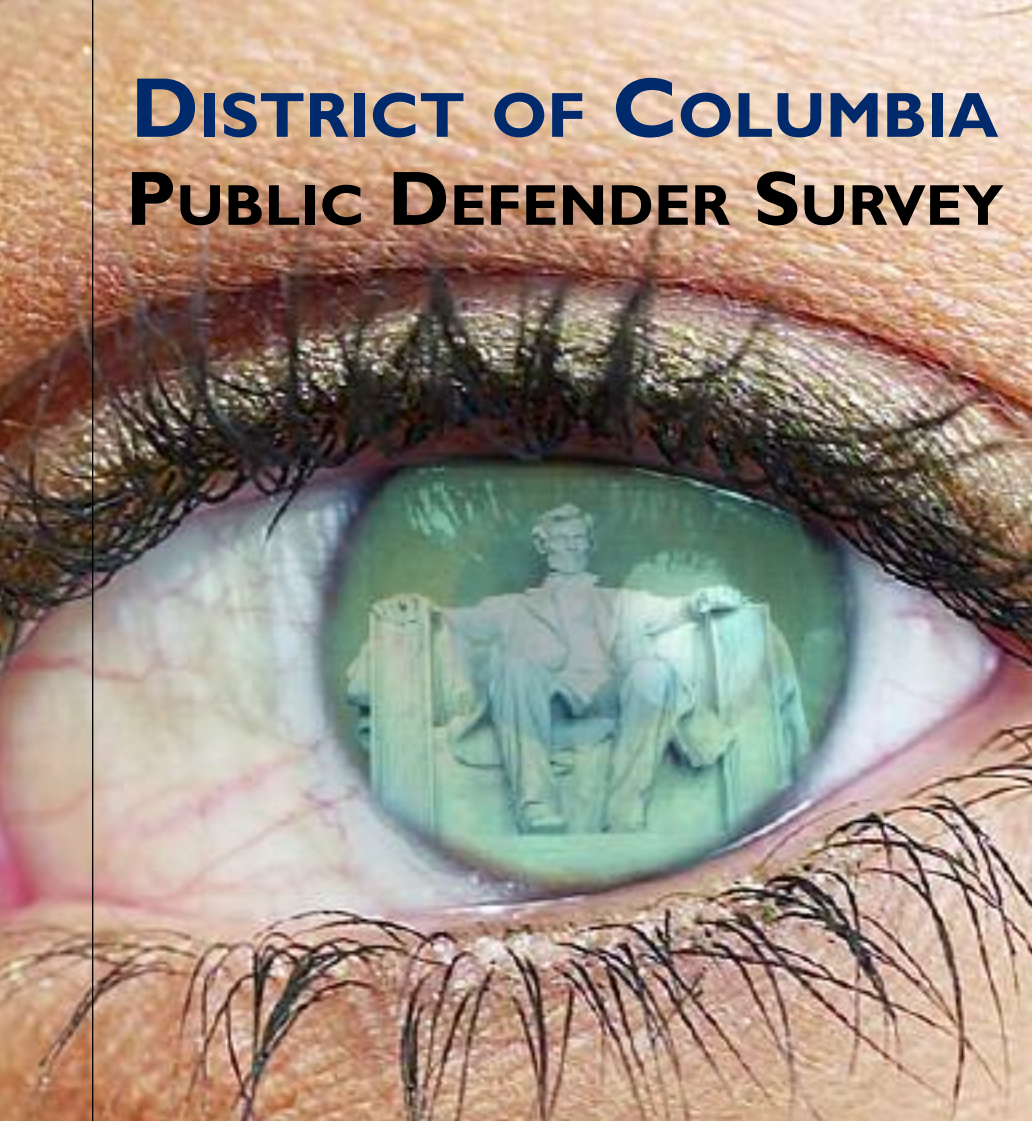


DISTRICT OF COLUMBIA PUBLIC DEFENDER SURVEY



BY TIMOTHY P. O'TOOLE *et al.*

What Do Jurors Understand About Eyewitness Reliability? Survey Says...

As in most jurisdictions, the District of Columbia criminal justice system repeatedly is called upon to assess the accuracy of witnesses' claims that they remember having seen someone committing a criminal offense. Yet, as noted by Lisa Steele in this past November's issue of *The Champion*, courts around the country have been "strongly resistant to allowing experts to testify about identification and memory."¹ Such courts generally insist that research with respect to the limitations of eyewitness testimony adds nothing to what is already within the common knowledge of jurors, effectively excluding academic research from criminal trials.² In doing so, courts regularly make unsubstantiated assertions that jurors understand, as a matter of common sense, how memory works and what its limitations are in the eyewitness identification context.

This article disproves such judicial assertions by presenting the results of a survey of potential jurors' understanding of eyewitness reliability — a powerful tool for defense attorneys anywhere who want to get expert testimony admitted.

Survey Design And General Findings

In the winter of 2004, lawyers from the Public Defender Service for the District of Columbia (PDS) decided to investigate whether jurors did, in fact, understand as a matter of common sense what factors make eyewitness identifications more or less reliable. The project was initiated by Edward J. Ungvarsky, PDS Special Counsel and

a Vice Chair of the NACDL Forensic Evidence Committee, and PDS' Special Litigation Division, a unit that works exclusively on systemic criminal justice issues such as forensic evidence issues and issues surrounding the suppression of exculpatory evidence by prosecutors. These PDS lawyers worked with Dr. Elizabeth Loftus³ and independent pollsters at Peter D. Hart Research Associates to craft questions designed to measure jurors' basic understanding of many of the factors that can distinguish a reliable eyewitness from an unreliable one.

The motivation behind this project was simple: If jurors really understand as a matter of common sense what makes some eyewitness identifications more reliable than others, it would not make sense for PDS to continue to devote resources toward educating already-informed jurors on this topic. On the other hand, if jurors actually have an incomplete understanding of the factors that affect eyewitness reliability, it would remain imperative to continue to seek to provide jurors with the tools necessary to ensure that they could intelligently evaluate the evidence presented to them by the government.

After the questions were crafted, Peter D. Hart firm researchers surveyed approximately 1,000 potential D.C. jurors to find out how they assessed the reliability of eyewitness identifications and what factors might contribute to making the testimony suspect in their eyes. The results demonstrate that judicial assertions concerning jurors' ability to appraise the efficacy of eyewitness identifications are verifiably wrong. In particular, the PDS survey shows as an empirical matter that significant numbers of jurors (often substantial majorities) misunderstand human memory and eyewitness reliability in the following ways:

- Jurors overestimate the ability of people to remember strangers' faces, incorrectly analogizing the process of remembering and recounting events to the act of replaying a video recording;

- Jurors do not understand that the involvement of a weapon tends to make an eyewitness' memory for details about an event less reliable;

- Jurors do not understand how severe stress reduces the ability of a witness to remember details about an incident and identify faces;

- Jurors do not understand that eyewitnesses have a strong tendency to overestimate the duration of a stressful event;

- Jurors do not understand the lack of any meaningful correlation between witness confidence at trial and witness accuracy;

- Jurors place unwarranted trust in the identification abilities of police officers;

- Jurors fail to recognize that eyewitnesses are better at identifying members of their own race and have difficulty identifying members of other races;

- Jurors exhibit substantial confusion about how proper police procedures can affect the accuracy of identifications.

In short, the PDS survey shows that jurors are currently assessing eyewitness reliability on the basis of demonstrably incorrect assumptions and misconceptions. It is no wonder, then, that jurors often believe mistaken eyewitnesses. Wrongful convictions will continue to result until judges begin to allow jurors to be given the information tools that will assist them in distinguishing a reliable identification from an unreliable one.

Specific Findings Of The Survey

Complete PDS survey results are now available in the NACDL-NLADA online forensic library⁴ and at the PDS Web site.⁵ The survey provides a critical tool for convincing courts to reassess their assumptions about what jurors understand about eyewitness reliability and, more importantly, what they do not. Since D.C. residents' demographics are similar to many urban areas, poll results should find application nationwide.⁶ Virtually every finding of the survey can be used to demonstrate that jurors do not, as a matter of common sense, understand much about how eyewitness memories work. However, to best use the survey, defense attorneys should educate themselves about the underlying research on eyewitness identification so that they can contrast juror intuitions in the survey with what current science holds.⁷ Consider how the following examples juxtaposing opinion and science might play with judges:

Example: Statements Of Confidence

One area of substantial juror confusion revealed by the survey involves the relationship between witness confidence and witness accuracy. Research has shown that witnesses who are highly confident in their identifications are only slightly more likely to be correct as compared to witnesses who are less sure of the identifications. In other words, the correlation between confidence and accuracy is weak.⁸

Eyewitness confidence is a product of personality and social factors in which the accuracy of memory recall plays a minor role. A witness' confidence signif-

icantly depends on how self-confident the witness is to begin with and what interactions the witness has had with others that confirm or undermine that confidence. For example, studies have shown that confidence is highly malleable and can be substantially increased by many post-event factors, including confirming feedback.⁹ Witness confidence can accordingly increase after an incident through the use of procedures that do not in any way enhance the accuracy of the original identification and may undermine it. The weak correlation between confidence and accuracy that may have existed immediately after the incident is thus often destroyed after a witness has had their confidence level raised or lowered through "contaminating" exposure to feedback.

Because the research seems completely counterintuitive — that is, without the research discussed above it would seem logical that a more certain witness would be a more accurate one — it would be surprising if jurors understood the relationship between confidence and accuracy as a matter of common sense. And, in fact, the PDS survey results demonstrate that they do not.

For example, one survey question (see figure) asked respondents to com-

pare the reliability of a witness who was "absolutely certain" of an identification with that of a witness who was not. A plurality of respondents, 31 percent, found the "absolutely certain" witness to be "much more reliable." Only 17 percent of the respondents correctly understood the slight correlation between confidence and accuracy. Thus, 83 percent of the respondents demonstrate a fundamental misunderstanding about the confidence-accuracy correlation.¹⁰

One eyewitness says he is absolutely certain of his identification of the criminal defendant, and another eyewitness does not say he is absolutely certain of his identification of the criminal defendant — would the first or second witness be much more reliable, slightly more reliable, or equally reliable?

First much more reliable — 31%
First slightly more reliable — 17%
Both equally reliable — 26%
Second slightly more reliable — 12%
Second much more reliable — 5%
Neither Reliable/Unsure — 9%

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These results were confirmed and contextualized by another survey question that asked whether it was true or false that an eyewitness' level of confidence was an "excellent indicator" of reliability. Roughly the same percentage of respondents thought this was true, 39 percent, as previously answered that an absolutely certain witness was much more or much less reliable, 36 percent. However, the survey's true and false questions were too blunt to provide more than a rough confirmation of the more detailed questions above — respondents had no way to express the right answer and were only tested whether they would reject the clearly wrong answer. For instance, the fact that 55 percent of respondents said it was false that confidence was an "excellent indicator" of reliability does not mean that all 55 percent understand that confidence is a weak or neutral indicator of accuracy. Many among those 55 percent likely thought confidence was an indicator of unreliability, as their answers to the more detailed question above suggests. Thus, the survey's true or false question responses confirm the responses to its more detailed question: a supermajority of

potential jurors misunderstand the true relationship between confidence and accuracy.

Weapon And Stress Effects

Similarly, potential D.C. jurors do not understand how specific factors like the presence of a weapon in a crime, or violent actions generally, decrease the reliability of eyewitness memories.

Numerous studies have shown that the involvement of a weapon in a crime decreases an eyewitness' ability to identify the user of the gun.¹¹ The problem is partly that the weapon draws viewers' attention away from the culprit's facial features to the gun. However, the presence of a weapon usually coincides with a violent situation and causes viewers stress. While the effects of violence and stress generally on eyewitness reliability continue to be debated, early studies indicating that high stress narrows the range of detail accurately retained by eyewitnesses appear to have been definitively confirmed by recent experiments with military interrogations.¹² Whether the hormonal or psychological effects of stress are to blame, the high stress of violent situations decreases eyewitness reliability.

Contrary to this research, 37 percent of the survey respondents actually thought the presence of a weapon would make a witness' memory for event details more reliable, while 33 percent of the respondents thought that the presence of a weapon either would have no effect or were not sure of what effect a weapon would have (see figure below). Only three out of ten potential jurors correctly understood that the presence of a weapon tends to make an eyewitness' memory for details less reliable.

Nearly identical results were found for juror understandings of how general violence effects eyewitness memories. Thirty-nine percent of the respondents actually thought that event violence would make a witness' memory for event details more reliable,¹³ while 31 percent of the respondents thought that event violence either would have no effect or were not sure of what effect event violence would have.

In situations in which _____, do you think this makes an eyewitness's memory about the details of the crime more reliable, less reliable, or has no effect on the eyewitness's memory about the details of the crime?

... a gun is involved in a crime ...
More reliable — 37%
Less reliable — 30%
No effect on reliability — 25%
Unsure — 8%

...a crime is violent...
More reliable — 39%
Less reliable — 30%
No effect on reliability — 22%
Unsure — 9%

An interesting wrinkle to this data is that when violent and gun crimes are reframed to potential jurors as events in which the eyewitness felt intense stress, their intuitions may be closer to reality. Only 14 percent of respondents said that it was true that an eyewitness under "high stress" at a crime scene will have "better recall" for details. About 80 percent disagreed such stress would give better recall and 6 percent were unsure. Compared to the 37 percent who thought presence of a gun would make memory more reliable, this 14 percent who think stress improves recall is significantly less. Again, this true or false question was a blunt instrument designed only to let respondents reject the wrong answer, so nothing can be

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read into the 80 percent of respondents who thought it false that “high stress” creates “better recall.”¹⁴ Nonetheless, based on these findings it seems defense attorneys might do well to cross eyewitnesses about the stress they experienced rather than the violence or danger of a crime scene.

Cross-Racial Accuracy

Race is another factor in eyewitness identification reliability about which the public’s intuitions are mistaken.

More than 20 years of research have demonstrated that witnesses are better able to identify details in and recognize faces of individuals in the witnesses’ own racial group.¹⁵ In fact, the science is so consistent and voluminous on this point that one state already has explicitly recognized the need for jury instructions on cross-racial identifications.¹⁶ Nonetheless, many jurisdictions pose barriers to letting experts describe the nature and extent of this kind of racial bias — a bias many are loathe to recognize.

Over 55 percent of potential jurors questioned in the PDS survey mistakenly thought that cross-racial identifications are as reliable or more reliable as same-race identifications when given a concrete scenario (see figure below).

One eyewitness is of the same race as the person being identified as the culprit, and another eyewitness is of a different race from the person being identified as the culprit — would the first or second witness be much more reliable, slightly more reliable, or equally reliable?

First much more reliable — 21%
First slightly more reliable — 15%
Both equally reliable — 48%
Second slightly more reliable — 4%
Second much more reliable — 3%
Neither Reliable/Unsure — 9%

However, because of the highly controversial nature of racial biases, survey participants may have been reticent to admit their decreased ability to recognize facial features of other races. A later true-false question asked respondents whether eyewitnesses are equally accurate when identifying someone of a different race compared to someone of the same race. Posed in this more abstract manner, only 27 percent agreed that accuracy is the same regardless of race — compared to the 48 percent in the more concrete hypothetical. Caveats

about the bluntness of true or false questions aside, this difference appears significant and warrants further research.

Warning Instruction

Perhaps the greatest value of the survey results is their potential to prompt reform of the identification procedures used by police in dealing with eyewitnesses. Its findings provide yet another reason why the need for such reform is urgent — jurors do not understand the importance of proper identification procedures and thus are unlikely to consider the presence or absence of such procedures in deciding whether a particular identification is a reliable one.

One area of particular concern involves the use of police instructions designed to reduce “guessing” by explicitly warning eyewitnesses that the culprit may or may not be present in the lineup. Research has demonstrated that a witness’ willingness to make a relative judgment about the culprit, in a lineup where the culprit is in fact absent, falls significantly when such an instruction is given.¹⁶ Moreover, research demonstrates that this instruction still results in the same number of accurate identifications when the culprit is actually present in the lineup. In other words — although it does not end the practice of relative judgments altogether — an instruction that the culprit “may or may not be in the lineup” reduces the willingness of a witness to use the relative judgment process without decreasing the number of accurate witness identifications.

Potential jurors, however, do not appear to understand the role or importance of such instructions at all (see figure). In fact, over half of the respondents in the PDS survey, 51 percent, thought that an identification at a live lineup would be more reliable if the eyewitness was not instructed about the culprit’s potential absence. An additional 21 percent either thought it did not matter whether such an instruction was given or were not sure. By contrast, only 28 percent of the respondents thought that a live lineup would be more reliable if the eyewitness was instructed that the actual culprit “may or may not be in the lineup.”

These numbers were virtually the same for photographic arrays, confirming that respondents understood the question but simply had wrong intuitions about the importance of a warning. An equal number, 51 percent, thought an identification from a photo array would be more reliable if the eye-

witness was not instructed about the culprit’s potential absence, while an additional 19 percent either thought it did not matter whether such an instruction was given or were not sure. Similarly, only 30 percent of the respondents correctly understood that an identification from a photo array is more reliable if the witness is instructed that the actual culprit “may or may not be in the photo array.”

Please tell me which one you think is more reliable, or whether you think both are equally reliable: Procedure A, a line-up where the eyewitness is instructed that the criminal suspect may or may not be included in the line-up or Procedure B, a line-up where the eyewitness is not instructed that the criminal suspect may or may not be included in the line-up?

Procedure A more reliable — 28%
Procedure B more reliable — 51%
Both equally reliable — 15%
Neither Reliable/Unsure — 6%

...for photo arrays...

Procedure A more reliable — 30%
Procedure B more reliable — 51%
Both equally reliable — 16%
Neither Reliable/Unsure — 3%

The survey thus demonstrates substantial juror confusion on the importance of lineup and photo array instructions; in fact, a substantial majority of jurors begins each trial with a fundamental misunderstanding about the manner in which such instructions can affect the accuracy of an identification. Many other police procedures (e.g., sequential and double blind viewing techniques) were tested in the survey and in nearly all cases the majority could not distinguish between procedures that promote and undermine eyewitness reliability.

Conclusions

The PDS survey demonstrates that a substantial number of jurors come to each trial with basic misunderstandings about the way memory works in general, and about specific factors that can affect the reliability of eyewitness identifications. The findings undermine previous judicial speculation about what jurors know as a “matter of common sense.” For example, significant numbers of jurors (often substantial majorities) do not understand the concepts of weapon focus, the effects of violence and stress,

and the lack of meaningful correlation between witness confidence at trial and the accuracy of eyewitness identification. Jurors also appear to overestimate the reliability of cross-racial identifications, and they have no meaningful understanding of how police procedures can affect the accuracy of an eyewitness identification.

Lawyers need to confront courts with these findings as quickly as possible in order to ensure the introduction of expert testimony to assist jurors in evaluating the reliability of eyewitness identifications. Advocates for reform also need to confront legislatures and police departments with these findings in order to prompt a change in identification procedures — especially since the judicial system will likely have difficulty winnowing out unreliable identifications once they make their way into the courtroom. Yet, to make the greatest use of these findings in any arena, lawyers need to learn enough about the academic research to be able to juxtapose uninformed opinion with empirical truths.

We are hopeful that the PDS survey will provide a critical first step in eliminating wrongful convictions by convincing courts and others to reassess their assumptions about what jurors understand about eyewitness reliability and, more importantly, what they do not.

Notes

1. Lisa Steele, *Trying Identification Cases: an Outline For Raising Eyewitness ID Issues*, THE CHAMPION, November 2004.

2. For an especially poignant case in which proffered expert testimony could have been used to allow jurors to assess the testimony of an eyewitness whom DNA evidence has now conclusively demonstrated was wrong, see *Cotton v. North Carolina*, 394 S.E. 456 (N.C. App. 1990) (affirming exclusion of expert witness on ground that the effects of stress, cross-racial factors, priming of memory and confidence malleability were commonly known to jurors).

3. A founder of the field of witness memories, Dr. Loftus is Distinguished Professor of Psychology & Social Behavior and Criminology, Law & Society at the University of California, Irvine. PDS extends its special thanks to Dr. Loftus for helping make this survey a reality. Dr. Loftus has also worked with PDS on a more detailed report on the survey soon to be published.

4. The NACDL-NLADA Partnership supports an excellent and ever-expanding forensics library that includes a section dedicated to eyewitness identifica-

tion. Criminal defense attorneys can download briefs and even request expert transcripts — many other resources are available to the general public — all at: www.nlada.org/Defender/forensics.

5. Eyewitness identification pleadings and other materials for use in systemic criminal defense litigation may be found at: <http://www.pdsdc.org/SpecialLitigation/index.asp>.

6. E.g., of the roughly 1000 potential jurors polled: 37 percent had a family income of less than \$40,000, 34 percent over \$70,000; 61 percent were black, 32 percent were white; 35 percent had only a high school diploma or less, 22 percent had a college degree, and 23 percent had done some post-graduate work.

7. Although this article cites to a few of the predominant research findings, for more information readers are highly recommended to check the NACDL-NLADA Forensics library (endnote 4, above), and the homepage of Dr. Gary Wells, another founder of the field of eyewitness research, at: <http://www.psychology.ias-tate.edu/faculty/gwells/homepage.htm>.

8. In some instances, studies have shown no meaningful correlation between confidence and accuracy. See, e.g. 60 ALB. L. REV. 389; 418, 79 Ky. L.J. 259, 276, citing Cutler, Penrod & Martens, *The Reliability of Eyewitness Identification*, 11 L. & HUM. BEHAV. 233, 234 (1987); Deffenbacher, *Eyewitness Accuracy and Confidence*, 4 L. & HUM. BEHAV. 243, 258 (1980).

9. Bradfield, Wells & Olson, *The Damaging Effect of Confirming Feedback on the Relation Between Eyewitness Certainty And Identification Accuracy*, 87 JOURNAL OF APPLIED PSYCHOLOGY 112 (2002).

10. Even if respondents who said that an identification of a confident witness is “equally reliable” as one by a less confident witness are treated as having correctly understood this phenomenon, 59 percent of the respondents — more than half of the jurors on any given jury — demonstrate a fundamental misunderstanding of the confidence accuracy relationship.

11. Steblay, *A meta-analytic review of the weapon focus effect*, LAW HUM. BEHAV. 16: 413-24 (1992).

12. A recent “field” study of the effects of severe stress on eyewitness reliability was done using data collected from the interrogations of U.S. military personnel undergoing “survival school training.” The results demonstrate that for more than half of the subjects eyewitness reliability was significantly better in low (vs. high) stress interrogations. Morgan, Hazlett, Doran, et al., *Accuracy of eyewitness memory for persons encountered during exposure*

to highly intense stress, 27 INTERNATIONAL JOURNAL OF LAW AND PSYCHIATRY, 265-279 (2004).

13. Researchers have postulated that lay people share a “common” but mistaken “belief that stress heightens a witness’ observation powers and ‘burns’ an image of the scene into the mind.” Major Thomas J. Feeney, *Expert Psychological Testimony On Credibility Issues*, 115 MIL. L. REV. at 146 (disproving validity of this common belief). In fact 46 percent of respondents to the PDS survey compared a traumatic event to a video recording where details are imprinted or burned into one’s brain.

14. E.g., respondents who thought stress has no effect on witness reliability would have correctly answered the true or false question, but misunderstood what empirically happens.

15. Meissner & Brigham, *Twenty years of investigating the own-race bias in memory for faces: a meta-analytic review*, PSYCHOL. PUBLIC POLICY LAW 7: 3-35 (2001).

16. See, e.g., *State v. Cromedy*, 727 A.2d 457 (NJ 1999). This case also was partly responsible for galvanizing statewide eyewitness identification procedure reform in New Jersey.

17. See, e.g., Brian L. Cutler & Steven D. Penrod, *MISTAKEN IDENTIFICATION: THE EYEWITNESS, PSYCHOLOGY, AND THE LAW* 101, 115-23 (1995) (concluding that “the research shows that biased instructions substantially increase the likelihood of false identifications”). ■

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