When Speaking the Truth is Not Enough: The Implicit Association Test, A Necessary Supplement to Juror Voir Dire and A Model to Better Protect Capital Defendants From Implicit Racial Bias

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Introduction

“Americans share a common historical and cultural heritage in which racism has and still plays a dominant role...To the extent that this cultural belief system has influenced us all, we are all racists. We do not recognize the ways in which our cultural experience has influenced our beliefs about race or the occasions on which those beliefs affect our actions. In other words, a large part of the behavior that produces racial discrimination is influenced by unconscious racial motivation.”

- Charles R. Lawrence, III

Nearly 25 years after Professor Lawrence’s seminal article addressing the law’s treatment of unconscious racism, the Race Implicit Association Test (Race IAT) has arisen as a method which many conclude measures implicit racial bias in people. The test’s authors find that the presence of unconscious bias stands as a critical roadblock in this area because of the assumption that people behave in certain ways only as a result of their explicit conscious beliefs. As in all areas, implicit racial bias undoubtedly plays a role in the criminal justice system, especially the capital murder structure.

Although the Turner v. Murray standard serves as a method to better protect capital defendants from explicit juror bias at the sentencing phase of trial, more is needed to guard against implicit bias as jurors make a determination during the guilt phase of trial. Like juror questionnaires, the Implicit Association Test should be used to supplement the voir dire process in order to better identify underlying racial bias and address the importance of implicit bias to jurors who serve as decision-makers in capital trials.

Part I will briefly address why this paper focuses on African American capital defendants, both because of the degree to which Blacks are heavily entrenched in the capital system and because implicit racial bias studies focus on African Americans as the subjects of discrimination. It will also explain that, due to the changing times, implicit bias is a major concern that must be addressed within the capital system.

3 See id.
Part II will detail the Supreme Court’s holding in the *Turner* case in addition to its limitations. It will argue in favor of Justice White’s majority contention that inquiries about racial bias must be allowed at the sentencing phase of interracial murders. However, it will further argue that Justice Brennan’s dissenting view that racial biases of jurors will have an impact at all phases of the capital trial should be emphasized. It will further assert that courts should allow information about implicit racial bias to be sought on voir dire. Moreover, Part II will review some of the psychological and neuroscience studies that show the existence of bias at the unconscious level.

Part III will contend that, if jurors are unaware of their unconscious racial bias, they will not be able to report when asked about it. It will describe the voir dire process in general and how it applies to the capital murder realm, stressing the importance of eliminating bias due to the finality of death. It will explain the purposes of voir dire and present brief psychological as well as methodological critiques of the process. Finally, Part III will liken the Implicit Association Test to anonymous juror questionnaires as a method in which more information about juror bias can be discerned because of the ability to address sensitive issues such as race in a private manner. Thus, Part III will assert that the Implicit Association Test can be used to overcome some of the flaws of voir dire and better identify unconscious bias of which jurors are unaware.

Part IV will describe the Implicit Association Test as a means by which implicit racial bias can be identified and measured in test subjects. It will also detail overall trends, including the finding that most subjects, regardless of race, have some preference for European Americans as opposed to African Americans. It will review studies in which implicit association scores have been found to conflict with subjects’ explicit self-reports of their own levels of bias and discuss some of these self-report measures. It will relate this discrepancy between types of bias to voir dire in which jurors may openly express impartial feelings about racial groups yet possess bias at the subconscious level. Part IV will also examine studies that have found that predictive validity exists with the Implicit Association Test in as many participants who have revealed implicit bias on the test also manifest explicit bias. It will address various critiques of the test as a measure of bias including those that the Implicit Association Test assumes too quickly that a person’s performance on it is due to discrimination and that the IAT does not reveal actual racial attitudes.
Part V will outline the Implicit Association Test model for voir dire. In acknowledging that some of the criticisms of the IAT may be valid, Part V will emphasize that the Implicit Association Test should be used in a holistic way and not in a manner that will allow the disqualification of a venire member solely on the basis of IAT score. It will explain how the model could be applied in the practical setting of voir dire, addressing criticism that administering the IAT would be costly and inefficient. Finally, Part V will conclude, that in giving jurors the IAT, attorneys and the court can assure that jurors are made aware of implicit racial bias and how it can affect their judgment of capital defendants.

I

Background Statistics and Limitations

A. Racial Bias Throughout American History

America’s history is one in which racial discrimination against minority groups, especially African Americans, was long promoted by the government. Now, however, intolerant behaviors are prohibited by law in many regards. American society has now advanced to the point that overt discrimination against minorities is frowned upon as morally unacceptable. Despite the outward trend against racial prejudice, a significant amount of scholarship still seeks to assess the level of racial bias within the American people and to analyze how such implicit bigotry may become evident to the detriment of Blacks, especially as defendants in the criminal justice system. Due to the decrease in overt racial bias in American society, implicit bias is a subject that must be addressed.

Racial and ethnic minorities, especially African Americans, remain heavily entrenched in the current criminal justice system. Although African Americans comprise less than 13 percent of the United States population, they commit more than half of all murders. Scholarship reviewing the effect of race within the capital system became popularized with David Baldus’ review of capital murder sentences after the Supreme Court’s decision in Furman v. Georgia,

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5 See id.
6 See id.
7 See Banks, supra note 4, at 1177-8; see also Federal Bureau of Investigation, U.S. Department of Justice, Crime in the United States 2004, 298 tbl. 43 (2005).
which held that the risk of racial discrimination in the sentencing process was enough to invalidate a capital defendant’s sentence under the Eighth and Fourteenth Amendments as being cruel and unusual.\(^8\) Baldus and colleagues presented the findings to the Court as evidence in support of the petitioner in *McClesky v. Kemp*. McCleskey sought to challenge his conviction on Eighth Amendment grounds, and in doing so analyzed 68 post-*Furman* cases from the state of Georgia.\(^9\) Baldus calculated the likelihood of a capital defendant receiving a death sentence by assessing the facts of individual cases with statistical multiple regression and drawing conclusions.\(^10\) The authors identified several salient factors, which had the most significant influence on which post-*Furman* defendants were sentenced to death. These included the number of victims, any other serious contemporaneous offenses committed, and the existence of any aggravating factors.\(^11\) Moreover, the authors found that a prior felony conviction or record of violent crimes, the presence of any mitigating factors, and the existence of one or several accessory aggravating factors to have an influence on whether a defendant would receive the death penalty.\(^12\) In analyzing how these factors influenced the final sentence given by the jury, the authors found that the race of the victim mattered to a great degree. They concluded that there was a very low death-sentencing rate when victims were black.\(^13\) Consequently, the authors found that the death rate was much higher if a white victim was involved in the offense.\(^14\) “Georgia juries appear to tolerate greater levels of aggravation without imposing the death penalty in black victim cases; and, as compared with white victim cases, the level of aggravation in black victim cases must be substantially greater before the prosecutor will ever seek a death sentence,” the authors concluded.\(^15\) After Baldus presented his statistical findings, additional

\(^9\) See id.
\(^10\) See id. at 689.
\(^11\) See id. at 685-6.
\(^12\) See id.
\(^13\) See id. at 707.
\(^15\) See id. at 710.
studies were done reviewing trends in other states and at the federal level. Similar trends have been observed in more recent years.

### B. Racial Bias in the Federal System

At the federal level, racial disparities have also been well noted. Due to the frequency with which prosecutors seek the death penalty for African American defendants, it is necessary to have a mechanism for identifying and minimizing racial bias in juries. For example, when choosing to seek the death penalty as opposed to another sentence for capital murder, the race of the defendant has been shown to be an important factor in the decisions of United States attorneys. In 1995, Congress adopted the Violent Crime Control Act, which required the Department of Justice implement, a protocol that required all U.S. attorneys to submit all capital eligible cases to the Attorney General regardless of whether a U.S. attorney would be recommending a death sentence. From the period of 1995 through 2000, 80% of all federal capital cases were of minority defendants with nearly half of those being cases in which a Black defendant was involved. Moreover, after the Attorney General reviewed the cases submitted by the U.S. attorneys, 72% of cases in which the death penalty was sought had defendants of minority races, with 45% of those being sought against Black capital defendants.

Akin to Baldus’ findings, the race of the victim has been shown to be of importance at the federal level as well. From 1995-2000, U.S. attorneys were nearly twice as likely to recommend a death sentence for an African American defendant if the victim was non-Black in comparison to when the capital murder victim was Black. In contrast, U.S. attorneys were somewhat less likely to advocate a death sentence for a White capital defendant when the victim was a minority than when the victim was Caucasian. These numbers are especially telling

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17 See id.
18 See id.
19 See id.
20 See id.
21 See id.
23 See id.
24 See id.
because during that time period, three-quarters of all homicides were intraracial, meaning the defendant and victim was of the same racial group. 25 Only 26% of all homicides from that period involved a defendant of one race and at least one victim of another race or ethnicity. 26

Racial disparities are also apparent when reviewing the plea agreements from the 1995 through 2000 time period. During the span, White capital defendants were almost twice as likely to be given a plea by prosecutors that resulted in a death sentence being removed as a potential punishment than African American defendants. 27 Furthermore, the Attorney General entered into accepted plea agreements with 32% of federal capital defendants, with nearly half of those going to benefit White defendants and only a quarter entered on behalf of African American defendants. 28 As of July 2000, there were 19 people on federal death row and 79% of them were of a minority race or ethnicity. 29 Among that group, 68% of those awaiting capital punishment were Black yet only 21% were Caucasian. 30

C. Racial Bias Overall and the Focus of Laboratory Research

As of 2010, analogous patterns of racial disparity can be observed when viewing the capital system in the country as a whole. The race of the defendant is a vital characteristic to note as 35% of those executed since Furman have been Black capital defendants. 31 Again, as observed in other studies, the race of the victim matters to an even greater degree because, of those executed since Furman, 77% have been convicted of killing white victims while only 15% of those executed have been convicted of murdering African Americans. 32 In reviewing the overall figures for interracial murders, in which one defendant of a certain race was executed for murdering one or more victims of another race, there have been more than 16 times the number of African Americans executed after conviction for murdering a White victim than for Whites

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25 See id.
26 See id.
27 See id.
29 See id.
30 See id.
32 See id.
who have been convicted of murdering a Black victim. When assessing the current death row population as a whole at all levels, 41% are Black defendants while nearly an equal proportion are White defendants, again despite the difference in overall population disparity between the two races and because most homicides are still intraracial.

Perhaps due to the historical and current racial disparities, the psychological and neuroscience laboratory research focuses on Blacks as being the target of prejudice while utilizing a majority of white test subjects. Furthermore, the Race IAT compares subjects’ preferences of African Americans and European Americans only. Consequently, there are no comparable measures of bias against other racial minority groups, such as Latinos or Asian Americans. As a result of these trends and limitations of science research, this paper will focus on African American capital defendants.

II

*Turner and Its Limitations*

A. The Holding

On July 12, 1978, a Black man committed armed robbery of a jewelry store in Franklin, Virginia. He killed the White store owner during a battle with police. After being convicted of capital murder and sentenced to death, he challenged his conviction on Sixth Amendment grounds, arguing that the trial judge committed reversible error at voir dire by refusing the petitioner’s request to ask potential jurors about racial prejudice. Prior to the start of the voir dire, petitioner’s counsel submitted a list of questions to the judge so that the judge could inquire as to the potential jurors’ neutrality. The trial judge refused to allow an inquiry of the jurors’ ability to return a fair and impartial verdict based on the evidence alone and not be influenced by the fact that the murder was an interracial one.

33 *See id.*
34 *See id.; See also* Banks, *supra note 4,* at 1181.
35 *See Brian A. Nosek et al., Harvesting Implicit Group Attitudes and Beliefs*
36 *See Theodore Eisenberg & Sheri Lynn Johnson, Implicit Racial Attitudes of Death Penalty Lawyers, 53 DEPAUL L. REV. 1539, 1543 (2004).*
38 *See id.* at 30.
39 *See id.* at 29.
40 *See id.* at 30.
41 *See id.* at 30-31.
In reversing the Fourth Circuit’s ruling that the petitioner was not entitled to question potential jurors about racial bias, the Supreme Court held that denying the petitioner the ability to voir dire potential jurors on issues of racial prejudice invalidated his death sentence but not his capital murder conviction.\(^{42}\) In his opinion for the majority, Justice White concluded that the risk of racial prejudice may have affected the petitioner’s sentence to an unacceptable degree especially because such risk could have been easily minimized with an inquiry about racial prejudice by the judge.\(^{43}\) He argued that “[t]he risk of racial prejudice infecting a capital sentencing proceeding is especially serious in light of the complete finality of the death sentence.”\(^{44}\) The Court held that the denial of such questioning was in violation of the petitioner’s Sixth Amendment constitutional guarantee of a neutral jury and that all capital defendants who are accused of committing an interracial crime have a right to inform potential jurors of the such defendant’s race and inquire as to racial bias.\(^{45}\) Adding a caveat to the new rule, White argued that in order to invoke the right to question about racial bias, a defendant must specifically request to ask such questions.\(^{46}\) In vacating Turner’s sentence due to the inadequate voir dire, White held that the risk of racial prejudice was unacceptable due to three factors present in the case so much so that the risk of a capital defendant receiving an improper sentence was too high.\(^{47}\) He identified these as being that the petitioner was accused of a violent interracial crime, the large amount of discretion given to the jury at the death penalty hearing, and the seriousness of the sentence.\(^{48}\) However, in regard to the guilt phase of trial which took place before the jury rendered a death sentence appropriate for Turner, the Court held that the risk of racial prejudice affecting the jury’s decision was no higher than in other cases of noncapital crimes and therefore the risk was not great enough to give the defendant a right to ask about it at the guilt stage of trial.\(^{49}\)

In his dissenting opinion, Justice Powell argued that the record did not show racial prejudice was a part of the jurors’ deliberations, and that the fact that the case involved an interracial murder did not in itself create the substantial likelihood that racial bias would alter a

\(^{43}\) See id. at 36.
\(^{44}\) See id.
\(^{45}\) See id. at 36-37.
\(^{46}\) See id. at 37.
\(^{47}\) See id.
\(^{49}\) See id. at 38.
defendant’s sentence. Powell drew attention to the fact that the prosecutor argued that race was not an issue outside of the fact that the petitioner was black and the victim was white. In concluding that there was no evidence presented that the jury was tainted with racial prejudice, Powell concluded that “[t]he manner in which [the] petitioner was tried and sentenced, and particularly the jurors who fulfilled their civic duty to sit in his case, reflected not a trace of the racial prejudice that the Court’s new rule now presumes.”

While Justice White’s majority opinion that capital defendants have a right to ask jurors about racial bias in interracial cases is a step in the right direction, Justice Brennan’s dissenting view should be noted and applied to the overall voir dire process. Concurring with the judgment that the death sentence should be vacated but dissenting in part, Justice Brennan disagreed that the sentencing phase is fundamentally different from the guilt phase in that there is a higher risk that the verdict will be blemished with racial prejudice. In agreeing with the majority’s holding that the three factors existed in the case to make the sentence void and that judge’s must allow interracial defendants the ability to ask about racial prejudice at the sentencing phase is correct, Brennan went a step further, arguing that the defendant is stripped of his constitutional right to an impartial jury during the guilt phase of trial by the refusal to allow an inquiry about racial prejudice. Brennan maintained that the majority of the Court failed to explain why jurors’ biases should receive any less interest as to the guilt phase of trial and that the state of race relations of the country did not permit the court to presume a jury to be impartial to interracial crimes. Arguing against the majority’s holding that inquiries about racial bias are not a right of capital defendants at the guilt phase of trial, Brennan argued that the same jurors who may possess racial bias at sentencing will possess those same biases at the earlier guilt portion of the trial. In concluding that both the conviction and the sentence violated the defendants’ Sixth Amendment rights, Brennan argued:

Implicit in the Court’s judgment is the acknowledgment that there was a likelihood that the jury pronounced the death sentence acted, in part on the basis of racial prejudice. But the exact same jury convicted Turner. Does this court really mean to suggest that the constitutional entitlement to an impartial jury attaches only at the sentencing phase?

50 See id. at 47.
51 See id.
52 See id. at 53.
53 See id. at 38-39.
55 See id. at 39, 42.
56 See id. at 42.
Does the court really believe that racial biases are turned on and off in the course of one criminal prosecution?\textsuperscript{57}

Courts should not only adhere to Justice Brennan’s view in allowing questions addressing racial bias to be asked at both the guilt and sentencing phases of the capital trial; they should also allow information about implicit racial bias to be sought on voir dire of potential capital jurors. Before examining the voir dire process in more detail, it is important to note that the psychological and neuroscience areas have garnered research that racial bias may exist at the unconscious level, further supporting the need for the use of implicit bias measures as a necessary component to the voir dire process.

**B. Facial Feature Research**

There is evidence that criminal defendants who possess more Afrocentric facial features receive harsher sentences. In seeking to test this hypothesis, Irene V. Blair and colleagues defined Afrocentric features as those physical attributes understood as common to African Americans including traits of dark skin, wide noses, and full lips.\textsuperscript{58} The researchers selected a random sample of roughly 100 Black and 100 White inmates from the Florida Department of Corrections database and coded the prisoners’ criminal histories based on several factors.\textsuperscript{59} Factors that dictated the coding scheme consisted of the seriousness of the offense for which they had been convicted, the number of prior offences, and the current number of years the inmate was serving on his current sentence.\textsuperscript{60} Then, the authors utilized the coding histories to group inmates into categories with level one offenders committing the most minor crimes such as driving without license authorization, level five being mid level offenders who were convicted of offenses like selling cocaine, and level 10 being the most serious offenders who committed murder.\textsuperscript{61} The researchers gathered a group of college students, approximately 35 White students and 35 Black students, and asked them to code the inmates’ faces on a scale that had been created for the experiment.\textsuperscript{62} The facial coding scale ranged from 1, for an inmate having features that were not at all typical of Black Americans, to 9, for an inmate whose face had

\textsuperscript{57} See id. at 43-4.

\textsuperscript{58} See Irene V. Blair et al., *The Influence of Afrocentric Facial Features in Criminal Sentencing*, 15 PSYCHOL. SCI. 674, 674 (2004).

\textsuperscript{59} See id. at 675.

\textsuperscript{60} See id.

\textsuperscript{61} See id.

\textsuperscript{62} See id. at 676.
features that were very typical of Black Americans. After the students coded the faces using the scale, the authors compared them to the actual sentencing and file data from each inmate.

The researchers found that overall, the inmates’ criminal record accounted for 57% of the variation in the sentence lengths and that the race of the offender did not account for significance in sentencing. Blair and colleagues concluded that Afrocentric facial features were associated with the sentence length, finding that offenders who from the same racial group who possessed more Afrocentric features received longer sentences despite having equivalent criminal histories. They further argued that the findings of this study are consistent with other data showing that, in general, people use Afrocentric facial features to prejudge behaviors deemed to be stereotypical of Black Americans, in this case criminal tendencies.

C. Brain Wave Research

Moreover, research has been done to analyze the responses in the brain that occur when people view faces of the ingroup, members of their own race, as opposed to faces of the outgroup, members of another racial group. In examining this hypothesis, Allen J. Hart and associates sought to find if outgroup and ingroup trends would become visible if they were to measure the brain activity of various subjects. First, the researchers described the various social psychology research that supports their argument that arguing that participants of one race respond in different ways when viewing stimuli of faces from their own ingroup race in comparison to when they view outgroup faces of other races. Furthermore, the authors found preliminary support for the conclusion that participants are better able to categorize outgroup faces than faces of their own race. Hart and co researchers predicted that that the amygdala, a part of the brain which has a main role of memory and emotional response processing, would show heightened blood oxygen-level-dependent (BOLD) signal when measured by Functional Magnetic Resonance Imaging (fMRI) as subjects looked at outgroup face stimuli than when

63 See id.
64 See Irene V. Blair et al., The Influence of Afrocentric Facial Features in Criminal Sentencing, 15 PSYCHOL. SCI. 674, 676 (2004).
65 See id.
66 See id. at 677
67 See id.
69 See id.
70 See id.
viewing ingroup face stimuli. The researchers created the study to measure the fMRI responses to outgroup versus ingroup responses across both Black and White subjects in order to counterbalance for any sequential differences between the stimuli faces. Subjects included four white males, four white females, four black males, and four black females all between the ages of 20 and 35 years of age. Researchers used grayscale pictures of males and female faces from the Facial Recognition Technology (FERET) United States Army Research Laboratory database during two fMRI scans. The researchers asked participants to identify if the pictures were of males or females and told to make this determination by pressing a button on a keypad distributed to them. The order of the face stimuli was equalized across scans within the same subject and across the whole group of subjects. The first scan of each subject included 10 white faces and 10 black faces with both sets of faces being of equal gender composition. The first scan also included 10 fixation crosses, which, like the face stimuli, was shown for one second intervals. After the first scan, the participants were given a two minute break before the second scan began. Finally, upon leaving the fMRI scanner after the second scan, researchers told subjects to characterize what they had seen and to report any emotions or responses they had to the face stimuli during the experiment.

The researchers observed no notable difference upon analysis of scan one by itself or between both scans when examined as a whole. Furthermore, the test subjects reported no different emotional reactions when viewing outgroup faces as opposed to ingroup faces. Hart and colleagues reported that the most forceful holding they could draw would be that the responses in the amygdala are based on the race of the participant and how such participant perceives the race of the facial stimuli. They found that there was a significant difference

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71 See id. at 2352.
72 See id.
73 See id.
75 See id.
76 See id.
77 See id.
78 See id.
79 See id.
80 See id.
81 See id.
82 See id. at 2353.
83 See id.
shown in amygdala when subjects viewed outgroup faces versus when they viewed ingroup faces during the second scan and the authors concluded that this activity pattern was consistent with the amygdala becoming more familiar with the ingroup faces in comparison to the outgroup faces. In assessing the results of the study with other neuroimaging experiments, the authors found that other similar experiments found increased amygdala activity to occur when test subjects viewed unfamiliar faces than when viewing familiar faces.

Research of the this nature gives credence to the argument that unconscious bias, regardless of whether it stems from actual racial prejudice, is something that cannot be addressed by the standard self-reports of racial attitudes that occur during the voir dire process. Although implicit bias measures are unable to prove actual causation between unconscious bias and outward discrimination, the ability to gauge a person’s level of bias is of importance to the voir dire process. When used in a holistic manner, information gathered about jurors from voir dire questions and from other measures, such as the Implicit Association Test, can come closer to being able to predict behavior that will have an unfair impact on capital defendants. As a result, it is necessary to apply the psychological, neuroscience, and other hard science data to the legal arena of the capital murder system to create a more complete system for detecting bias on voir dire.

III
The Voir Dire Process and Critiques

A. The Need for Effective Voir Dire

If jurors are unaware of their unconscious bias, they will be unable to report it when asked on juror voir dire. The voir dire process is one in which attorneys and the court attempt to limit the amount of bias on the jury. Criticism of the criminal justice system for exhibiting racial bias has been levied in regard to nearly all aspects of it, although most of the sharpest critiques

84 See id. at 2353-2354.
85 See Allen J. Hart et al., Differential Response in the Human Amygdala to Racial Outgroups vs. Ingroup Face Stimuli, 11 NEUROREPORT 2351, 2353 (2004); See also William A. Cunningham et al., Separable Neural Components in the Processing of Black and White Faces, 15 PSYCHOL. SCI. 806 (2004) (Researchers found that that, in assessing amygdala activation and frontal cortex evaluation, activation in these was indicative of automatic group processing).
have been aimed at sentencing determinations.\footnote{See Blair, supra note 55, at 674.} Eliminating bias in a capital case is especially important given the finality of a death sentence. In \textit{Furman}, the Court noted that, “[t]he only explanation for the uniqueness of death is its extreme severity,” and the \textit{Turner} court echoed the \textit{Furman} court’s sentiments by arguing that the risk of racial prejudice influencing jurors’ decision-making was especially dangerous due to the completeness of death.\footnote{Furman v. Georgia, 408 U.S. 238, 287 (1972); see also Turner v. Murray, 476 U.S. 29, 36 (1986).}

With its decision in \textit{Duncan v. Louisiana}, the Supreme Court extended the Sixth Amendment right of trial by jury to the states and, at a general level, the voir dire process is the method by which most juries are selected in the country.\footnote{Duncan v. Louisiana, 391 U.S. 145, 149 (1968); see also James J. Gobert, Criminal Law: In Search of the Impartial Jury, 79 J. CRIM. L. & CRIMINOLOGY 269, 315 (1988).} Translated from the French, voir dire means “to see what is said” as well as “to speak the truth”.\footnote{See Jon M. Van Dyke, Jury Selection Procedures: Our Uncertain Commitment to Representative Panels 140 (1977).} Practically speaking, the primary purpose of juror voir dire is to identify bias in potential jurors that would prevent them from evaluating the facts of a particular case in an impartial manner.\footnote{See id. at 11.} Usually the voir dire process follows a similar pattern as a group of potential jurors is summoned to court, most commonly from a list of names collected from voter registration lists.\footnote{See id. at 10.} The panel of potential jurors questioned in the courtroom is called the juror venire, which is usually comprised of between 20 and 50 people who have been selected from an even greater pool of people summoned for jury duty.\footnote{See Van Dyke, supra note 86, at 119-126.}

Questions are asked during the various levels of screening of the venire. First, the court solicits excuses given by venire members, the typical reasons including a lack of adequate transportation to and from court, sickness, a necessity of serving as a caretaker of children, as well as financial difficulties.\footnote{See Sheri Lynn Johnson, Black Innocence and the White Jury, 83 Mich. L. Rev. 1611, 1670 (1985).} Also, inquiries are made as to the jurors’ qualifications including...
that they be 18 years of age or older, possess United States citizenship, and reside in the court
district for a minimum of one year.\textsuperscript{96} The court questions the venire members to ensure that they
have no physical or mental problems that would impair judgment, are literate and able to
understand the English language, and have no prior felony convictions.\textsuperscript{97}

Parties exercise their “for cause” strikes to remove a potential juror member who
identifies a bias in belief or opinion that would not allow the person to take a role in impartially
arriving at a verdict.\textsuperscript{98} The party seeking to strike the juror must explicitly state a ground in
order to properly exercise a “for cause” strike from the venire.\textsuperscript{99} The number of for cause strikes
is unlimited.\textsuperscript{100} Jurors may also be stricken for cause if they have a relationship to one of the
parties in the trial.\textsuperscript{101} For example, a prospective juror may be removed if he or she shares a
blood or marital relationship to the accused or the alleged victim.\textsuperscript{102} A venire member may also
be removed if he or she serves as a director, officer, or employee of the accused.\textsuperscript{103} Moreover, a
party may strike a juror if he or she has an interest in the outcome of the case, has a bias against
either party, or has gained information about the alleged offense from outside sources that would
impede impartiality in decision-making.\textsuperscript{104} Likewise, a party may strike a venire member if he
or she indicates that he or she may be unable to decide the outcome in a fair manner based only
on the law and evidence as presented in trial.\textsuperscript{105}

Unique to the for cause determination at the capital trial, parties must guarantee that those
who are able to sit on the jury are “life-qualified” and “death-qualified”.\textsuperscript{106} A venire person can
be considered “death-qualified” if he or she manifests no view or opinion that would
disproportionately affect his or her judgment in being a proponent or opponent of giving the
death penalty in the case at hand.\textsuperscript{107} This means that a person must be removed from the jury if
such person manifests in court that he or she would always impose the death sentence or would

\begin{footnotes}
\textsuperscript{96} See id. at 131.
\textsuperscript{97} See id.
\textsuperscript{98} See Baldus, supra note 88, at 12.
\textsuperscript{99} See id.
\textsuperscript{100} See See Jean Montoya, The Future of the Post-Batson Peremptory Challenge: Voir Dire by Questionnaire and the
\textsuperscript{101} V. A. R. SUP. CT. 3A:14
\textsuperscript{102} See id.
\textsuperscript{103} See id.
\textsuperscript{104} See id.
\textsuperscript{105} See id.
\textsuperscript{106} See Baldus, supra note 88, at 40.
\textsuperscript{107} See id.
\end{footnotes}
never impose the death sentence, despite what the facts of the case may be. In regard to being “life-qualified”, a juror must be stricken if one expresses that one would automatically vote for a death sentence after a finding of capital murder guilt. With its ruling in Witherspoon v. Illinois, the Supreme Court held that a venire member cannot be removed for cause if he or she expresses reservations about the death penalty at a general level and may be against it as a policy matter if the venire member can show that he or she would be able to set this opinion aside in order to consider the matter before the court impartially.

Voir dire also exists so that attorneys or the court can utilize peremptory challenges to strike a juror, not because they identify a bias that disqualifies the juror, but because the juror may reveal attitudes that one party may not find sympathetic to the overall goal. Peremptory challenges are declared to be a matter of right and although parties need not give a reason for exercising them, some limitations exist in that attorneys cannot strike potential jurors for gender or race-based reasons. The Supreme Court has barred attorneys from using peremptory challenges to completely strike jurors of one race and held that using race as a reason to exercise a peremptory strike against a juror is in violation of the Fourteenth Amendment’s Equal Protection Clause. In doing so, the Court has established that one’s race is not substantially related to one’s role as a juror. In extending its rationale, the Court has also held that it violates the Equal Protection Clause for a party to exercise a peremptory challenge to remove a potential juror based on gender.

Like the exercise of peremptory challenges at a general level, attorneys in capital cases have several factors to consider. Although the number of peremptory strikes varies in non-capital cases, parties are allowed the highest number of strikes in the capital trial system. Most states allow the same number of strikes for the prosecution and defense and of those states that do not give an equal number of peremptories, four allow the defense twice the number of

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110 See id. at 1216; Witherspoon v. Illinois, 39 U.S. 510 (1968).
111 See Baldus, supra note 88, at 11.
112 See id. at 10, 12.
113 See id. at 24, 30; see also Swain v. Alabama, 380 U.S. 202 (1965); see also Batson v. Kentucky, 476 U.S. 79 (1986).
strikes as the prosecution. In addition, peremptory challenges can be placed into four categories, all of which affect how a party will use them in a capital case. First, a party may exercise a peremptory strike if it believes that there is a potential for juror bias that did not rise to a degree high enough to classify as a for cause strike. For example a party may strike a venire member due to the member’s expressed skepticism about the death penalty even though such skepticism did not rise to the level of disqualification for cause. Second, lawyers in a capital case may judge the venire member’s attitude, appearance or demeanor throughout the voir dire process and use this to make inferences about how a person may serve on the jury panel. Third, attorneys may strike peremptorily based on how each party perceives how a member’s race or gender will influence his or her judgment due to feelings in regard to the alleged victim or capital defendant. Finally, parties use stereotypes to draw conclusions about jurors being pro-defendant or pro-prosecution based on demographic factors in order to strike them from the jury panel. If parties do not strike venire members, they are seated on the jury to decide the capital matter.

B. Critiques of Voir Dire

Several strong critiques have been levied against the voir dire process. Methodologically, critics argue that the manner in which voir dire is conducted does not encourage jurors to speak freely as it discourages potential jurors from making self-disclosures. Such discouragement can be exacerbated by the fact that, overall, courts have a lot of discretion in the process which can create for a less effective voir dire. As a result of the high level of discretion given, the procedure for voir dire varies between jurisdictions, which may not promote the methods that are most likely to promote the discovery of bias in potential jurors. Furthermore, courts may limit

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117 See id. at 13.
118 See Baldus, supra note 88, at 14.
119 See id.
120 See id.
121 See id.
122 See id.
123 See id. at 14-5.
124 See Baldus, supra note 88, at 11.
126 See Montoya, supra note 97, at 985.
127 See id.
the time or scope of the voir dire procedure and may even bar attorneys from asking questions to individual jurors outside of the larger venire panel.\footnote{128 See James J. Gobert, Criminal Law: In Search of the Impartial Jury, 79 J. CRIM. L. & CRIMINOLOGY 269, 316 (1988).}

Some psychological criticism stems from these methodological shortcomings. Many psychologists believe that it is unreasonable to rely on one’s own judgment of his or her level of prejudice and decades of research support the conclusion that people are weak in assessing their own levels of racism.\footnote{129 See Hans, supra note 123, at 44.} In methods where respondents are asked in survey form to assess their own level of prejudice, respondents tend to underestimate the actual level of bias they possess.\footnote{130 See id. at 44-5.} Psychologists have created methods of assessing a respondent’s level of prejudice without asking them directly. According to Valerie P. Hans “[w]hile it is difficult to imagine how these methods might be applied to courtroom jury selection, the more general point holds: Exclusive reliance on the juror’s admission of bias is bound to give only a partial picture of a jury panel’s views.”\footnote{131 See id. at 45} Flaws in the voir dire process should be addressed in order to fulfill the goal of removing bias from the jury.

C. Suggestions for More Effective Voir Dire

Psychologists have posed suggestions for improvements to the voir dire process as a method of better identifying bias and prejudice that may interfere with a just trial. One suggestion involves changing the manner in which questions are asked in order to make jurors more comfortable in answering truthfully.\footnote{132 See id. at 51.} Evidence suggests that the best method of discovering prejudice among venire members is by using broad, open-ended questioning of sequestered jurors, meaning that attorneys ask individual jurors questions outside the presence of others in the panel.\footnote{133 See id. at 52.} In addition to questioning jurors individually, jurors are more likely to divulge underlying prejudice about sensitive material when asked expansive rather than limited questions.\footnote{134 See id. at 52.
Moreover, the jury questionnaire has also been suggested as a means of identifying bias in potential jurors. Juror questionnaires pose additional questions that jurors complete before the normal in court voir dire process begins. Practically speaking, jury questionnaires can be mailed to potential jurors with the summons to attend court for jury duty, or attorneys can request that venire members complete them when they arrive. Perhaps most important with juror questionnaires, sufficient time must be allowed in order for attorneys to review the answers provided on the questionnaires by jurors. Several benefits have been identified as juror questionnaires can be used as a tool to “…[p]rovide valuable information on all jurors, not just those who are willing to raise their hands in court.” Likewise, there is the potential for increased information disclosure by potential jurors, especially in regard to sensitive topics. Jury questionnaires also decrease the chance that one juror’s prejudicial answer will taint the responses given by other venire panel members. Finally, due to the increase of information disclosed by jurors, jury questionnaires allow for better follow-up questions to be asked by attorneys on voir dire.

D. The Implicit Association Test as a Means to More Effective Voir Dire

Racial bias may be a sensitive topic for many jurors, and the jury questionnaire serves as a method in which jurors may feel more comfortable. The Implicit Association Test is similar. Like the jury questionnaires where venire members can answer questions about delicate material in private, the Implicit Association Test is also as confidential. The Implicit Association Test should be used as a mode to assist in overcoming the self-report flaws of the voir dire process and work to ascertain unconscious bias of which jurors are unaware.

IV

The Implicit Association Test – Its Supporters and Critics

136 See id.
137 See id.
138 See id.
139 See id.
140 See id.
142 See id.
A. Development and Early Experiments

The Implicit Association Test (IAT) has gained a large following as a method of measuring underlying, subconscious bias in those who take it. Before reviewing the research, it is necessary to differentiate between implicit and explicit bias as described by the test’s authors. According to the Anthony G. Greenwald and colleagues, a belief is an explicit one if a person consciously upholds it.\textsuperscript{143} A person has the conscious intent to act if they are knowledgeable that they are taking that action for a reason.\textsuperscript{144} Likewise, “[i]mplicit biases are discriminatory biases based on implicit attitudes or implicit stereotypes.”\textsuperscript{145} These implicit biases manifest themselves as behaviors or judgments that occur automatically without that person’s knowledge of such causation.\textsuperscript{146}

The IAT’s creators first reported the test in 1998 after conducting a series of laboratory experiments with it.\textsuperscript{147} In designing the test, the authors viewed the Implicit Association Test as a method by which underlying attitudes can be gauged without being obscured by self-presentation techniques used by subjects in which subjects may self-report a lack of bias in order to save face in social situations instead of identifying actual attitudes.\textsuperscript{148} The authors conducted two experiments with 13 White males and 19 White females from an introductory psychology course in an attempt to gauge the IAT’s ability to discern between explicit and implicit bias.\textsuperscript{149} The researchers argued the measure of the difference in perceived difficulty by the respondents would be the level of “implicit attitudinal difference between the target categories”.\textsuperscript{150} Greenwald and colleagues placed the subjects in a room with a desktop computer and all instructions were administered on the computer screen.\textsuperscript{151} In introducing the “target-concept” discrimination to participants for the first experiment, researchers used target concepts that they believed would be very similar across a variety of people.\textsuperscript{152} These included the use of names of

\textsuperscript{143} See Greenwald & Krieger, supra note 2, at 946.
\textsuperscript{144} See id.
\textsuperscript{145} See id. at 951.
\textsuperscript{146} See id.
\textsuperscript{148} See id. at 1465.
\textsuperscript{149} See id. at 1466.
\textsuperscript{150} See id.
\textsuperscript{151} See id.
\textsuperscript{152} See id.
flowers and musical instruments as positive concepts along with weapons and insects as negative concepts. The target concepts were grouped with pleasant and negative meaning words as “evaluative attributes” which the authors predicted that participants would perform better at matching words that were considered “evaluatively compatible,” such as flowers with pleasant-meaning words or weapons with unpleasant-meaning words. The researchers presented 150 words total including 25 insect names, 25 musical instrument names, 25 pleasant-meaning words, and 25 unpleasant-meaning words through out the course of the experiment.

Computers instructed participants to identify responses on the left side of the screen with his or her left forefinger by pressing the “A” key on the keyboard and select responses on the right side of the screen with his or her right forefinger by pressing the “5” key on the numeric keypad. Words appeared on the screen at random to be matched until all words from the list had been exhausted. Matching tasks appeared on the screen in trial blocks of 50 words as two IATs were given in a row, one featuring flower and insects with another involving musical instruments and weapons. The first task presented the initial target concepts and asked participants to differentiate between them by pressing keys. Second, the evaluative attributes appeared as participants were told to make similar distinctions. Thirdly, the original two tasks were combined and respondents received the same instructions. Then, respondents were told to pair target concepts in the reverse, for example, matching insects with flowers or weapons with musical instruments. Finally in the first IAT task, all categories were combined in the reverse, as participants were told to match, for example, flowers and musical instruments with unpleasant meaning words. With task one, each participant was given a practice round of the first two groupings and the final three groupings were scored. In contrast the second IAT

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154 See id.
155 See id.
156 See id.
157 See id. at 1467.
158 See id.
160 See id.
161 See id.
162 See id.
163 See id.
164 See id. at 1467.
measure given did not include the evaluative discrimination that comprised step two of the first IAT.\textsuperscript{165}

In measuring the respondents’ explicit bias, the researchers administered a paper and pencil questionnaire to participants after the computer tasks asking for reports of their feelings toward the target concepts of flowers, insects, musical instruments, and weapons.\textsuperscript{166} Participants completed a feeling thermometer, judging their “general level of warmth or coolness” to the targets with 0 being completely cold or very unfavorable toward the target and 99 being very favorable.\textsuperscript{167}

Overall, in assessing the results of the measures, the authors found that the procedural variables it observed had no significant affect on the results.\textsuperscript{168} These included the order of compatibility pairings requested, key assignment being left or right, the order in which the target concepts were presented, and the size of the category sets.\textsuperscript{169} Moreover, the authors reported that, as predicted, the participants held more positive associations toward flowers as opposed to insects and musical instruments in comparison with weapons as evidenced by their faster response time in making these matches.\textsuperscript{170} Also, there were correlations between the self-report measures and the IAT scores in completion of the instrument-weapon pairing and the flower-insect pairing, albeit weak correlations.\textsuperscript{171}

In another experiment by the IAT creators, the authors sought to measure implicit racial attitudes and how these differentiate between explicit self-reports of racial bias.\textsuperscript{172} Instead of the original target words, this IAT experiment featured a method of grouping names deemed most likely to be associated with Black Americans and names most-likely to be associated with White Americans as well as distinguishing between words with pleasant meanings and words with unpleasant meanings.\textsuperscript{173} Subjects included 14 White female and 12 White male students from an

\textsuperscript{166} See id. at 1467.
\textsuperscript{167} See id.
\textsuperscript{168} See id. at 1468.
\textsuperscript{169} See id.
\textsuperscript{170} See id.
\textsuperscript{172} See id. at 1473.
\textsuperscript{173} See id.
introductory psychology class.\textsuperscript{174} The execution of the computer experiment was in the same manner as the first experiment and after the computer portion of the test, subjects completed five race-related questionnaires in private booths.\textsuperscript{175} Subjects completed a feeling thermometer, a semantic differential measure, the Modern Racism Scale, a diversity scale, and a discrimination scale as self-reports.\textsuperscript{176}

As expected, the authors’ predictions surfaced as White subjects exhibited implicit bias in the White category versus Black category, showing faster response times in matching White names with pleasant words than in matching Black names with pleasant words.\textsuperscript{177} In comparing IAT measures with explicit self-reports, there was a divergence between the two types of measures, including a stronger relative preference for White in the IAT measure with the semantic differential or feeling thermometer.\textsuperscript{178} Still, the authors reported a weak correlation between implicit measures and the explicit attitude measures.\textsuperscript{179} A similar weak correlation could be observed when comparing the implicit measures and the racist belief measures of the Modern Racism Scale, discrimination scale, and diversity scale.\textsuperscript{180} The authors concluded that the IAT may definitely reveal implicit racial prejudice when participants deny bias on self-reports.\textsuperscript{181} In this case, most subjects self-reported no preference for either race yet all but one subject showed a preference for White on the Implicit Association Test.\textsuperscript{182} However, the authors also acknowledged that the faster reaction time of the subjects in regard to the White names may have been due to the fact that they were more familiar with them and may have liked them better as a result, although such a conclusion cannot be drawn from the first experiment.\textsuperscript{183}

In drawing overall conclusions about both experiments, the authors found that the order in which the combinations of words were presented had a significant effect on the results observed although this did not undermine the IAT’s ability to measure bias, instead changing the

\textsuperscript{174} See id.
\textsuperscript{175} See id.
\textsuperscript{176} See id.
\textsuperscript{178} See id. at 1475.
\textsuperscript{179} See id.
\textsuperscript{180} See id.
\textsuperscript{181} See id.
\textsuperscript{182} See id.
\textsuperscript{183} See id. at 1475-6.
neutral point away from zero. Nonetheless, the authors concluded that the compatibility-order effect decreased significantly when, in later experiments, the number of combined trials was lessened. The researchers posited that the effect could be removed altogether if the number of these tasks was decreased even more.

B. Immunity to Subject Self-Representation and Development of a Less Complex Version

Most important to use of the Implicit Association Test in the voir dire process is the author’s contentions that the test may be more immune to participants’ self-preservational forces. Greenwald and colleagues believe that the IAT may be more immune to participants’ desire to present themselves in non-prejudiced ways than are self-report measures due to the fact that test subjects were not reluctant to express feelings on topics such as flowers and insects in the first experiment. The authors found greater variation in explicit measures’ effect sizes in the racial bias experiment and believe this gives credence to the conclusion that subjects may have been “more responsive to self-presentational forces than can mask subjects’ attitudes.” As a whole, the authors held that, with the Implicit Association Test’s private and anonymous nature, subjects do not have to worry about self-representation to the public but only self-presentation. Researchers have made use of other forms of the Implicit Association test as a means of collecting data across a wider array of participants.

A paper version of the test exists as well and removes many of the complications that were present in the original computer experiment version. With the paper test, faces of Black and White people replace group name associations. Respondents are given short columns of faces and words and told to put the words in categories as fast as possible without making too many mistakes in 20 seconds. Like the original computer version, respondents are given two

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185 See id.
186 See id.
187 See id. at 1476.
188 See id.
189 See id.
191 See Eisenberg, supra note 33, at 1543.
192 See id.
practice tests in order to acclimate them to the categorization method. Instead of pressing keys, respondents are told to check on the left or right side of the word to denote something as good or bad. In the first practice test, respondents are told to pair flowers with words that have “good” meanings and insects with words that have “bad” meanings. The second practice test asks respondents to pair insects with good words and flowers with bad words. After completing the practice tests, respondents see four new categories including three “good” words, three “bad” words, five White faces, and five Black faces. For the scored rounds, participants are given short columns then told to check White or bad items on the left of the column and Black or bad items on the right of the columns. Respondents are told to match White with good words and Black with good words in another set. In scoring the test, “[t]he number of items correctly completed is then counted; it is not the number of items a particular subject can complete that is of significance, but the difference in the number of items he or she completes when White is paired with good and Black with bad, as contrasted with the number completed when Black is paired with good and White with bad.”

C. Project Implicit and Trends

Despite the existence of the paper test, much of the research revolves around a widespread version of the original computer test. More than 500,000 race IATs have been taken via the online Harvard website called Project Implicit. Like the paper test, many of the difficulties noted in the original computer test have been removed. Respondents are given a practice test before beginning the actual test where they are told to press keys on the left side of the computer for a picture of an African American [AA] that appears on the screen and keys on the right side of the keyboard when pictures of European Americans [EA] appear on the computer screen. Respondents are then instructed to press keys on the left and right sides of

193 See id.  
194 See id.  
195 See id.  
196 See id.  
197 See Eisenberg, supra note 33, at 1543.  
198 See id.  
199 See id. at 1544.  
200 See id. at 1545.  
201 See id. at 1543.  
202 See Greenwald & Krieger, supra note 2, at 952.  
203 See id.
the keyboard when to distinguish a few words with pleasant meanings from a few words with unpleasant meanings. After completing the practice tests, the respondents are informed that the actual tasks will begin and told that they will do each of the required tasks two times. In the exercises, all four categories, including the pleasant-meaning words, the unpleasant-meaning words, the African American faces, and the European American faces are presented. In one task, respondents are instructed to press a key on one side of the keyboard, for example the left, when he or she sees an African American face or a pleasant word and to do the opposite when he or she sees a European American face or an unpleasant word. In the other task, respondents are told to do the opposite by pairing European American faces with pleasant words and African American faces with words of unpleasant meaning. As per the tests creators’ usual method, the measures of racial attitudes are based on the relative speeds in which respondents complete these tasks.

Several trends have emerged based on an analysis of the Project Implicit data. Overall, most participants who have taken the Project Implicit test have expressed an unconscious preference for European Americans in comparison to African Americans. Moreover, traditionally disadvantaged group members tend to exhibit the same preferences as majority groups. In regard to racial bias, African Americans as a group exist as the only major exception to the pattern of preferences by minority racial groups as Blacks’ expressed preferences are divided, with roughly equal proportions expressing a preference for Black Americans and preference for White Americans. Researchers have found this to be a measure of near race neutrality of the African American group. Furthermore, although White Americans identify a preference for ingroup racial members, Black Americans as a whole show no preference in favor of ingroup racial members.

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204 See id.
205 See id.
206 See id.
207 See id.
208 See Greenwald & Krieger, supra note 2, at 952.
209 See id. at 952.
211 See id.
212 See id.
213 See Greenwald & Krieger, supra note 2, at 959.
214 See Jolls & Sunstein, supra note 205, at 971.
The creators analyzed more than 220,000 Race IATs taken at the demonstration website from 1998 through 2000 and found that attitudes matched the laboratory data. They noted that, overall, there was an automatic preference for White Americans over Black Americans. Participants at the website noted a similar preference for Whites on explicit self-report measures but the preference was to a smaller degree. Whites reported a preference for Whites on explicit measures while Blacks reported a stronger preference in the opposite direction in favor of Blacks. Although both groups showed a preference for White Americans, Whites exhibited a strong preference and Blacks expressed a weak preference.

In addition, when comparing self-report measures and IAT data from the past five years, African Americans’ IAT results showed a much higher preference for European Americans when self-report measures revealed strong favoritism toward Blacks. Likewise, data suggests that any non-Black racial minority group will probably include a statistically significant number of people who exhibit an apparent implicit preference for European Americans in comparison to African Americans.

D. The Implicit Association Test as a Predictor of Explicit Discrimination

Most recently, the Implicit Association Test creators analyzed the more than 730,000 Race IATs taken to date at the Project Implicit website. 27% of the respondents expressed a strong preference for European American over African American while 27% also showed a moderate preference for White over Black. Further, 16% of all respondents expressed a slight automatic preference for European Americans as 17% identified little to no automatic preference between either racial groups. A minority of respondents manifested any amount of automatic

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215 See Brian A. Nosek et al., Harvesting Implicit Group Attitudes and Beliefs From a Demonstration Web Site, 6 GROUP DYNAMICS THEORY, RESEARCH, & PRACTICE 101, 105 (2002).
216 See id.
217 See id.
218 See id.
219 See id.
220 See Greenwald & Krieger, supra note 2, at 956.
221 See id.
223 See id.
224 See id.
preference for African Americans with 6% showing a slight preference, 4% showing a moderate preference, and 2% exhibiting a strong preference.225

Additional laboratory research has been done utilizing the Implicit Association Test as a measure of predicting explicit discrimination. The first to test the link between implicit and explicit measures of bias as well as the most commonly cited was that of researchers Allen R. McConnell and Jill Leibold.226 The authors sought to discover if implicit bias identified on the Implicit Association Test could predict discrimination and find if one’s IAT score would correlate with explicit prejudice measures.227 The researchers predicted that participants who exhibited more negative feelings toward blacks on the Implicit Association Test would act in less congenial ways with a black experimenter.228 Participants included 41 college students from a psychology course and researchers told them that they would be participating in a “word perception” experiment.229 Each participant completed the experiment as individuals and a hidden camera recorded the students’ interactions with a white as well as a black female experimenter.230 First, participants met with a white female experimenter who told the students they would be completing quick tasks, asking them four unrelated questions and telling a scripted joke during the approximately three minute interaction.231 Before interacting with the Black experimenter, the students filled out various questionnaires in private about their views on Black people including a feeling thermometer for both Blacks and Whites as well as a corresponding semantic differential scales.232 After completing the self-reports, the student participants completed the “word perception” task on a computer which was actually the original names version of the Implicit Association Test.233 Afterward, the researchers created an unexpected interaction between the Black experimenter, who asked the students several

225 See id.
227 See id. at 436.
228 See id.
229 See id. at 436-7.
230 See id. at 437.
231 See id.
233 See id.
procedural questions about the test, told another scripted joke, and sought their permission for the researchers to use the videotaped footage.\textsuperscript{234}

In evaluating the interactions, the researchers scored students on body language and judges completed similar measures to rate the student’s behavior.\textsuperscript{235} Among the participants, the researchers found an overall significant level of racial bias in both the implicit and explicit gauges of prejudice.\textsuperscript{236} The researchers found a significant correlation between the implicit and explicit measures observed, concluding that higher IAT scores in favor of European Americans predicted increased positive explicit behaviors with the white experimenter including more smiling, more speaking, and fewer speech hesitations.\textsuperscript{237}

In identifying a lack of empirical studies to test implicit bias with a legal focus, Justin D. Levinson and colleagues developed an Implicit Association Test that combined race and guilt, predicting that people would associate Black with guilt at a higher rate than they would associate White with guilt.\textsuperscript{238} The authors used the test results from the IAT to predict how respondents would analyze vague trial evidence.\textsuperscript{239} The participants in the experiments including 67 jury eligible undergraduate students who mostly self-identified as European American or Asian American.\textsuperscript{240} Participants completed a robbery evaluation task first which respondents read as story of a robbery and then the researchers primed the respondents with crime scene photographs of criminals with light or dark skin.\textsuperscript{241} Priming is “the incidental activation of knowledge structures, such as trait concepts and stereotypes, by the current situational context.”\textsuperscript{242} After the priming exercise was complete, the researchers gave the respondents evidence and told the students to score it based on its tendency to show the defendant as guilty or not on a scale of 0 to 100 with 0 being definitely not guilty to 100 being definitely guilty.\textsuperscript{243} When the participants scored the evidence, Levinson and colleagues administered the Black/White/Guilty/Not Guilty Implicit Association Test, the traditional Black/White/Pleasant/Unpleasant Test, the Modern

\textsuperscript{234} See id. at 438.
\textsuperscript{235} See id.
\textsuperscript{236} See id.
\textsuperscript{237} See id. at 440.
\textsuperscript{238} See Justin D. Levinson et al., Guilty by Implicit Racial Bias: The Guilty/Not Guilty Implicit Association Test, OHIO ST. J. CRIM. L. 1, 3 (forthcoming 2010).
\textsuperscript{239} See id. at 3-4.
\textsuperscript{240} See id. at 15.
\textsuperscript{241} See id. at 16.
\textsuperscript{242} See id.
\textsuperscript{243} See id. at 16-17.
Racism Scale, and a set of feeling thermometers in random order.\textsuperscript{244} The researchers used Greenwald’s improved scoring algorithms and the results of the Guilty/Not Guilty test to suggest that, overall, respondents showed both a significant implicit bias between Black and guilt as well as between Black and unpleasantness.\textsuperscript{245} Scores on the Pleasant/Unpleasant IAT correlated with the respondents’ views on the Modern Racism Scale in that those who manifested greater implicit bias were also more likely to self-report greater explicit negative feelings toward Blacks.\textsuperscript{246} Moreover, the results of the feeling thermometers showed that people who reported warm feelings toward Blacks were more likely to exhibit implicit guilty bias against blacks on the Implicit Association Test.\textsuperscript{247} Stronger implicit associations between Black and guilty as well as stronger association scores on the traditional Implicit Association Test “predicted judgments of ambiguous evidence as more indicative of guilt.”\textsuperscript{248} Levinson and colleagues considered the results from the Guilty/Not Guilty Implicit Association Test in light of the presumption of innocence, which is a fundamental ideal in the criminal justice system.\textsuperscript{249}

\textbf{E. Critiques of the Implicit Association Test as a Measure of Predictive Validity}

Even though the research surrounding the predictive validity of the Implicit Association Test’s ability to predict explicit discriminatory behavior has been well-received, there is still a significant amount of criticism. Hal R. Arkes and Philip E. Tetlock are among the most cited critics of the test. Arkes and Tetlock argue that an inferential leap is made with the reaction time (RT) scoring system that is used to attribute implicit prejudice to those who take the Project Implicit test.\textsuperscript{250} The authors find that the response time may be a sign of shared cultural stereotypes instead of personal negative feelings toward a race, positing that a person can hold implicit prejudice and avoid explicit bias yet find that such a person may need to work carefully to prevent implicit feelings from manifesting themselves.\textsuperscript{251} In addition, Arkes and Tetlock disagree with the IAT researchers’ belief that people who possess unconscious prejudice also

\textsuperscript{244} See Justin D. Levinson et al., Guilty by Implicit Racial Bias: The Guilty/Not Guilty Implicit Association Test, OHIO ST. J. CRIM. L. 1, 15 (forthcoming 2010).
\textsuperscript{245} See id. at 17-18.
\textsuperscript{246} See id. at 18.
\textsuperscript{247} See id.
\textsuperscript{248} See id. at 13.
\textsuperscript{249} See id.
\textsuperscript{251} See id. at 258, 261.
actually own negative racial views of minorities.\textsuperscript{252} The authors believe that many researchers in the field nearly take it for granted that fellow scholars think that the Implicit Association Test reveals true prejudicial views of respondents.\textsuperscript{253} In adhering to an alternative cultural stereotype model, the authors believe that a person need not show prejudice on the IAT measure in order to give credence in any way to negative opinions revealed by the tests.\textsuperscript{254} Furthermore, the authors argue that there is not enough evidence to judge people as being prejudiced just because of the response-time arrangements that occur.\textsuperscript{255} In support of their position, Arkes and Tetlock note that other researchers have found that with IAT and priming research that participants are responding to cultural stereotypes with which they may or may not concur instead of respondents’ manifestation of their own attitudes.\textsuperscript{256} The authors also note that other researchers found, in the non-IAT context, that a respondent’s knowledge of a stereotype may nonetheless have an impact on one’s behavior even if he or she does not agree with it.\textsuperscript{257} “If we assume that the thousands of African Americans who took the Web-based IAT are not prejudiced against their own race, then these data strongly suggests that culturally stereotypic associations, which they do not endorse, are responsible for this result,” the authors assert.\textsuperscript{258} Arkes and Tetlock conclude that the cultural stereotype explanation can assist in accounting for the comparatively modest links found between implicit measures of prejudice and explicit discrimination.\textsuperscript{259} The authors also suggest that any “affective negativity” the Implicit Association Test purports to show may be due to emotions and understandings that are not necessarily of prejudiced origins.\textsuperscript{260} Arkes and Tetlock argue that the negative associations the test identifies could result from a variety of emotional-cognitive associations, such as anger, shame, or selfishness, which are not racial prejudice.\textsuperscript{261} Yet, the authors find that a respondent can be

\footnotesize
\begin{itemize}
\item \textsuperscript{252} See id. at 258.
\item \textsuperscript{253} See id. at 261
\item \textsuperscript{254} See id.
\item \textsuperscript{255} See id.
\item \textsuperscript{256} See Arkes & Tetlock, supra note 247, at 261.
\item \textsuperscript{257} See id.
\item \textsuperscript{258} See id. at 262.
\item \textsuperscript{259} See id.
\item \textsuperscript{260} See id. 258.
\item \textsuperscript{261} See id. at 265.
\end{itemize}
found to harbor implicit prejudice based on these emotions’ manifestations on the test. \(^{262}\) Others critique the Implicit Association test on similar grounds. \(^{263}\)

Multiple critiques have specifically been levied against McConnell and Leibold’s study. Like Arkes and Tetlock, Hart Blanton and colleagues argue that despite the perception that the predictive validity as it relates to the Implicit Association Test is well-established, the research is far more limited. \(^{264}\) Attesting that only a few studies have researched the Implicit Association Test and its ability to forecast behavior, the authors argue that, in fact, a little more than a dozen studies have reviewed the IAT in how it can predict discriminatory behavior. \(^{265}\) In conducting a reanalyses of the original data presented by such implicit association studies, the authors argue that the studies are really weak evidence for the predictive validity claim. \(^{266}\) Finally, Blanton and colleagues argue that the Implicit Association Test studies rely on small data sets, further undermining their support. \(^{267}\)

Further critiques include the assertion that utilizing physical behavior as a measure of explicit discrimination is flawed. \(^{268}\) R. Richard Banks and colleagues assert that some studies that compare the Implicit Association Test scores to physical cues measure things that can be ambiguous and subtle. \(^{269}\) Examples include eye contact, speech errors, and facial expressions, such as the measurement made in McConnell and Leibold’s study. \(^{270}\) Banks and associates argue that, “[w]hile such physical cues may be socially consequential, they are probably not what most people think of when they think of discriminatory behavior.” \(^{271}\) Moreover, the critics believe that the physical cues measured in such studies may be due to psychological states of mind, not discriminatory behavior. \(^{272}\) For example, the authors posit that a White subject’s lack of eye contact with a Black person could be due to prejudice but could also be due to more

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\(^{262}\) See Arkes & Tetlock, supra note 247, at 265.

\(^{263}\) See Banks, supra note 4, at 1169.

\(^{264}\) See Arkes & Tetlock, supra note 247, at 265-67.

\(^{265}\) See id. 267.

\(^{266}\) See id. 268.

\(^{267}\) See id. 269.

\(^{268}\) See Banks, supra note 4, at 1187-1188.

\(^{269}\) See id. at 1187.

\(^{270}\) See id.

\(^{271}\) See id. at 1187-1188.

\(^{272}\) See id. at 1188.
comfort with Whites or because he does not want to be judged by the Black person as a racist.\textsuperscript{273} The authors conclude that:

“A disinclination to make eye contact would reflect bias if prompted by group animus or negative stereotypes, but probably not if prompted by fear of oneself being negatively perceived or evaluated. And views might differ as to whether comfort with one’s own racial group is necessarily racist. If eye contact, speech errors, and facial expression can only be condemned as discriminatory behavior based on suppositions about the psychological state that produced them, then such ‘behaviors’ cannot be used as the basis for deciding whether the Race IAT measures bias.”\textsuperscript{274}

The research in support of the Implicit Association Test as a measure of implicit bias and the corresponding criticism assists in the development of the IAT model for voir dire, in addressing both theoretical and practical concerns that the model need approach.

V

The Implicit Association Test Model for Void Dire and Conclusions

A. The Proposed Model and Responses to Potential Criticism

The Implicit Association Test model for voir dire should be applied to the current capital system due to the role racial bias is able to play in interracial murder trials. First, the Implicit Association Test should be administered to venire members as part of the routine voir dire procedure. As the voir dire process is supposed to serve as a method for parties to remove bias from the jury, many critiques of the voir dire process’ ability to do this have been levied. The current self-report measures are incomplete because venire persons may not even know they have bias or may not feel comfortable identifying themselves as biased in the courtroom. Several psychologists argue that people are not strong in assessing their own level of prejudice and tend to underestimate the level of bias they actually possess.\textsuperscript{275} Moreover, many courts limit the time allowed for voir dire which can, in turn decrease the likelihood even more that jurors will speak freely.

Frederick’s suggestions of utilizing jury questionnaires and sequestered questioning as methods to make jurors more comfortable in order to increase the truthfulness in reporting bias supports the use of the Implicit Association Test in the process. Questionnaires and

\textsuperscript{273} See id.
\textsuperscript{274} See Banks, supra note 4, at 1188.
\textsuperscript{275} See Hans, supra note 121, at 44.
sequestration allow jurors to discuss sensitive topics in private. The IAT is also a measure of bias that can be completed in private, likely having the same effect of making jurors more comfortable and willing to self-identify bias. Greenwald and colleagues presented evidence that the IAT is immune from self-preservational forces because it is a private mechanism. As applied to the capital voir dire process, jurors will have less incentive to misrepresent the level of bias they possess in order to save face in front of others in the courtroom. Also as noted by the critics of voir dire, venire members may not be unaware that they possess unconscious racial bias. The IAT can serve as a method for identifying such bias in potential jurors.

The Implicit Association Test should be administered in the manner used in the laboratory. With Greenwald and colleagues’ original test, the test was administered before asking explicit measure questions about racial bias. In the proposed model, the test should be given after attorneys have asked questions unrelated to race but before they ask questions about racial bias. This will decrease the chance that potential jurors will be able to anticipate being judged on issues of racial bias before taking the test. This will also allow the attorneys to highlight the importance of implicit racial bias after the tests are given. No specific format need be followed as long as attorneys are given ample time to address unconscious bias. Such a discussion could take the form of a brief summary of the Turner case as well as the psychological studies. It is necessary that this be done in a colloquial way so not to overwhelm the jury with jargon. Attorneys can discuss racial bias with venire members as the tests are being graded and, afterward, use the results to sequester members and ask sensitive questions about racial bias outside of the presence of other members. With this scheme, attorneys will be able to use voir dire as an educational tool in creating fair juries.

Moreover, in the proposed model, jurors will not be given the computer-based version of the Implicit Association Test but only the pencil and paper version. The original test utilized by Greenwald would likely be too complex as jurors would be required to match and categorize 150 words. Subsequent computer tests decreased the complexity, which, in turn, increased the ease and ability with which many different types of people could take it. As potential jurors will be from many backgrounds, it is necessary to have a version of the test that is most accessible to a variety of people. The paper test is the best option because much of the complication of the original laboratory computer test has been removed.
Another benefit to utilizing the paper test is that the valid critiques about the use of a respondent’s reaction time to measure one’s implicit racial bias, such as those levied by Arkes and Tetlock, are inapplicable. With the paper test, potential jurors who are elderly, have slower physical abilities, or those who are not technologically inclined will be able to make use of it.

In addition, use of the paper test is cost-efficient. Many courts will undoubtedly be limited in terms of monetary resources and many will be unwilling to use extra money needed to administer the Implicit Association Test via computers during interracial capital crimes, especially due to the infrequency with which capital charges are brought. Since the proposed model makes use of the paper test only, potential critiques that it will not be economical will not be valid. Having venire members take the paper IATs will only require court personnel to print out a few sheets of paper per venire member, the cost of which will be nominal at most.

The proposed model will utilize the faces version of the test as opposed to the names version of the test. Greenwald and the other IAT creators found that the faster response time in matching ingroup names with positive attributes may have been due to White respondents’ familiarity with typical White names. While the laboratory data is lacking due to an overall lack of African American participants, it is likely that the same trend may be observed for Blacks as well. However, with the version of the IAT that requires participants to match words with pictures of Blacks and Whites, much of the familiarity critique is removed.

Another plus of the proposed model is that it is efficient in terms of time as well. As voir dire is frequently limited in several courts, time is of the essence. Administering the paper test takes about 10 minutes and will not take up unnecessary court time. Venire members can complete it at the same time as one another. A fairly quiet room is needed during the completion of the test and the judge can require those in the courtroom to be quiet for such a short period of time while the test is administered to the venire persons.

In response to the possible critiques that the Implicit Association Test must be conducted with trained experts, administering the IAT in the proposed model does not require any experts to be involved. The instructions are clear and no statistical analysis is necessary as would be with computer version of the test. Grading the paper tests simply requires the ability to count and many, if not all, neutral parties in the courtroom will be able to perform this basic skill. For example, a bailiff or court clerk could quickly grade the tests after the venire persons take them.
Looking to the future, more research will be needed to determine a standardized scheme for grading. For example, it will be necessary to determine if 12 correct answers is indicative of a moderate preference for European Americans whereas 14 is indicative of a strong preference for European Americans. Although the grading schemes utilized by laboratory and Project Implicit researchers were efficient, a more simplified version will be needed for the voir dire process. Having a standard grading system will allow for better ease in assessing the test and will make it less susceptible to manipulation.

It is also important to note that the Implicit Association Test is by no means a fool proof measure of implicit bias and that some of the criticisms about its predictive validity may be correct. Nonetheless, the Implicit Association Test will not replace the traditional voir dire process and will serve as a part of the holistic Implicit Association Model for voir dire. The model does not purport to be a means of proving causation through identifying underlying racial bias in venire members that will automatically manifest itself as overt discrimination against African American capital defendants. Nor does it seek to drastically alter the current voir dire procedure. The Implicit Association Model for voir dire seeks only to utilize the current level of implicit and explicit bias correlation that can be identified with the test as a supplement to the current capital structure.

As a whole, test results can be used in concurrence with jurors’ answers on voir dire to better assess jurors’ ability to serve as impartial decision-makers in capital trials. Attorneys from both parties, although most beneficial to the defense, can use the composite picture of venire members created by all of the information garnered to strike jurors who have expressed a level of bias likely to be unfair to the defendant. This will allow defense attorneys to have better bases for removing venire members from the panel with peremptory strikes. While the scores alone should not be used to remove individuals from capital juries, stronger trends are likely to develop as attorneys will be able to gain more information about venire members through the use of the Implicit Association Test. This is to the benefit of the overall fairness of the capital voir dire system.

B. Conclusion

Although the Turner v. Murray standard serves as a method to better protect capital defendants from explicit juror bias at the sentencing phase of trial, more is needed to guard
against implicit bias as jurors make a determination during the guilt phase of trial. Courts should allow attorneys to ask about racial bias at both the guilt and sentencing phase of trials involving interracial murders. The Implicit Association Test model for voir dire serves as a supplement to the current voir dire scheme and a method to better identify underlying racial bias and educate jurors about it. If the voir dire process is to serve as a method in which potential jurors are supposed to “speak the truth” about bias, it seems as if many of them may need a little help in doing so and the Implicit Association Test can serve as the assistance they need.