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# Studying Juror Expectations for Scientific Evidence: A New Model for Looking at the CSI Myth\*

Donald E. Shelton, Gregg Barak, & Young S. Kim

After a jury acquittal, the prosecutor explains the loss to the assembled media by saying that the jurors demanded too much of the government. They “wrongfully” acquitted the defendant only because the television show *Crime Scene Investigation* (“CSI”), or one of its many spin-offs and copycats, overly influenced them. According to the prosecutor, the jurors could not separate reality from fiction when they did not see the same kinds of advanced scientific evidence during the trial that is commonly depicted on their television screens. This fictional scenario is played out in many criminal cases. The news media quickly coined the term “CSI effect” to refer to these common prosecutorial anecdotal complaints, and it has been repeated and republished since CSI first aired nine years ago.<sup>1</sup> The popular media has almost universally accepted the prosecutor’s explanation for such jury acquittals as true and has helped to construct the CSI effect as a serious problem for the criminal justice system and a threat to the sanctity of the jury system.

The media-coined phrase “CSI effect” generally refers to the allegation that jurors who watch CSI, or similar television programs, expect and demand scientific forensic evidence as portrayed on these shows and, when such evidence is not produced, that jurors wrongfully acquit defendants. The genesis of the CSI effect on jury acquittals was anecdotal and subjective, based primarily on the opinions of prosecutors, judges, and other law enforcement officials.<sup>2</sup>

In 2006, we tested the validity of this popular notion and conducted the first empirical study of the alleged CSI effect on summoned jurors (the Washtenaw County Study). The study involved a survey of 1,027 summoned jurors in Washtenaw County, Michigan, about their television-watching habits, their expectations for scientific evidence in particular types of cases, and their likely verdicts in those particular cases when faced with scenarios featuring various types of evidence.<sup>3</sup> The data showed that jurors had increased expectations for scientific

evidence, and that in cases based on circumstantial evidence, jurors would be more likely to acquit a defendant if the government did not provide some form of scientific evidence. However, the Washtenaw County Study data also showed no significant correlation between those expectations and demands and whether the jurors watched CSI or similar programs on television.<sup>4</sup> We speculated that the cause of these heightened juror expectations and demands represents a broader change in our popular culture regarding the use of modern science and technology, buttressed by media portrayals of those scientific advances. We suggested that these evolving expectations and demands could more accurately be called a “tech effect.”<sup>5</sup>

Washtenaw County is a suburban county in southeast Michigan with a large university population. The demographics of the jurors showed a very high educational level consistent with that setting. We thought it important, therefore, to undertake a similar survey in a different jurisdiction. This follow-up study in 2009 (the Wayne County Study) surveyed jurors in Wayne County, which is centered in Detroit and is the most populous jurisdiction in Michigan. It is a metropolitan jurisdiction and the thirteenth most populous county in the nation. The racial, educational, and income demographics of the jurors in Wayne County are significantly different from the demographics of the jurors in Washtenaw County.

The Wayne County study also explored the suggestion of a broader tech effect rather than a television-based CSI effect, or even a more general effect of all media sources acting alone or possibly in combination, as the causative agent for the increased juror expectations and demands seen in the Washtenaw County study. Similarly, the juror questionnaire in the Wayne County study included additional questions that were meant to gauge the jurors’ technological knowledge, use of modern technology, interest in criminal justice news and development, assumptions about the availability of modern

## Footnotes

\* This article is an abridged and revised version of a report of the authors’ study originally published as *An Indirect-Effects Model of Mediated Adjudication: The CSI Myth, the Tech Effect, and Metropolitan Jurors’ Expectations for Scientific Evidence*, 12 VAND. J. ENT & TECH. L. 1 (2009). The authors appreciate the cooperation of Wayne County Circuit Judge Edward Ewell, Jr. and the staff of the Wayne County Circuit Court Jury Services Office, including Mary Kay Wimsatt, Ilene Marschner, Kari Komienky, Gina Jackson, and Audrey Mitchell.

1. See Donald E. Shelton, Young S. Kim & Gregg Barak, *A Study of Juror Expectations and Demands Concerning Scientific Evidence:*

*Does the “CSI Effect” Exist?*, 9 VAND. J. ENT. & TECH. L. 331, 335-36 (2006); Simon A. Cole and Rachel Dioso-Villa, *Investigating the “CSI Effect” Effect: Media and Litigation Crisis in Criminal Law*, 61 STAN. L. REV. 1335, 1339 (2009).

2. See Andrew P. Thomas, *The CSI Effect on Jurors and Judgments*, 115 YALE L.J. POCKET PART 70 (2006), <http://www.thepocketpart.org/2006/02/Thomas.html> (discussing the results of a survey of Maricopa County prosecutors regarding the CSI Effect); Shelton et al., *supra* note 1, at 335-36.

3. Shelton et al., *supra* note 1, at 337-43.

4. *Id.* at 367.

5. *Id.* at 364.

forensic science capabilities in their local police crime laboratories, and expectations about how and when those capabilities would be used.

### THE CSI EFFECT AND THE TECH EFFECT

To determine the existence of the CSI effect, it is necessary to separate and define the claimed effects, including the observable attitudes and actions of jurors with regard to scientific evidence, as well as the potential causes of that juror behavior—such as watching *CSI*-type programs on television. With respect to the claimed effects, the 2006 Washtenaw County study showed high levels of juror expectations and demands that the prosecutor would present scientific evidence. The more recent Wayne County study reinforced those observations and revealed even higher levels of juror expectations for scientific evidence in metropolitan jurors. However, as in the Washtenaw County study, the Wayne County study showed that most jurors still appeared to trust eyewitnesses, perhaps misguidedly, and will rely on factual testimony to find that the government has met its burden, even in the absence of scientific evidence. Thus, jurors are not necessarily prepared to acquit defendants due to a lack of scientific evidence alone. In cases where there are no eyewitnesses and the government relies on circumstantial evidence, the observation in Wayne County is consistent with the prior observation in Washtenaw County—jurors are much more likely to acquit if the government's case does not include some scientific evidence. However, it is not appropriate to characterize such acquittals as wrongful, as prosecutors are wont to do when they lose such cases.<sup>6</sup> Researchers have found no evidence of a higher acquittal rate that could be linked to the so-called CSI effect in state courts.<sup>7</sup> Thus, the CSI effect could be more appropriately called the “CSI myth.”

Data in the Washtenaw County and Wayne County studies have demonstrated high expectations and demands for scientific evidence among jurors. Other scholars and researchers have found similarly high expectations and regard for scientific evidence by jurors.<sup>8</sup> If these expectations are the effect, then what are the causes? Contrary to the prosecutor- and media-

promoted idea, the Washtenaw County study data actually ruled out watching *CSI* or similar programs and showed no causal relationship between jurors' expectations and demands for scientific evidence and television-watching habits.

Subsequently, we refined and extended the analysis of the original data pertaining to circumstantial evidence cases and eyewitness evidence cases, performing a more sophisticated multivariate regression and path analysis and controlling for individual juror characteristics. This new data analysis reinforced the original analysis.<sup>9</sup> Neither the Washtenaw County study data, nor any other studies involving jurors or potential jurors as subjects, have demonstrated a causal relationship between jury verdict behavior and watching *CSI* or other programs in that genre.<sup>10</sup> The Wayne County study reinforced that conclusion—there is no CSI effect on jury expectations for scientific evidence that influences their verdicts.

That conclusion, however, merely states the negative. If watching *CSI*-type television programs does not cause juries to acquit defendants in cases without scientific evidence, what could be the cause of the jurors' heightened expectations and demands for scientific evidence? The lack of a correlation between watching *CSI* and jurors' expectations for scientific evidence does not necessarily mean that watching a plethora of forensic science television shows does not play a role in the juror behavior we have documented. After the Washtenaw County study, we theorized that a “tech effect,” rather than the more specific CSI effect, causes these heightened expectations and demands. This tech effect means that the origins of heightened juror expectations about scientific evidence lie in the broader permeation of the changes in our popular culture brought about by the confluence of rapid advances in science and information technology and the increased use of crime stories as a vehicle to dramatize those advances.<sup>11</sup> The last 30 years have brought about such scientific discoveries and developments that some have justifiably called it a “technology rev-

**[T]he CSI effect could be more appropriately called the “CSI myth.”**

6. For example, the Vice-President of the National Association of District Attorneys declared, “Prosecutors are increasingly encountering the ‘CSI Effect’ among jurors even when they have strong cases, with eyewitnesses and confessions by defendants. If they don’t have forensic evidence there have been jurors who will not convict a defendant even if no such evidence was available, and the defendant was caught ‘red-handed.’ When these defendants are found ‘not guilty’ because of the ‘CSI Effect’ and a juror/jurors’ blind faith and belief in the truth of popular forensic crime shows—they are released back into society to continue in their life of crime.” Posting of Joshua K. Marquis (*The CSI Effect—Does It Really Exist?*) to NDAA Talking Justice, <http://communities.justicetalking.org/blogs/day17/archive/2007/10/16/csi-effect-does-it-really-exist.aspx> (Oct. 26, 2007, 15:50 EST) (last visited Nov. 2, 2009).

7. See Cole and Dioso-Villa, *supra* note 1 at 1356–64 (other acquittal rate research cited therein).

8. N. J. Schweitzer & Michael J. Saks, *The CSI Effect: Popular Fiction*

*About Forensic Science Affects the Public’s Expectations About Real Forensic Science*, 47 JURIMETRICS J. 357, 363 (2007); Janne A. Holmgren & Heather M. Pringle, *The CSI Effect and the Canadian Jury*, 69 RCMP GAZETTE, Issue No. 2, at 30, 30-31 (available at [www.rcmp-grc.gc.ca/gazette/archiv/vol69n2-eng.pdf](http://www.rcmp-grc.gc.ca/gazette/archiv/vol69n2-eng.pdf)).

9. Young S. Kim, Gregg Barak & Donald E. Shelton, *Examining the CSI-Effect in the Cases of Circumstantial Evidence and Eyewitness Testimony: Multivariate and Path Analyses*, 37 J. CRIM JUST. 452 (2009).

10. Cole and Dioso-Villa, *supra* note 1, at 1371; Kimberlianne Podlas, *The CSI Effect and Other Forensic Fictions*, 27 LOY. L.A. ENT. L. REV. 87, 125 (2007); Kimberlianne Podlas, “*The CSI Effect: Exposing the Media Myth*,” 16 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 429, 461 (2006); Shelton et al., *supra* note 1, at 367; Kiara Okita, *The CSI Effect: Examining CSI’s Effects upon Public Perceptions of Forensic Science* (Fall 2007) (unpublished M.A. thesis, University of Alberta) (on file with author).

11. Shelton et al., *supra* note 1, at 364.

**Recent research has offered some support for our tech effect hypothesis.**

olution.” In 2001, a Rand Corporation study concluded that “[b]eyond the agricultural and industrial revolutions of the past, a broad, multidisciplinary technology revolution is changing the world.”<sup>12</sup> These new technologies have been used to

create a further information revolution in the wide availability and quick transmission of information.<sup>13</sup> These developments in science and information are contemporaneous and interrelated. Advancements in science are fostered by the ability to exchange and transfer information, and scientific developments almost immediately become available not only to scientists but also to the entire world.

The information technology system quickly makes scientific discoveries and advancements part of our popular culture. The dissemination of technological developments is fast and widespread through various media, including the Internet, fiction and nonfiction television programs, film, and traditional news sources like television, newspapers, and magazines. Deoxyribonucleic acid (DNA) is a prime example, as it has gone from an abstract concept known only to the small biochemical community to a term that is included in children’s dictionaries.<sup>14</sup> Ordinary people know, or at least think they know, more about science and technology from what they have learned in the media than they ever learned in school.<sup>15</sup> These ordinary people are the jury system, and they come into court filled with years of information and preconceptions about sci-

ence in addition to their beliefs about the criminal adjudication process itself.<sup>16</sup>

Recent research has offered some support for our tech effect hypothesis.<sup>17</sup> Kiara Okita’s detailed regression analysis of 1,200 Canadian citizens’ responses to a random telephone survey “suggest[s] that the ‘tech effect’ posited by Shelton et al. may indeed relate to respondents having learned about forensic science from a larger body of media than *CSI*, one which also includes movies and other fictional television crime dramas,<sup>18</sup> and that this larger ‘effect’ may also be a function of respondents’ social location and particular life experiences.”<sup>19</sup> In the Wayne County study, we tested that tech effect theory and its underlying assumption that jurors’ expectations are a reflection of broader scientific and technological changes in our society.

### **SURVEY MATERIALS AND PROCEDURES**

Most of the survey questions administered in Wayne County<sup>20</sup> were the same questions that were used in the Washtenaw County study.<sup>21</sup> These questions gathered information about jurors’ television-watching habits,<sup>22</sup> their expectations about whether they would see various types of scientific and other evidence in several criminal trial scenarios,<sup>23</sup> their likely verdict in each of those scenarios depending on whether their expectations were met,<sup>24</sup> and a variety of demographic and victimization-related personal information. However, the Wayne County survey also asked jurors for information that was not requested as part of the Washtenaw County study. Jurors were asked how interested they were in information about crimes and trials and how often they

12. Philip S. Anton, Richard Silbergliitt & James Schneider, *The Global Technology Revolution: Bio/Nano/Materials Trends and Their Synergies with Information by 2015* (2001) (available at [http://www.rand.org/pubs/monograph\\_reports/2005/MR1307.pdf](http://www.rand.org/pubs/monograph_reports/2005/MR1307.pdf)); see also J.R. OKIN, *THE TECHNOLOGY REVOLUTION: THE NOT FOR DUMMIES GUIDE TO THE IMPACT, PERILS, AND PROMISE OF THE INTERNET* (2005); RICHARD SILBERGLITT ET AL., *THE GLOBAL TECHNOLOGY REVOLUTION 2020, IN DEPTH ANALYSES: BIO/NANO/MATERIALS/ INFORMATION TRENDS, DRIVERS, BARRIERS, AND SOCIAL IMPLICATIONS* (2006), (available at [http://www.rand.org/pubs/technical\\_reports/2006/RAND\\_TR303.pdf](http://www.rand.org/pubs/technical_reports/2006/RAND_TR303.pdf)).

13. See MICHAEL L. DERTOUZOS, *THE UNFINISHED REVOLUTION: HUMAN CENTERED COMPUTERS AND WHAT THEY CAN DO FOR US* (2001); Peter F. Drucker, *Beyond the Information Revolution*, *THE ATLANTIC*, Oct. 1999, at 47, 47-57 (available at <http://www.theatlantic.com/doc/199910/information-revolution>).

14. See “D is for DNA,” *LITTLE EXPLORERS ENGLISH PICTURE DICTIONARY*, <http://www.enchantedlearning.com/Disfor.shtml> (last visited Nov. 2, 2009).

15. See, e.g., GLENN REYNOLDS, *AN ARMY OF DAVIDS: HOW MARKETS AND TECHNOLOGY EMPOWER ORDINARY PEOPLE TO BEAT BIG MEDIA, BIG GOVERNMENT, AND OTHER GOLIATHS* (2007).

16. Shelton et al., *supra* note 1, at 362-64 (citations omitted).

17. Okita, *supra* note 10, at 75.

18. *Id.*

19. *Id.* Even more directly, Okita concludes by stating, “I agree with their assertions, and further the argument by contending that forensic science, and by virtue of its content, that *CSI*, may have become emblematic of both the rapid rate of scientific and tech-

nological change our society is continually undergoing, and of a desire for a social certainty of justice that continues to wane.” *Id.* at 106.

20. A copy of the survey is on file with the authors.

21. For a detailed description of the survey questions, see Shelton et al., *supra* note 1, at 340-43.

22. The television program list was revised to reflect current programming differences from the 2006 study.

23. Seven questions posed scenarios of the following types of cases and charges: every criminal case, murder or attempted murder, physical assault of any kind, rape or other criminal sexual conduct, breaking and entering, any theft case, and any crime involving a gun. For each scenario, jurors were asked whether they expected any of the following seven types of evidence: eyewitness testimony from the alleged victim, eyewitness testimony from at least one other witness, circumstantial evidence, scientific evidence of some kind, DNA evidence, fingerprint evidence, and ballistics or other firearms laboratory evidence. The choices for each type of evidence were “yes,” “no,” or “unsure.”

24. Prior to this section, jurors were provided with the reasonable-doubt and burden-of-proof jury instructions used in Michigan. They were then asked how likely they were to find a defendant guilty or not guilty based on certain types of evidence presented in the seven various types of cases. Responses were made on a five-value scale, including “I would find the defendant guilty,” “I would probably find the defendant guilty,” “I am not sure what I would do,” “I would probably find the defendant not guilty,” or “I would find the defendant not guilty.”

obtained criminal justice information from sources ranging from broadcast and print media to movies, television, and Internet sources. They were then asked what crime laboratory resources they thought were available to the local police and when they thought those laboratory resources should be used (i.e., in every criminal case, in every felony case, or only in serious crimes such as murder, rape, or robbery). In the demographics section, additional questions were added to determine whether jurors had various technology devices available to them, including a computer at work or home, a cell phone with or without text messaging or Internet access, cable or satellite television at home, and a global positioning system (GPS) or other electronic navigation device.

The survey was administered during a six-week period to all persons appearing for jury duty on Wednesdays at the facility where state felony trials are conducted in Detroit. A judge advised the jurors that it was for academic research purposes only, that their responses would be anonymous and would not impact their potential selection as jurors in any case, and that participation was entirely voluntary. Of the 1,257 persons appearing for jury duty, 1,219 completed valid surveys.

#### **THE EFFECT OF CSI-WATCHING ON METROPOLITAN JURORS' EXPECTATIONS FOR SCIENTIFIC EVIDENCE ARE HIGH**

Jurors' expectations that the prosecution would present scientific evidence were high in the Wayne County study, exceeding the level of expectations that the data demonstrated in the Washtenaw County study. In Wayne County, 58.3% of the potential jurors expected to see scientific evidence of some kind in every type of criminal case, compared to 46.3% of Washtenaw jurors in our 2006 study. A significant number of jurors (42.1%) expected to see DNA in every case. This was almost double the number of Washtenaw County jurors who reported two years earlier that they expected to see DNA in every case. Approximately half of Wayne County jurors expect to see fingerprint evidence (56.5%) and even ballistics evidence (49.1%) in every criminal case.

Expectations for scientific evidence varied according to the type of crime involved, but still remained very high overall. In murder or attempted murder cases, jurors' expectations for scientific evidence were consistently high as to each of the various scientific evidence categories. Over four out of five Wayne County jurors in a murder or attempted-murder case expect to be presented with scientific evidence of some kind (83.3%), fingerprint evidence (84.5%), and ballistics evidence (83.9%). Almost three-quarters (74.6%) of the Wayne County jurors expected to see DNA evidence in murder cases.<sup>25</sup> In rape cases, the expectations for scientific evidence generally, and DNA evidence in particular, were very high: 83% of the Wayne County jurors were looking for some kind of scientific evidence and 88.9% were expecting to see DNA evidence in a rape case, with only 3.1% saying they did not expect it and 4.8% being "unsure."<sup>26</sup>

25. These responses were considerably higher than those we previously recorded in Washtenaw County where, for example, the expectation for DNA in murder cases was 45.5%. Shelton et al.,

Even in cases involving less serious types of crimes, jurors' expectations for scientific evidence seemed strong. In assault cases not involving murder, attempted murder, or rape, jurors expected scientific evidence of some kind (55%), DNA evidence (48.6%), fingerprint evidence (54%), and ballistics (44.6%). In breaking-and-entering cases, the expectations were scientific evidence of some kind (56.8%), DNA evidence (31.9%), fingerprint evidence (83.8%), and ballistics (28.8%). In any theft case, the expectations were scientific evidence of some kind (45.4%), DNA evidence (24.2%), fingerprint evidence (83.8%), and ballistics evidence (28.8%). In general, the expectation for fingerprint evidence was high for every type of crime that was asked about in the survey.

**Almost three-quarters... of the Wayne County jurors expected to see DNA evidence in murder cases.**

#### **THE RELATIONSHIP OF CSI-WATCHING TO HIGH EXPECTATIONS FOR SCIENTIFIC EVIDENCE**

The data collected in the Washtenaw County study led to the conclusion that these high juror expectations for scientific evidence were unrelated to watching *CSI* or similar shows on television. The study of Wayne County jurors reinforced, and indeed strengthened, that conclusion. A comparison of the impact that watching *CSI* has on the evidentiary expectations of Wayne County and Washtenaw County showed that watching *CSI* affected Wayne County jurors less than it affected Washtenaw County jurors. Thus, the metropolitan jurors seemed to be less affected by the show than the suburban jurors.

Watching *CSI* made a difference in the expectations for 21 of the 49 categories of evidence in the Washtenaw County study, compared to only 13 of the 49 categories in the Wayne County study. For example, watching *CSI* made a significant difference in the expectations of Washtenaw County jurors for scientific evidence in murder and rape cases, while there was no such difference noted in Wayne County jurors. On the other hand, *CSI* watchers in Wayne County were more likely than those in Washtenaw County to expect DNA and fingerprint evidence in assault and breaking-and-entering cases.

#### **DEMANDS FOR SCIENTIFIC EVIDENCE AS A CONDITION OF FINDING GUILT**

If the jurors followed the jury instruction they were given about the presumption of innocence and the burden of proof, the most rational and legally correct response to questions about their probable verdict would be, "I am not sure what I would do," and almost half of the Wayne County jurors gave some form of that response. The other half, however, were willing to give their opinion as to their likely verdict both with and without scientific evidence. The results were similar to those recorded in the Washtenaw County study, and in most

*supra* note 1, at 349.

26. Compared to 72.6% of Washtenaw County jurors who expected to see DNA evidence in rape cases. *Id.*

**[J]urors' increased expectations and demands are more likely the result of the changes in our popular culture...**

cases the jurors still appeared to give considerable weight in the testimony of fact witnesses. In the “every criminal case” category, 28.7% would find the defendant guilty based on eyewitness testimony even without any scientific evidence, compared to 18.8% who said their probable

verdict would be “not guilty” in such a situation.<sup>27</sup> On the other hand, when the prosecution relies on circumstantial evidence, the failure to produce scientific evidence of some kind may be fatal to the government’s case, with 41% of jurors indicating a probable acquittal and only 9.2% indicating a probable guilty verdict.<sup>28</sup> The willingness to rely on factual witnesses did not extend to rape cases, where the jurors appeared to demand scientific evidence as a condition of finding guilt. When the prosecution relies on the rape complainant or other witnesses, but does not present scientific evidence of some kind, more jurors reported that they would find the defendant not guilty (27.1%) than guilty (21.1%). When the prosecutor does not present DNA evidence in a rape case, even more jurors surveyed indicated that they would be more likely to find the defendant not guilty, with 24.8% of the Wayne County jurors indicating a likely verdict of not guilty as opposed to 18.1% indicating a probable guilty verdict.

In other types of cases, a similar pattern of trusting factual witnesses, but demanding scientific evidence where the only other evidence is circumstantial, prevails in the Wayne County study. Even in murder cases where factual witnesses provide testimony, but there is no scientific evidence, 36.8% of the jurors indicated a probable guilty verdict as opposed to 18.2% who indicated a probable not-guilty verdict. In murder cases with factual witnesses, jurors were also less likely to demand DNA evidence, with 38.4% indicating a probable guilty verdict without DNA compared to 12.2% indicating a not-guilty verdict. When the prosecution relies on circumstantial evidence in a murder case and fails to introduce scientific evidence, however, those ratios reversed and 36.1% of the jurors indicated a probable not-guilty verdict as opposed to 12.2% indicating a probable guilty verdict.<sup>29</sup>

**THE RELATIONSHIP OF CSI-WATCHING TO JUROR DEMANDS FOR SCIENTIFIC EVIDENCE AS A REQUISITE FOR CONVICTION**

The more pertinent issue regarding any so-called CSI effect is whether jurors who watch *CSI* are more likely to demand that prosecutors present some scientific evidence before they will find a defendant guilty. The Washtenaw County study data

showed significant differences between *CSI*-watchers and non-*CSI*-watchers in only four of the thirteen different crime scenarios. The data therefore tended to disprove the existence of the *CSI* effect as described by prosecutorial anecdotes. The results in the urban Wayne County study were even more pronounced. In the same 13 scenarios, there were no significant differences in the propensity or reluctance of Wayne County jurors to find a defendant guilty based on whether they watched *CSI*-type programs.

**EXPLORING THE “TECH EFFECT”**

Having ruled out the *CSI* effect, one explanation for the increased expectations and demands for scientific evidence by jurors is the possibility of a broader tech effect. The tech effect suggests that jurors’ increased expectations and demands are more likely the result of the changes in our popular culture brought about by the confluence of rapid advances in science and information technology and the increased use of crime stories as a vehicle to dramatize those advances.<sup>30</sup>

After publication of the 2006 Washtenaw County study, Professor Cole described the article’s suggested tech effect as an interpretation of the *CSI* effect that asserts that “the cause of changes in juror behavior is not *CSI* but rather the real-life technological improvements in forensic science.”<sup>31</sup> Cole’s description is accurate but incomplete. In addition to the actual forensic-science improvements that have occurred, jurors’ perceptions of those increased forensic evidence capabilities, whether they exist in reality or not, also influence jurors’ behavior. Further, even if the forensic science techniques that the jurors envision actually exist, the local police or prosecutors may not always have access to those techniques for budgetary, policy, or other reasons. It is the perceptions of jurors about scientific evidence that represent the real tech effect with which the criminal justice system must come to grips. An important part of that coping process is the realization that the perceptions do not arise from a single television show or even a genre of television shows, but rather from far-reaching changes in our popular culture relating to science and technology.

The tech effect, as Professor Cole accurately concludes, is “not a societal problem.”<sup>32</sup> It is not a problem in the sense that it is inappropriate or wrongful, which is how prosecutors and the media portray the *CSI* effect. It is simply a cultural reality. In other words, the *CSI* effect should not be fodder for the “faulty criminal justice system frame” that sociologist Theodore Sasson describes as competing in the United States for both the public’s and the media’s attention.<sup>33</sup>

The “faulty system frame” argues that crime stems from criminal justice leniency and inefficiency as personified by inadequate DNA laboratories. The policy solutions have called for the criminal justice system to “get tough” and to emphasize

27. Compared to 21% and 16.2%, respectively, in the 2006 Washtenaw study. *Id.* at 354.

28. The Washtenaw results were very similar for circumstantial evidence cases, with guilty and not-guilty verdict percentages at 40.4% and 6.5%, respectively. *Id.*

29. Again, the Washtenaw County jurors followed a similar pattern of probable verdicts in murder cases. *Id.*

30. Shelton et al., *supra* note 1, at 362-65.

31. Cole and Dioso-Villa, *supra* note 1, at 1347 (discussing the “tech effect” proposed in the Washtenaw County study).

32. *Id.* at 1348 (emphasis added).

33. THEODORE SASSON, CRIME TALK: HOW CITIZENS CONSTRUCT A CRIME PROBLEM 13-17 (1995).

the administration of “crime control” rather than the administration of “due process.”<sup>34</sup> As Professor Ray Surette has elaborated, the faulty criminal justice system frame:

[H]olds that crime results from a lack of “law and order.” People commit crimes because they know that they can get away with them because the police are handcuffed by liberal judges. The prisons are revolving doors. The only way to ensure public safety is to increase the swiftness, certainty, and severity of punishment. Loopholes and technicalities that impede the apprehension and imprisonment of offenders must be eliminated, and funding for police, courts, and prisons must be increased. The faulty system frame is symbolically represented by the image of inmates passing through a revolving door of a prison.<sup>35</sup>

Hence, the rising expectations for scientific evidence are not necessarily due to a CSI effect or a faulty criminal justice system exacerbated by unrealistic juror expectations. On the contrary, rising expectations are grounded in a mediated tech effect, which has become part and parcel of our criminal justice culture. The only issue stemming from this reality is whether the criminal justice system will adapt.

#### **JUROR FAMILIARITY WITH TECHNOLOGY AND CRIMINAL JUSTICE**

Part of the basis for suggesting a tech effect is the idea that jurors have become increasingly technologically sophisticated. They use computers and consumer-level technological gadgets daily and therefore have an appreciation of the power of modern information technology. From this appreciation, jurors develop an expectation that the criminal justice system will exercise that power as well.<sup>36</sup>

The data collected from the Wayne County jurors are clearly reflective of survey data from the general population regarding access and usage of the Internet. Such usage may actually exceed some of the data about this issue obtained only a few years ago. For example, the 2006 Pew Internet Research Project revealed a continually expanding penetration of the Internet into the lives of adult Americans.<sup>37</sup> The Pew study data collected in early 2006 showed that 73% of American adults are Internet users, reflecting an increase from 66% in a Pew study just one year earlier.<sup>38</sup> Almost 87% of the surveyed

Wayne County jurors reported having a computer in their home, and over 40% even have Internet access through their cell phones. Given the increased rate of Internet usage documented in the Pew research, the 87% reflected in the Wayne County study data may simply be a continuation of the strong trends shown over the last several years.<sup>39</sup>

The surveyed jurors also reported using modern information appliances other than home or office computers. The Wayne County jurors’ reported cell-phone usage was consistent with the increased permeation of cell-phone usage that has occurred in the United States.<sup>40</sup> Over 92% of the surveyed jurors have cell phones, compared to the 73% nationally that the Pew Internet Project documented in 2006.<sup>41</sup> In addition, a 2009 Pew study reported that 49% of adult Americans consider their cell phones to be a necessity rather than a “luxury.”<sup>42</sup>

The Wayne County jurors help to demonstrate how technology and its associated gadgets have dramatically changed our culture. As the Pew Internet Project described it, people have an evolving relationship to cyberspace and all of its information:

[A]t a time when accessing online content no longer necessarily means walking over to a weighty beige box and taking a seat. Lighter laptop computers and high-speed networks (wireless and otherwise) give people the opportunity to get digital content on the go and do new things with computing—such as making a phone call. More versatile “smart devices” make emailing, phone calling, and downloading digital content possible with a very portable device. Pictures—photographs and videos—can be created and shared almost instantly, and Web cameras can put people in touch face-to-face over distance in real-time using broadband connections.<sup>43</sup>

While jurors seem to be technologically sophisticated, the question remains: do jurors expect that their local police have,

**[J]urors have become increasingly technologically sophisticated.**

34. RAY SURETTE, *MEDIA, CRIME, AND CRIMINAL JUSTICE: IMAGES, REALITIES, AND POLICIES* 39 (3d ed. 2007).

35. *Id.*

36. See Donald E. Shelton, *Twenty-First Century Forensic Science Challenges for Trial Judges in Criminal Cases: Where the “Polybutadiene” Meets the “Bitumen,”* 18 WIDNER L.J. 309, 376-77 (2009); Shelton et al., *supra* note 1, at 362-65. See generally Sarah Keturah Deutsch & Gray Cavender, *CSI and Forensic Realism*, 15 J. CRIM. JUST. & POPULAR CULTURE 34 (2008).

37. Mary Madden, *Internet Penetration and Impact* 3 (2006) (available at [http://www.pewinternet.org/~media/Files/Reports/2006/PIP\\_Internet\\_Impact.pdf](http://www.pewinternet.org/~media/Files/Reports/2006/PIP_Internet_Impact.pdf)).

38. *Id.* at 1.

39. *Id.* at 3.

40. A 2007 Harris survey found that almost nine in ten (89%) of

adults have a wireless or cell phone. This represents a significant increase from 77% in October–December 2006 when The Harris Poll conducted a similar analysis; almost eight in ten (79%) adults say that they have a landline phone. This is down slightly from 81% in 2006. *Cell Phone Usage Continues to Increase*, THE HARRIS POLL, April 4, 2008, [http://www.harrisinteractive.com/harris\\_poll/index.asp?PID=890](http://www.harrisinteractive.com/harris_poll/index.asp?PID=890) (last visited Nov. 2, 2009).

41. John B. Horrigan, *A Typology of Information and Communication Technology Users* 12 (2007) (available at [http://www.pewinternet.org/~media/Files/Reports/2007/PIP\\_ICT\\_Typology.pdf](http://www.pewinternet.org/~media/Files/Reports/2007/PIP_ICT_Typology.pdf)).

42. Paul Taylor et al., *Luxury or Necessity?: The Public Makes a U-Turn* 1 (2009) (available at <http://pewsocialtrends.org/assets/pdf/luxury-or-necessity-2009.pdf>).

43. Horrigan, *supra* note 41, at 1.

**Television is the clearly dominant medium for criminal justice information in popular culture...**

and will use, advanced technological equipment? The Wayne County survey asked jurors whether they thought the police in southeast Michigan have certain crime laboratory testing available to them, including fingerprint comparison, ballistics analysis, hair or fiber analysis, and DNA analysis.

They were also asked in what types of cases (every criminal case, every felony case, or only serious crimes like murder, rape, or robbery) they expected the local police to use those analytical technologies. Overwhelmingly, the Wayne County jurors believe that their local police have the technology available to perform fingerprint, ballistics, hair or fiber, and DNA analysis. For the most part, they expect the police to use that technology in every criminal case. Almost half (45.3%) of the jurors believe the police should use DNA analysis in every case.

The popularity of criminal justice programs and news among the jurors surveyed also demonstrates a curiosity in criminal justice issues. The Wayne County jurors indicated that they have a fairly high interest in getting news about crime and criminal trials. Almost 70% said they were either “very” or “somewhat” interested in getting news about crime and criminal trials. The jurors were asked what sources they use—including radio, newspapers, television, Internet, movies, magazines, and books—to get news about crime and criminal trials and how often they use each source.

The study data showed that print media are not the primary source for news about crime. Television is the clearly dominant medium for criminal justice information in popular culture, with 68.8% of jurors indicating that they used television to get such information regularly, if not often. Adding jurors who said that they used television at least on occasion for criminal justice information increases the cumulative percentage to 89.4%. Nearly half of the jurors in the Wayne County study reported using newspapers at least often and 34% of the jurors used the Internet at least often to get criminal justice information.

Although the jurors primarily rely on television for criminal justice information, that medium has recently undergone significant changes.<sup>44</sup> Access to a multitude of sources through cable television has dramatically changed the availability and

type of information, including information about crimes, trials, and the criminal justice system, in our popular culture. For example, in 2008, more people reported that they obtained their national news from cable television programs than from traditional television broadcast network news programs, although people continued to rely on local broadcast stations for local news.<sup>45</sup> Nationally, 89.1% of American households have cable or satellite television access, while only 10.9% have broadcast only.<sup>46</sup> Wayne County jurors reported information consistent with this trend, with over 85% indicating that they accessed television through cable or satellite.

Social scientists have long understood that characterizations of our criminal justice system in television and other media influence jurors’ perceptions of that system. An early explanation for this influence is the cultivation theory, which communications professor George Gerbner posited over 30 years ago.<sup>47</sup> He theorized that television programs develop or “cultivate” the public’s perceptions of societal reality.<sup>48</sup> Indeed, he regarded television as such a strong force in our society that he believed it was the source of our perceptions of reality. Gerbner found that one strong message that television communicated to the public was about crime and an overestimated likelihood of becoming a victim of crime in a “mean world.”<sup>49</sup>

Gerbner’s view of mediated images of crime and justice has been expanded and developed over the past 30 years.<sup>50</sup> The modern issue with the originally framed cultivation theory as a means of explaining the impact of popular culture on individual perceptions of reality is that it is technologically outdated.<sup>51</sup> Although television still may be the most important source of criminal justice information, it no longer has the overwhelming media impact on our culture today that it did when Gerbner made his observations. Thirty years has turned out to be an enormous amount of time technologically, as there are many more types of media sources now than there were then.

Television itself has changed dramatically, particularly in the variety of its offerings. But that does not necessarily mean that Gerbner’s conception of the impact of mass media, and television in particular, on perceptions of the criminal justice system is no longer valid. The range of sources of mass media in general, and the range of television sources in particular, is much broader and diverse than when Gerbner formulated the cultivation theory. But it remains true that portrayals of crime and criminal justice on television impact the perception of law and,

44. Taylor, *supra* note 42.

45. Press Release, Pew Research Ctr. for the People & the Press, *Audience Segments in a Changing News Environment* 13 (Aug. 17, 2008), available at <http://people-press.org/reports/pdf/444.pdf>.

46. *Household TV Trends Holding Steady: Nielsen’s Economic Study 2008*, NIELSEN, Feb. 24, 2009, [http://blog.nielsen.com/nielsenwire/media\\_entertainment/household-tv-trends-holding-steady-nielsen%E2%80%99s-economic-study-2008/](http://blog.nielsen.com/nielsenwire/media_entertainment/household-tv-trends-holding-steady-nielsen%E2%80%99s-economic-study-2008/) (last visited Nov. 22, 2009).

47. George Gerbner et al., *Growing Up with Television: Cultivation Processes*, in *MEDIA EFFECTS: ADVANCES IN THEORY AND RESEARCH*

43, 43-44 (Jennings Bryant & Dolf Zillmann eds., 2d ed. 2002); George Gerbner & Larry Gross, *Living with Television: The Violence Profile*, 26 J. COMM. 173, 191 (1976) (available at <http://www.unf.edu/~pharwood/courses/fall05/3075fall05/crimegerbner.pdf>).

48. Gerbner & Gross, *supra* note 47, at 191.

49. *Id.* at 193.

50. See KATHERINE MILLER, *COMMUNICATION THEORIES: PERSPECTIVES, PROCESSES, AND CONTEXTS* (2d ed. 2005).

51. See Podlas, *Exposing the Media Myth*, *supra* note 10.



in particular, criminal justice in our popular culture.<sup>52</sup> Today, however, the medium of television is one of many more conveyance mechanisms for the messages about crime and criminal justice we receive from the media. Television, while still a dominant media source, is no longer the monopolizing or overpowering media influence in our society that it once was.<sup>53</sup>

The diversity of sources does not necessarily mean that there is a concomitant diversity of themes about criminal justice that those media sources portray. The message that Gerbner saw in the media about crime and the “mean world” is still conveyed, but perhaps now by a much broader and diverse array of media sources, including a more diverse television medium itself. Cultivation theory is still valid, but this theory now applies to a greater diversity or multiplicity of media, including television. More importantly to the issue of demands for forensic evidence, the same limited “faulty justice” frame of Sasson still appears to be a dominant theme or message found in each and all of the media.

### **CORRELATING THE TECH EFFECT TO JUROR EXPECTATIONS FOR SCIENTIFIC EVIDENCE**

To examine the tech effect, the Wayne County study assumed that modern technological advances would be reflected in personal familiarity with the use of technology and in various popular media, including television, radio, newspaper, or the Internet. The study also assumed that those who use technology regularly or are frequently exposed to popular media would be more aware of the technological and scientific developments in forensics.

The jurors’ exposure to various criminal television programs showed significant relationships with their expectations for scientific evidence. In “every criminal case,” for example, jurors who frequently watched various criminal justice programs were significantly more likely to expect testimony from the victim, circumstantial evidence, some kind of scientific evidence, DNA, fingerprint, and ballistic evidence than jurors who watched less frequently. In general, exposure to criminal justice programs was significantly related to the expectations in many evidence and offense scenarios.

On the other hand, juror exposure to a variety of media sources showed considerably fewer significant relationships with expectations. In the “every criminal case” category, exposure to various media sources for information about recent crimes was significantly related to the expectations for testi-

mony from the victim, fingerprint, DNA, and ballistic evidence. Interestingly, however, media exposure showed no significant relationship with expectations for any evidence in the cases of physical assault, rape, or theft.

Juror access to and familiarity with technology devices produced findings in between the other two tech effect measures. This highest level of technology usage had a significant relationship to evidentiary expectations in almost half of the scenarios. The jurors with cell-phone Internet access, for example, had significant expectations that they would see some form of scientific evidence in six of the seven crime categories.

Jurors’ exposure to *CSI* or similar dramas showed a significant relationship with their expectation in less than a fourth of the scenarios. As the suburban Washtenaw County study showed in 2006, jurors who watched *CSI*-type dramas more frequently were more likely to expect traditional forms of evidence, such as victim testimony or eyewitness testimony, rather than just strictly scientific evidence, such as fingerprints, ballistics, or DNA. They expected victim testimony in every criminal case, every rape case, and every gun case, and victim testimony and eyewitness testimony in murder or attempted murder cases. They also expected DNA and fingerprint evidence in physical assault and theft cases.

### **“MASS MEDIATED EFFECTS” ON ATTITUDES, BEHAVIOR, AND EXPECTATIONS**

Most contemporary scholars of mass media accept the reality that both factual and fictional narratives help to shape the beliefs, values, thoughts, and actions of the general public.<sup>54</sup> In fact, the dominant perspective within contemporary studies of crime, justice, and mass media is that of social constructionism—the belief that reality is not only composed of objective and empirically based knowledge, but also of information that we acquire from social interactions of all kinds. Social constructionism has also adopted the commingling or blurring of factual and fictional accounts as fundamental in shaping what the public comes to regard as crime and justice.<sup>55</sup> When it comes to the mass media’s effects on the public’s notions of

**[B]oth factual and fictional narratives help to shape the beliefs... of the general public.**

52. See Steven D. Stark, *Perry Mason Meets Sonny Crockett: The History of Lawyers and the Police as Television Heroes*, 42 U. MIA MI L. REV. 229, 229-35 (1987); Steven Keslowitz, *Note, The Simpsons, 24, and the Law: How Homer Simpson and Jack Bauer Influence Congressional Lawmaking and Judicial Reasoning*, 29 CARDOZO L. REV. 2787, 2787-98 (2007).

53. See John Dimmick, Yan Chen & Zhan Li, *Competition Between the Internet and Traditional News Media: The Gratification-Opportunities Niche Dimension*, 17 J. MEDIA ECON. 19, 27 (2004) (“[T]he Internet has a competitive displacement effect on traditional media in the daily news domain with the largest displacements occurring for television and newspapers.”); Press Release, Pew Research Ctr. for the People & the Press, *Social Networking*

*and Online Ideas Take Off* 4 (Jan. 11, 2008) (available at <http://people-press.org/reports/pdf/384.pdf>) (indicating that the number of people who get political information from the Internet, as opposed to television, almost doubled between 2004 and 2008).

54. See, e.g., DORIS A. GRABER, *MASS MEDIA AND AMERICAN POLITICS* (7th ed. 2006).

55. See generally VICTOR E. KAPPELER ET AL., *THE MYTHOLOGY OF CRIME AND CRIMINAL JUSTICE* (1993) (“Myths tend to organize our views of crime, criminals, and the proper operation of the criminal justice system”); MEDIA, PROCESS, AND THE SOCIAL CONSTRUCTION OF CRIME: *STUDIES IN NEWSMAKING CRIMINOLOGY* (Gregg Barak ed., 1994) (analyzing how media coverage has shaped Americans’ conception of crime and criminal justice); Surette, *supra* note 34.

**[T]here is no factual basis for the strong prosecutor version of the CSI effect...**

social reality, there are four models that explain these effects: (1) the hypodermic needle model,<sup>56</sup> (2) the limited effects model,<sup>57</sup> (3) the minimal effects model, and (4) the indirect-effects model.<sup>58</sup>

The hypodermic needle model, as the term suggests, assumes that the mass media

has a direct and significant effect on the way people perceive social reality.<sup>59</sup> When it comes to the administration of justice in general, or to the trial and adjudication of criminal defendants in particular, this is the most superficial model of the four. Even if it could apply to some aspects of people's views on crime and justice, it has no application in determining the outcome of a criminal verdict.

At the other end of a media-effects continuum is the limited effects model, which argues that, while individuals turn to mass media for information, they do so not as a *tabula rasa* but rather as people who have experience and knowledge from other sources, such as family, school, and friends.<sup>60</sup> As Professor Surette maintains, people possess a social reality that consists of both their "experienced reality" and their shared "symbolic reality."<sup>61</sup> As a result, the idea that all viewers of CSI-type programs would take away the same lessons is an absurd or untenable proposition to most media theorists.

Somewhere in the middle of the continuum is the minimal effects model, which argues that media effects are neither direct or total nor insignificant or inconsequential.<sup>62</sup> From this perspective, media effects are more general in the sense that they help to establish agendas by telling us what we should be thinking about or what the important issues of the day are.<sup>63</sup> Media effects also help us to frame discussions either thematically, using data, trends, and context; episodically, using anecdotal, individual, and superficial stories; or both.

The fourth perspective, or the indirect-effects model, rejects the hypodermic needle model.<sup>64</sup> While the indirect-effects model could be located on the continuum between the limited and minimal effects models, it also shares some things in common with each of these models. As Professor Barak has previously argued, whether one is studying the interactions between law and order, crime and justice, or violence and nonviolence, one should simultaneously study the social construction of these phenomena as they are mediated through mass communications and popular culture.<sup>65</sup> For example, understanding the construction of newsmaking criminology requires an

examination of the conscious and unconscious processes involved in the mass dissemination of symbolic consumer goods. To explain juror responses to forensic evidence issues in criminal cases, we suggest such an indirect-effects model of mediated adjudication and turn to that model in the concluding section of this article.

#### **CONCLUSION: EXPECTATIONS AND AN INDIRECT-EFFECTS MODEL OF MEDIATED ADJUDICATION**

The 2006 Washtenaw County study and the 2009 Wayne County study clearly demonstrate that jurors very much expect to see scientific evidence in criminal trials. These high expectations result in large part from what we have described as the tech effect, or public awareness of and familiarity with the powers of modern technology, coupled with their awareness of the availability of that technology, as an important part of the criminal adjudication process. This awareness comes from a variety of sources, especially from mass media, including television with its expanded offerings. CSI-type programs are a part of that media environment, but they do not play the significant role in forging jurors' expectations that many have attributed to them.

Expectations are one thing, but demands are another. The Wayne County study data also demonstrates that even though these expectations do not originate in watching CSI-type programs, they also do not necessarily result in corresponding jury verdicts. At the very least, there is no factual basis for the strong prosecutor version of the CSI effect, which claims that watching CSI programs causes jurors to wrongfully acquit defendants; thus, the CSI effect is a myth. The tech effect, on the other hand, is created by the mass media far beyond the CSI genre; however, it still cannot be singled out as the sole causative link to jury verdicts, either for convictions or acquittals. The process by which jurors deliberate on criminal allegations is far too complex and the impact of the media generally on those outcomes is far too diverse to lie at the foot of any one particular cause. Instead, with respect to the importance of scientific evidence, there is a multifaceted media impact on juror verdicts. We therefore propose an indirect-effects model of this mediated adjudication process.

An indirect-effects model of mediated adjudication does not assume a direct or linear cause-effect relationship between criminal trial outcomes and any other variables—including the CSI effect, the tech effect, and the mass media effect. Nor does this model assume that guilty versus not guilty verdicts can be correlated with selected variables capable of discerning, let alone predicting, the behavior of juries, judges, or attorneys.

56. ROY EDWARD LOTZ, *CRIME AND THE AMERICAN PRESS* (1991).

57. SHANTO IYENGAR & DONALD R. KINDER, *NEWS THAT MATTERS: TELEVISION AND AMERICAN OPINION* (1987).

58. *Id.*

59. LOTZ, *supra* note 56, at 40-41.

60. *See generally* IYENGAR & KINDER, *supra* note 57.

61. SURETTE, *supra* note 34, at 33-34.

62. IYENGAR & KINDER, *supra* note 57.

63. *See* Simon Cottle, *Mediatizing the Global War on Terror: Television's Public Eye*, in *MEDIA, TERRORISM, AND THEORY: A READER*

(Anandam P. Kavoori & Todd Fraley eds., 2006).

64. GREGG BARAK, *VIOLENCE AND NONVIOLENCE: PATHWAYS TO UNDERSTANDING* 189 (2003).

65. *Id.* at 175; MEDIA, PROCESS, AND THE SOCIAL CONSTRUCTION OF CRIME, *supra* note 55, at xi-xv; Gregg Barak, *Mediatizing Law and Order: Applying Cottle's Architecture of Communicative Frames to the Social Construction of Crime and Justice*, 3 *CRIME, MEDIA, CULTURE* 101, 101-02 (2007); Gregg Barak, *Newsmaking Criminology: Reflections on the Media, Intellectuals, and Crime*, 5 *JUST Q.* 565, 565-66 (1988).

Rather, an indirect-effects model assumes a reciprocal system of mutually influencing factors where behavioral outcomes are not overly determined, but may vary considerably, especially in relation to the complexity of the criminal case. In other words, a CSI effect, a tech effect, or a mass media effect, alone or in combination, represents some of the more conspicuous social features that may, in interaction with a variety of other cultural and individual factors, affect the outcomes of criminal adjudication.

Thus far, this article has defined the CSI effect and the tech effect, and we have subjected these to a variety of empirical examinations, including path and multivariate analyses, but we have yet to define or test for mass media or media effects. Of course, when we examine a specific dramatic series like *CSI*, more general media sources like radio, films, newspapers, the Internet, or various criminal justice-related television programming, what we are actually examining are the various groups of mass communication or what may collectively be referred to as mediatized effects.<sup>66</sup>

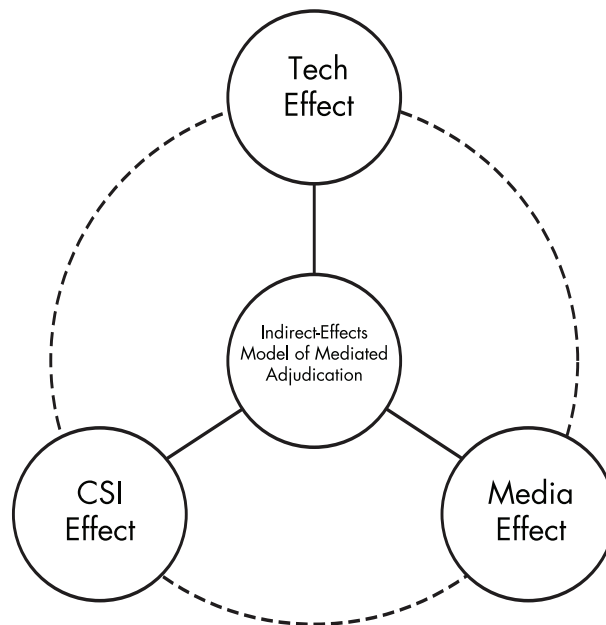
At the same time, media effects also refer to the increasing ubiquity and complexity by which the material and virtual realities of crime and justice are mediated throughout evolving technologies and mass culture. In a sense, then, we have also tested media effects indirectly when we tested for the CSI effect and the tech effect. While the data from the Washtenaw County study and Wayne County study have indicated the absence of a CSI effect on juror decision making and shown mixed and overlapping support for a combination of technological permeation and criminal-justice-related television viewing, any effect whatsoever is proof of a “mass mediated effect.” Thus, in terms of the indirect-effects model, we assume media effects as a given or a constant, and at the same time conceive of media effects as having their own sphere in a triangulated relation for the mythical CSI effect and the tech effect as depicted in the accompanying figure.

With respect to the two spheres of the indirect-effects model for which we directly tested (the CSI effect and tech effect), the Wayne County study data revealed that, while there was a significant increase in the expectations for the presentation of scientific evidence by those jurors exposed to various criminal-justice-related television programs, a much smaller increase for those exposed to *CSI*-type dramatic programs, and an even smaller increase for those exposed to various media sources, those expectations alone did not necessarily result in juror demands for scientific evidence as a prerequisite for a guilty verdict. In short, when it comes to juror behavior and the acquittal or conviction of criminal defendants, the CSI effect is,

in fact, a myth. However, like many other myths circulating throughout the criminal justice system and society in general, the myth may have real consequences.<sup>67</sup>

Prosecutors, judges, defense lawyers, and other law enforcement actors firmly believe in the “strong prosecutor” version of the CSI myth, so much so that they themselves, in collaboration with the news media, manufactured the CSI effect.<sup>68</sup> Survey research of prosecutors, defense attorney, and judges demonstrates that 79% of these legal actors perceive that the

### Relationships Within the Indirect-Effects Model



CSI effect is real and that forensic-based television programs have influenced jury decisions.<sup>69</sup> Similarly, research has also demonstrated that, either based on their own perceptions of jurors’ alleged behavior or by actually watching these shows for themselves, prosecutors and defense attorneys have altered their own behaviors during evidentiary evaluations, voir dire, opening and closing statements, and cross-examination of expert witnesses, among others.<sup>70</sup> This has led prosecutors to introduce “negative evidence”<sup>71</sup> to suggest to jurors that the public taxpayers cannot afford to perform scientific tests,<sup>72</sup> or to ask the judge to instruct jurors that the production of scientific evidence is not necessarily part of the government’s burden of proof.<sup>73</sup> Thus, the myth of the CSI effect turns into

66. CRIME AND MEDIA: A READER 5-8 (Chris Greer ed., 2009).

67. See *Demystifying Crime and Criminal Justice* (Robert M. Bohm & Jeffery T. Walker eds., 2006) (discussing several myths related to crime); HAROLD E. PEPINSKY & PAUL JESILOW, MYTHS THAT CAUSE CRIME (1984) (listing several myths related to crime and their implications).

68. See generally Maricopa County Attorney’s Office, *CSI: MARICOPA COUNTY: THE CSI EFFECT AND ITS REAL-LIFE IMPACT ON JUSTICE* (2005) (noting the influence on jurors of *CSI*-type programs); Marquis, *supra* note 6; Thomas, *supra*, note 2.

69. Monica L. P. Robbers, *Blinded by Science: The Social Construction of Reality in Forensic Television Shows and Its Effect on Criminal Jury Trials*, 19 CRIM. JUST. POLY REV. 84, 91 (2008).

70. See Shelton, *supra* note 36.

71. See *id.* at 378-81.

72. See, e.g., *People v. Compean*, No. A111367, 2007 WL 1567603, at \*8 (Cal. Ct. App. May 31, 2007).

73. *United States v. Saldarriaga*, 204 F.3d 50, 52-53 (2d Cir. 2000); see *United States v. Mason*, 954 F.2d 219, 221 (4th Cir. 1992); *Evans v. State*, 922 A.2d 620, 632-33 (Md. Ct. Spec. App. 2007).

a reality for the jurors at least insofar as it is reflected in the reactive conduct of the trial actors.

Finally, in terms of an indirect-effects model of mediated adjudication, the same research has supported a weak, rather than a strong, prosecutor effect. Hence, legal actors' belief in the CSI myth has had real consequences and, in all likelihood, will continue to do so, regardless of whether these actors learn that the CSI effect on jurors' decision making is actually a myth. This is the case because it is not any one of the mediated effects—CSI, tech, or mass media—acting alone that is the actual cause, but rather some kind of relationship as illustrated in the figure of our model.

This leads to practical research and conceptual issues alike. For example, one problem with the type of analyses that lay the blame on one “legal actor”—such as defense attorneys, prosecutors, judges, or juries in our case studies—is that the analyses become overly determined by only one of four legal actors that make up the adversarial system, when the legally adjudicated outcome-reality is always the result of the four legal actors interacting. Similarly, it is important that, when examining the impact of other social forces (e.g., mass media, CSI, technology), analysts should do so with the understanding that these effects interact with each other, as well as with other variables such as class, race, gender, education, and so on. Lastly, when conceptualizing these interacting relationships, the Indirect-Effects Model of Mediated Adjudication is one viable way of conceptualizing these interacting relationships.



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