitness identification instruction because it believes that the general witness credibility instruction is sufficient. MANUAL OF MODEL CRIMINAL JURY INSTRUCTIONS FOR THE NINTH CIRCUIT, 4.13 (1989).*

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[45] *State v. Henderson*,27 A.3d 872 (N.J. 2012), *aff'd*, 77 A.3d 536 (N.J. 2013); *Compare Pennsylvania v. Walker*, No. 28 EAP 2011, 2014 WL 2208139 (Pa. May 28, 2014).

[46] *Pennsylvania v. Alicia,* No. 27 EAP 2012, 2014 WL 2208138 (Pa. May 28, 2014); *Pennsylvania v. Harrell*, 65 A.3d 420 (Pa. Sup Ct. 2013).

> *The Ninth Cir. has approved the giving of comprehensive eyewitness jury instruction where the district court has determined that proffered expert witness testimony regarding eye witness identification should be excluded. See United States v. Hicks, 103 F.3d 837, 847 (9th Cir. 1996), overruled on other grounds, United States v. W.R. Grace, 526 F.3d 499 (9th Cir. 2008)(the district court may exercise its discretion to exclude expert testimony if it finds that … the trier of fact ... [would] be better served through a comprehensive jury instruction."); United States v. Rincon, 28 F.3d 921, 925-26 (9th Cir. 1994).*

These instructions while seemingly comprehensive do not take into account implicit bias variables that can weigh on credibility of a witness. Some courts go further to elaborate on special factors that may affect eye witness identifications' credibility.

Model Criminal Jury Instructions 4.11 – Eye Witness Identification states:

> In deciding how much weight to give [eye witness identification] testimony, you may consider the various factors mentioned in these instructions concerning credibility of witnesses.
>
> In addition to those factors, you may also consider:
>
> - Capacity and opportunity of the eyewitness to observe the offender based upon the length of time for observation and the conditions at the time of observation, including lighting and distance;
> - Whether the identification was the product of the eyewitness's own recollection or was the result of subsequent influence or suggestiveness;
> - Any inconsistent identifications made by the eyewitness;
> - The witness's familiarity with the subject identified;
> - The strength of earlier and later identifications;
> - Lapses of time between the event and the identification [s]; and
> - The totality of the circumstances surrounding the eyewitness's identification

But are these rules adequate in view of scientific knowledge? *State v. Henderson* asserts that they are not.[47] The New Jersey Supreme Court found that the state jury

[47] *State v. Henderson,* 27 A.3d 872 (N.J. 2011) (describing in great detail the scientific research on how memory works and the variables that can influence how a potential eye-witness may store and recall memories). The Court called on the Criminal Practice Committee and Committee on Model Criminal Jury Charges to draft proposed revisions

instructions on eye witness identification denied due process because of a failure to include incontrovertible scientific research that several factors heavily influence such testimony[48], including:

- blind administration,
- pre-identification instructions with regard to a police line-up,
- line-up construction,
- feedback on selections,
- recording confidence,
- multiple viewings,
- show-ups,
- private actors,
- other identifications,
- stress,
- weapon focus,
- duration,
- distance and lighting,
- witness characteristics,
- characteristics of perpetrator,
- memory decay,
- race-bias,
- opportunity to view the criminal at the time of the crime,
- degree of attention,
- accuracy of prior description of the criminal,
- level of certainty demonstrated at the confrontation, and
- the time between the crime and the confrontation. [49]

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to the current charge on eyewitness identification to include the variables affecting memory that are supported by scientific experts).

[48] *Id.* at 910. "Even if only a small number of jurors do not appreciate an important, relevant concept, why not help them understand it better with appropriate jury [instructions]."

Studies cited presented by the parties on juror understanding of memory: Tanja Rapus Benton et al., *Eyewitness Memory is Still Not Common Sense: Comparing Jurors, Judges, and Law Enforcement to Eyewitness Experts*, 20 APPLIED COGNITIVE PSYCHOL. 115, 118 (2006); J. Don Read & Sarah L. Desmarias, *Expert Psychology Testimony on Eyewitness Identification: A Matter of Common Sense?*, EXPERT TESTIMONY ON THE PSYCHOLOGY OF EYEWITNESS IDENTIFICATIONS, at 115, 120-27 (2009).

[49] Variables:

As a result of *Henderson,* New Jersey is one of the first states to incorporate scientific findings into jury instructions on eye witness identification, focusing in particular on "The witness's opportunity to view and degree of attention – stress, duration, weapon focus, distance, lighting, intoxication, prior descriptions of perpetrator, confidence and accuracy do not correlate, time elapsed, cross racial effects, any suggestive procedure, law enforcement involvement in ID process.[50]

Supporters of comprehensive jury instructions suggest that instructions are easy for judges to administer, easily incorporated into trial efficiently, and retain the discretion of the judge to modify as needed while maintaining uniform and neutral administration.

Yet the drawbacks of traditional jury instructions include: the lack of uniformity and detail sufficient to explain the science behind eyewitness identification; instead the general instructions reinforce common myths about memory, reliability, and identification. A solution to this issue, recently adopted by a few state supreme courts like New Jersey, is mandating the use of science-based, detailed instructions in eyewitness identification trials that include the information on the factors that impact credibility and bias that an expert witness might identify in a trial.[51]

System Variables The Court considered the research and special master's findings on system variables, which are factors within the states control such as lineup procedures. The court reached the following conclusions.

Estimator Variables The court considered the research and special master's findings on estimator variables, which are factors related to the witness, perpetrator, and event.

[50] The instructions begin with the following cautions: "eyewitness identification must be scrutinized carefully. Human beings have the ability to recognize other people from past experiences and to identify them at a later time, but research has shown that there are risks of making mistaken identification. That research has focused on the nature of memory and the factors that affect the reliability of eyewitness identifications; human memory is not foolproof. Science reveals that human memory is not like a video recording that a witness need only replay to remember what happened. Memory is far more complex, consider observations and perceptions on which identification was based; the witness's ability to make those observations and perceive events, and the circumstances under which the identification was made, and that a witness's level of confidence, standing alone, may not be an indication of the reliability of the identification

[51] Jules Epstein, *Irreparable Misidentifications and Reliability: Reassessing the Threshold for Admissibility of Eyewitness Identification,* 58 VILL. L. REV. 69, 70 (2013); *State v. Henderson*, 27 A.3d 872,924 (N.J. 2011); *State v. Cabagbag*, 288 P.3d 1027, 1038-39 (Haw. 2012).

But, some argue that the jury instructions would become too lengthy and incomprehensible for a lay jury. However, visuals and simple language broken up in various stages of the trial would rectify this complaint. This step easily rectifies the common misconceptions. *Henderson*'s framework for jury instructions allows juries to understand the impact of police misconduct, reliable science on memory, and limitations of the jury.

Jury Instruction Alternatives

Expert Testimony

The alternative to jury instructions on credibility of eyewitness testimony is for the jury to be educated by experts on scientific studies regarding the reliability of eyewitness testimony by either party during trial.

Expert evidence is routinely excluded with the justification that the availability of cross-examination permitted counsel to address witness perception and memory, and the science behind memory was deemed to be within the juror's lay knowledge.[52] Many Courts have resisted expert testimony on the credibility of eyewitness testimony, defending the fact finders lay knowledge as sufficient when in conjunction with cross-examination and cross-examination.[53] Advocates against expert testimony further suggest that it very costly, consumes too much trial time, and thus prevents its use in

[52] Derek Simmonsen, *Note, Teach Your Jurors Well: Using Jury Instructions to Educate Jurors about Factors Affecting the Accuracy of Eyewitness Testimony*, 70 MD. L. REV. 1044 (2011); *Commonwealth v. Walker*, 2014 WL 2208139 (May 28, 2014).

[53] *Note, The Province of the Jurist: Judicial* Resistance to Expert Testimony on *Eyewitnesses as Institutional Rivalry*, 126 HARV. L. REV. 2381, 2400 (2013). *See also United States v. Rodriguez-Felix*, 450 F.3d 1117, 1125 (10th Cir. 2006); Jeremy C. Bucci, *Revisiting Expert Testimony on the Reliability of Eyewitness Identification: A Call for Determination of Whether it Offers Common Knowledge*, 7 SUFF. J. TR. & APP. ADVOC. 1, 1 (2002)(stating that "the vast majority of cases dealing with expert testimony on the reliability of eyewitness identification have excluded [it] largely because it does not offer assistance to the trier of fact in acquiring relevant knowledge that is outside the scope of common knowledge."). The author also posits that the resistance to expert testimony is really a way for the judicial system's attempt to preserve the authority of lawyers and judges and undermine the authority of other sciences.

many cases.[54] However, we know from numerous scientific studies that people are bad at distinguishing between accurate and inaccurate identifications.[55]

Science shows that expert testimony is more effective in educating jurors on some issues and jury instructions, like false confessions.[56] Jurors believed that they would be able to differentiate a true confession from a false confession by watching a videotape, but were less confident about making such a differentiation from an audio recording. A large majority of the sample reported that it would be helpful to hear expert testimony about interrogation techniques and reasons why a defendant might falsely confess to a crime.[57]

Cross Examination

The other traditional alternative to comprehensive jury instructions and expert witness testimony is cross-examination. While it brings to light extenuating factors that parties or witnesses are self-aware, it is unable to hone in on implicit bias.[58]

Ameliorating Implicit Bias

Science Searches for Neutrality

Everyone has implicit biases to some degree. This does not mean we will act in an inappropriate manner. It only means our first blink sends us certain information.

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[54] See Simmonsen at 1078.

[55] See Dan Simon, *In Doubt: The Psychology of the Criminal Justice*, 151 (2012).

[56] A recent study also showed that jury instructions in lieu of false confession expert testimony was not as effective in educating the jury. Dayna Gomes, et al., *Expert Testimony is More Effective than Jury Instructions in Increasing Sensitivity to Disputed Confession Evidence*, APLS Conference (Mar. 14, 2012) (All participants were presented with a trial summary that included a videotaped reenactment of an interrogation and then randomly assigned to one of three conditions: control, expert testimony and credibility instructions. The results showed a high rate of conviction that was only reduced when participants received expert testimony); *See also* Mark Costanzo , *Juror Beliefs about Police Interrogations, False Confessions, and Expert Testimony*, 7 J. EMPIRICAL L. STUDIES 231 (June 2010).

[57] Gomes et al.

[58] Simmonsen, 70 MD. L. REV. 1044 (2011); *Commonwealth v. Walker,* 2014 WL 2208139 (May 28, 2014); Jules Epstein, 58 VILL. L. REV. 69, 70 (2013).

Acknowledging and understanding implicit responses are critical to whose decisions must embody fairness and justice.[59]

Strategies to Reduce Bias include:

- Exposure to counter-typical associations;
- Juxtaposing ordinary people with counter-typical settings. Bernd Wittenbrink et al., *Spontaneous Prejudice in Context: Variability in Automatically Activated Attitudes*, 81 J. Personality & Soc. Psychol. 815, 818-19 (2001);
- Doubt one's objectivity -- Remind judges that they are human and fallible, notwithstanding their status, education, robe;
- Become educated about implicit social cognitions and be internally persuaded that genuine problem exists;
- Improve Conditions of Decision-making. – engage in effortful deliberative processing; avoid elevated emotional states when making decisions. Galen v. Bodenhausen et al., Happiness and Stereotypic Thinking in Social Judgment, 66 J. Personality & Soc. Psychol. 621 (1994);
- Increase statistical accountability for decisions;
- Increase individual screening of jurors and juror diversity;
- Educate the Jury about implicit biases;
- Encourage Category-Conscious Strategies – be conscious of social categories; and
- Engage in perspective shifting activities

Research shows hope for long-term reduction. In a long-term prejudice habit-breaking study, people who were concerned about discrimination or who reported using the strategies showed the greatest reductions. Reductions in implicit bias emerged by week 4 and persisted through week 8, and endured for at least another month. Both education and training were necessary to produce changes in implicit bias. Conversely, short-term interventions had to counteract a large accretion of associative learning, and thus were unlikely to produce enduring change in unconscious schematic systems.[60]

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[59] Malcolm Gladwell, *Blink: The Power of Thinking Without Thinking*, Task Force on Implicit Bias, American Bar Association (2005)

[60] Patricia G. Devine, et. al., *Long-term reduction in implicit race bias: A prejudice habit-breaking intervention*, 48 J. EXP. SOC. PSYCHOL. 1267 (Nov. 2012)

In implicit sex bias research on benevolent sexism, a study showed that providing information about the harm associated with benevolent sexism is far more important than providing information about its pervasiveness in reducing sexism. Learning about the pervasiveness of benevolent sexism had no effect on endorsing benevolent sexist beliefs and resulted in decreased endorsement of modern sexist beliefs only when combined with information about harm. However, there were far greater reductions in discriminatory behavior when information about pervasiveness and harm were presented together.[61] Another study that found implicit bias against women in the legal profession, also showed that individuals were often able to resist their implicit biases and make decisions in gender neutral ways.[62]

NCSC Recommendations for Judges & Courts[63]

The NCSC released a report on Implicit Bias that featured various strategies that judges and Courts can do to reduce the impact of implicit biases in judicial decisions.

The first step to combating implicit biases is to understand the risk factors, including emotional states like anger, disgust and even happiness. These emotions can exacerbate implicit bias in judgment of stigmatized groups even if the source of the emotion has nothing to do with the current situation or with the issue of social groups or stereotypes more broadly. Other risk factors to be aware of include ambiguity, distracted or pressured decision-making, the ready appearance of social categories, and lack of feedback on decisions. Another problem is falling prey to low effort cognitive processing. This means developing inferences and expectations about a person early on that guide subsequent information and evidence presented. It can also affect social interactions with the target that may inadvertently elicit stereotype-confirming behavior.

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[61] Benevolent sexism consists of endorsing complementary gender differentiation, heterosexual intimacy, and paternalism by characterizing women as being wonderfully weak, affectionate but naïve. Modern sexism rests on the belief that sexism is a thing of the past. Such attitudes can be harmful for women by legitimizing inequality by offering the promise of protection and undermining women's resistance against discrimination, and de-emphasizing task-related competencies. Julia C. Becker & Janet K. Swim, Reducing Endorsement of Benevolent and Modern Sexist Beliefs: Differential Effects of Addressing Harm Versus Pervasiveness of Benevolent Sexism, 43 Soc. Psychol. 127 (2012).

[62] Levinson & Young, 18 DUKE J. GENDER L & POL'Y at 1.

[63] Casey et al., *Helping Courts Address Implicit Bias: Strategies to Reduce Influence of Implicit Bias,* National Center for State Courts, www.ncsc.org/ibreport (2012).

Training sessions with meaningful experiential learning techniques are most effective in raising awareness of these risk factors. However, mandatory trainings or imposed pressure to comply with egalitarian standards may elicit hostility and resistance.

Other strategies to reduce implicit bias include seeking to identify and consciously acknowledge real group and individual differences. In fact, color blindness actually produces greater implicit bias than strategies that acknowledge race. Individual judges can seek out the company of other egalitarian individuals and also identify unique attributes of stigmatized groups through thinking exercises.

Judges and Courts should routinely check thought processes and decisions for bias. Judges can use decision support tools including note-taking, articulating reasoning process in making decisions, and use checklists or bench cards with "best practices." Courts should develop guidelines that offer concrete strategies to reduce bias and establish best practice protocols.

To reduce and remove unnecessary distractions or stress in decision processes, Judges and Courts should allow for more time on cases and conduct organizational reviews to determine whether and how bias exists in the court system.

Judges should identify sources of ambiguity in decision-making context and establish concrete standards before making judgments. Some Courts may require judges to specialize in certain areas of the law, but should also be cautioned from falling into "auto-pilot" thinking.

Lastly, implementing feedback mechanisms through peer-review, bench-bar committees, and sentencing roundtables can provide feedback on implicit bias and how to control it.

CONCLUSION

Awareness is a key to neutrality ... but not enough

It is important for all fact finders, jury or judge, to be cognizant of the environmental and human factors that impact the reliability of eyewitness identification testimony, especially because of the huge deference given in the appellate level to overturn improper decisions of fact.