

Seeing Is Believing: The *CSI* Effect Among Jurors in Malicious Wounding Cases

Corey Call

Virginia Commonwealth University

Amy K. Cook

Virginia State University

John D. Reitzel

Virginia Commonwealth University

Robyn D. McDougle

Virginia Commonwealth University

With the popularization of television crime shows that focus heavily on forensic science, such as *CSI* and its spin-offs, concerns about a new threat to jury trials have emerged in recent years. Dubbed the “*CSI* effect,” this phenomenon has reportedly come to influence the way jurors perceive forensic evidence at trials based on the way forensic evidence is presented on television. While the *CSI* effect has been the topic of much discussion throughout the popular press, the *CSI* effect has seldom been empirically tested. In this study, we present a selection of media accounts as well as criminological and legal literature that provides a review of the current state of the *CSI* effect. Additionally, we present the findings of a survey of 60 jurors from five malicious wounding cases on the influence of viewing *CSI* on jury decision-making. Using a logistic regression model, we found that belief in the accuracy of the scientific methods used on *CSI* was significantly related to juror verdicts.

Keywords: *CSI effect, forensics, jurors*

Introduction

The American court system is predicated on the assumption that reasonable jurors can determine guilt based upon relevant facts of a case and the procedural rules governing jury trials. The notion that jurors may have their decisions influenced by an outside force is of great concern to the criminal justice system. In recent years, concerns about a new threat to jury trials have emerged. This threat, termed the “*CSI* effect,” centers on alleged changes in the way juries have come to view forensic evidence presented at trial and is based upon a questionable understanding derived from television crime dramas (Podlas, 2006).

The *CSI* effect is an umbrella term that covers the multiple ways in which television crime shows may unduly impact juror expectations (Podlas, 2006). Such impacts may include distorting the normative role of forensic evidence relative to other forms of evidence presented at trials and misleading portrayals of police and crime scene technicians as having unassailable integrity and possessing infallible crime solving abilities (Podlas, 2006). Expanding on this point, Podlas (2006)

found that the *CSI* effect has been defined in three different ways, including (1) creating unreasonable expectations amongst jurors; (2) elevating forensic evidence over other forms of evidence, making it near infallible; (3) and generating interest in forensic science among “lay people.”

Over the past decade, there have been dozens of news accounts addressing this emerging phenomenon. Based largely on anecdotal evidence and speculation by court personnel, legal experts, and other interested parties, the *CSI* effect seems to have achieved an appearance of factual legitimacy without the empirical substantiation. This lack of objective evidence comes from the inability of scholars to research issues that emerge in public at the pace in which they occur (Tyler, 2006). Perhaps the lack of evidence is the result of access to jurors, who are those most likely affected by the *CSI* effect. Thus, most accounts of the *CSI* effect derive either from news reports and editorials or from law reviews, which tend to explore such issues within a legal framework rather than an empirical one.

A New Phenomenon or an Old Picture in a New Frame?

Although preceded by other highly popular police and courtroom procedural shows such as *Perry Mason* and *Law & Order*, *CSI* was the first of these programs to make forensic investigation the focal point of the show—albeit in a highly stylized manner injected with a hardy dose of Hollywood sex appeal (Wise, 2010). Taking place in Las Vegas, episodes feature up to three cases being solved by the team of forensic scientists who, unlike actual forensic scientists, spend as much time at the crime scene performing police duties as they do examining evidence in the lab. When the forensic scientists on *CSI* are in the lab, they have technologically advanced (and sometimes imaginary) equipment at their disposal, allowing them to solve their “whodunit” case within the hour constraint of network television.

Indeed, since debuting on CBS in 2000, *CSI* has remained one of the top viewed network series, with over 26 million viewers tuning in every week at the height of its popularity (Kompere, 2010). With over 250 episodes airing since its debut, *CSI* has maintained its popularity and has remained one of the 25 most watched television programs of the 2011–2012 season (Gorman, 2012). *CSI* has been so successful that it has become a franchise spawning the two spin-off series (*CSI: Miami* and *CSI: NY*), as well as a series of novels, comic books, and video games (Kompere, 2010). Since *CSI* found its popularity with the television audience, a number of additional forensics-focused crime television programs—such as *Bones*, *Cold Case*, *Criminal Minds*, *NCIS*, *NCIS: Los Angeles*, and *Without a Trace*—have also entered the market, creating an entire genre of forensic science police procedurals (Cole & Dioso-Villa, 2007).

CSI's popularity with the public was accompanied by nearly instant controversy (Cole & Dioso-Villa, 2007). By the end of the show's first season, it was being reported in local newspapers across the country that *CSI* may be harmful to criminal prosecutions due to the public's newly realized desire for substantial amounts of forensic evidence to be presented at trial in order to render a conviction (Cole & Dioso-Villa, 2007). Soon after, the term *CSI* effect was coined and reported in the news. First appearing in a *Time* magazine article and on television in a segment of the CBS *Early Show* in late 2002, a string of reports in the press began to surface on the *CSI* effect claiming several effects of the program, but chiefly its detriment to prosecutors (Cole & Dioso-Villa, 2009; Harvey & Derksen, 2009). Although reports in the media began appearing in 2002, it was not until 2006 that the *CSI* effect appeared in scholarly writings. Tyler (2006) addressed the *CSI* effect from a theoretical perspective, whereas Podlas (2006) presented the first empirical study of the *CSI* effect.

According to McNeely (1995) and Surette (1992), because the majority of the general public does not interact with the criminal justice system on a regular basis, their perceptions and knowledge of the system are gleaned through the media and through television programs in particular. The *CSI* effect is not the first instance of a claimed effect of exposure to crime-related television programming on perceptions of the criminal justice system. As early as the 1960s, viewers of *Perry Mason* began to expect real-life defense attorneys to behave the way they had seen defense attorneys on television behave; such expectations included leaning on the witness stand which was prohibited at the time for fear of witness intimidation (Harvey & Derksen, 2009). Moreover, two generations have learned about Miranda rights as a result of them being read in every episode of *Dragnet* and *NYPD Blue* (Harvey & Derksen, 2009). *L.A. Law* and the movie *The Silence of the Lambs* have been cited as increasing law school applications and interest in forensic profiling careers (Cole & Dioso-Villa, 2009).

In a study of viewers of syndicated television courtroom programs such as *The People's Court* and *Judge Judy*, Podlas (2002) found that fans of syndicated courtroom television who served on juries expected a more active judge in their trials like those they saw on television who frequently questioned involved parties. Given the history of media influence on views of the criminal justice system, the notion of a potential effect of watching *CSI* on perceptions of forensic evidence is plausible; however, the frequency of reports in the media seems out of proportion to the empirical research on the *CSI* effect, which has yet to show strong evidence of its existence.

The *CSI* Effect: What Has Been Reported and What Has Been Tested

Although a number of aspects of the *CSI* effect have been identified in the literature, our primary focus is on the impact of the *CSI* effect in the courtroom. Although the *CSI* effect has remained a topic of discussion since the show's debut, there is a comparatively small amount of empirical research on the subject. To our knowledge, following an extensive literature search, all located empirical studies were included.

Voir Dire

Although it is believed that the *CSI* effect has influenced the entire trial process, several specific instances throughout the trial have been recognized as being severely affected by *CSI*. The first of these possible *CSI* effects is seen during voir dire or jury selection. Research has shown that due to the increased viewing of forensic television programs, both prosecutors and defense attorneys spend more time in the jury selection process (Hughes & Magers, 2007; Robbers, 2008). During the jury selection process, attorneys ask potential jurors questions related to their television viewing habits and educate potential jurors about the differences between what they see on television and what they are likely to see during an actual trial. In addition to seeking this information from potential jurors, it is believed that prosecutors and defense attorneys use this information as one method of considering whether to eliminate potential jurors (Maricopa County Attorney's Office, 2005).

A review of news reports on the *CSI* effect during the jury selection process suggests two common themes. Four news articles mention the fact that attorneys are spending more time in jury selection discussing *CSI* without providing any evidence or concrete examples of attorneys spending time discussing *CSI* during jury selection (see Deutsch, 2006; Gavin, 2011; Hoffmeister, 2011; Roe, 2005). Two additional articles provide examples from criminal justice professionals on how they have seen *CSI* change the jury selection process (see Stockwell, 2005; Willing, 2004). For example, Stockwell (2005) provides comments from the Alexandria, Virginia, assistant commonwealth attorney who

stated that when selecting a jury, she frequently feels the need to distinguish the differences between television programs like *CSI* and real life to potential jurors. Willing (2004) offers insights from Robert Hirschhorn, a jury consultant hired to advise defense attorneys on picking jurors for the trial of a millionaire real estate heir accused of murder. According to Willing (2004), Hirschhorn instructed defense attorneys to select jurors that were familiar with shows like *CSI* in hopes jurors would notice the lack of forensic evidence presented by prosecutors.

Despite the fact that news reports claim the *CSI* effect has had an effect on the jury selection process, limited empirical research is available to substantiate these claims (Cole & Dioso-Villa, 2007; Cole & Dioso-Villa, 2009; Lawson, 2009). Even though no articles were found that were devoted entirely to the *CSI* effect and the jury selection process, researchers have examined the *CSI* effect during the jury selection as a part of larger studies. In a national survey of judges and trial lawyers, Robbers (2010) found that 58% of prosecutors and 47.2% of defense counsel reported spending additional time in voir dire querying potential jurors on their television viewing habits and using their findings as a tool to eliminate potential jurors who they felt were unable to distinguish between television and reality. In a survey of Kentucky judges, 62% agreed or strongly agreed that they had seen the jury selection process change since shows such as *CSI* have become popular (Hughes & Magers, 2007).

Similarly, in a survey of Florida attorneys, Watkins (2004) reported that 55% of attorneys (there was not a statistically significant difference between prosecutors and defense attorneys) admitted questioning potential jurors about their *CSI* viewing habits. Despite more than half of the attorneys questioning potential jurors about the viewing habits, Watkins (2004) reported that only 19% actually considered removing potential jurors based on their responses. The strongest evidence of the *CSI* effect comes from the Maricopa County Attorney's Office (2005) in which 70% of prosecutors reported asking potential jurors during voir dire whether their understanding of the criminal justice system is derived from television shows. Moreover, 76% of those prosecutors base their decision to strike a potential juror on the response to this question. In spite of the fact that research on the impact of jury selection is limited at best, existing data suggests that there is merit to the impact of the relationship between the *CSI* effect and jury selection.

Discussion of Forensics During Trial

The second possible *CSI* effect occurs as attorneys present their cases during the trial. News reports allege that since *CSI* and similar TV shows have become popular, the way forensics is discussed in the courtroom has changed. Evidence of this effect was reported by various media outlets who discussed how prosecutors explain to juries of why forensic evidence was not found at a crime scene and why increased reliance on forensic experts is necessary to educate jurors about forensic science (Deutsch, 2006; Hoffmeister, 2011). Hoffmeister (2011) uses the term "negative evidence" to explain an aspect of the discussion of forensics during trials in which prosecutors rely on forensic experts not to explain a piece of forensic evidence, but to explain why forensic evidence was not found. Willing (2004) provided comments from a Belleville, Illinois, prosecutor who felt the need to call seven forensic experts to testify on the forensic evidence in his murder case because he felt he would not be able to obtain a conviction without that level of support. Furthermore, Stockwell (2005) offered comments from an Alexandria, Virginia, defense attorney who reported modifying his closing arguments based on basic forensic language that jurors may have learned while watching *CSI*-type shows.

Cole and Dioso-Villa (2007; 2009) discussed an additional aspect of the *CSI* effect not mentioned in the news. They discussed how forensic experts called as witnesses have received an enhanced level of credibility since the emergence of *CSI*-type shows (Cole & Dioso-Villa, 2007; 2009). As a result of the way forensic scientists are glamorized on television, it may be that jurors are likely to associate expert witnesses with television characters, elevating their testimony to having greater levels of influence than their testimony would without that association (Cole & Dioso-Villa, 2007).

Robbers (2008) reported that judges, prosecutors, and defense counsel have noticed an increased use of negative evidence witnesses with the largest group being judges (nearly 45%). Robbers (2008) found that a majority of all three groups reported spending additional time discussing forensic evidence during the course of a trial, with the largest group being prosecutors (76%). As far as a change in the way cases were presented in court since the beginning of the *CSI* phenomenon, judges were split on whether they noticed a change, with 48% agreeing or strongly agreeing and 45% disagreeing or strongly disagreeing (Hughes & Magers, 2007).

Influence on Jury Verdicts

The third *CSI* effect is the potential influence over jury decision-making in whether to acquit defendants. During a typical episode of *CSI*, crime scenes provide at least one piece of forensic evidence (but usually more) that leads to solving the case. The premise is that cases are solvable based on infallible forensic evidence. As a result, jurors may feel that they need concrete forensic evidence to establish guilt beyond a reasonable doubt. Interestingly, there is no consensus on whether this effect is felt more by prosecutors or defense attorneys because both can be affected. Prosecutors are said to feel the burden of the *CSI* influence on jury verdicts because if they are unable to produce a sufficient amount of forensic evidence, the jury is likely to acquit the defendant (Tyler, 2006); however, if prosecutors have forensic evidence, even if it is not crucial evidence, it may be tougher for defense attorneys to argue the defendant's innocence because juries view forensic evidence as infallible (Tyler, 2006).

The influence of *CSI* on jury decision-making is the most discussed aspect of the *CSI* effect (Cole & Dioso-Villa, 2007; 2009; Lawson, 2009; Tyler, 2006). It is plausible that the *CSI* effect can affect both prosecutors and defense attorneys; however, the majority of news articles present the prosecution's viewpoint (Blankenstein & Guccione, 2005; Dakss, 2005; Hoffmeister, 2011; Robertson, 2006). Jury decisions in high-profile murder cases such as Robert Blake and Casey Anthony have been discussed in relation to the *CSI* effect. In 2001, Blake was acquitted of shooting his wife because the prosecution could not show the jury any blood evidence or gunshot residue that put Blake at the scene of his wife's death (Blankstein & Guccione, 2005; Dakss, 2005; Deutsch, 2006; Roane, 2005; Robertson, 2006). Although the Blake case is 10 years old now, the media focus on the *CSI* effect and highly publicized cases continues today. A recent example of this is Hoffmeister's (2011) assertion of the strong possibility that the *CSI* effect influenced the jury's decision to acquit Casey Anthony in the murder of her daughter as a result of a lack of forensic evidence.

Extant research has not been supportive of the claims in the news that *CSI* effect has influenced jury decision-making. In a sample of 306 college students during a mock rape trial, (2006) found that 86% of the students found the defendant not guilty. Of those supplying a not guilty verdict, Podlas (2006) found no statistically significant difference between the students who reported being *CSI* viewers and nonviewers. Moreover, there were no statistically significant differences in the reasons for providing a not guilty verdict. In another mock jury study relating to drug possession and rape,

Podlas (2009) did not find a statistically significant difference in verdict or reasons between viewers versus nonviewers of *CSI*-type shows.

Although Podlas (2006; 2009) used university samples of mock juries, Shelton, Kim, and Barak (2006) surveyed actual jurors in Washtenaw County, Michigan, over a 2-month period. Shelton and colleagues (2006) reported that nearly half of all surveyed jurors expected to see forensic evidence in every criminal case, regardless of the charge. These results support claims from prosecutors that jurors have higher expectations about forensic evidence since the inception of *CSI*-type shows. Shelton and colleagues (2006) also reported that jurors who were *CSI* viewers had higher expectations for not only forensic evidence, but of all kinds of evidence when compared to jurors who were not *CSI* viewers. Despite findings of higher evidentiary expectations, statistically significant differences were not found between *CSI* viewers and nonviewers in willingness to convict defendants based upon viewing differences.

In a follow-up study of Wayne County, Michigan, jurors, Shelton, Kim, and Barak (2009) found even higher expectations of forensic evidence in jurors than in the previous study by Shelton and colleagues (2006), but no statistically significant differences were found between *CSI* viewers and nonviewers that watching *CSI* influenced verdicts. Shelton and colleagues (2006; 2009) postulated that the *CSI* effect has little merit, and instead, the increased expectations of forensic evidence at trial can best be explained by a “tech effect,” in which rapid changes in technology available to the general public and increased knowledge of technology has brought about a cultural change in which scientific evidence analyzed through the latest technology is expected.

In the most recent study of actual jurors, Hayes-Smith and Levett (2011) surveyed 104 dismissed jurors from a courthouse in the south. The jurors were randomly assigned to read one of three felony assault trial vignettes containing no forensic evidence, a low amount of forensic evidence, or a high amount of forensic evidence. Hayes-Smith and Levett (2011) found that the reported television viewing habits of jurors had an effect on decision-making in terms of selecting a verdict and confidence in their verdict. Those jurors who watched crime television shows were more likely to support the defense than those jurors who did not watch crime television shows when there was no or low amounts of forensic evidence presented in the vignette.

Examining the influence of forensic evidence and acquittal rates since the premier of *CSI*-type shows, Cole and Dioso-Villa (2009) asserted that if *CSI*-type programs had increased the number of defendants being acquitted, then this effect would be reflected in acquittal rates. Cole and Dioso-Villa (2009) examined the acquittal rates of California, Florida, Hawaii, Illinois, New York, North Carolina, Texas, and Vermont before and after the premier of *CSI*-type shows. They found that acquittal rates were relatively stable across all of the states examined over time. The biggest predictor of the likelihood of acquittal was the jurisdiction itself (Cole & Dioso-Villa, 2009). Although there was a slight rise in acquittals in the 2 years following the premiere of *CSI*, Cole and Dioso-Villa (2009) do not necessarily attribute this rise to a *CSI* effect, as acquittal rates were already rising prior to the premiere of *CSI*. Although the rise following *CSI* was short-lived, there were higher aggregate acquittal rates in the mid-1990s than in the 2 years post-*CSI* (Cole & Dioso-Villa, 2009).

In a survey of 133 circuit court judges in Kentucky, Hughes and Magers (2007) found support for the belief that jurors expect more forensic evidence at trials due to *CSI*. Similar to the findings of Shelton and colleagues (2006; 2009), these increased expectations have not translated into increased

conviction rates. Hughes and Magers (2007) found that roughly 75% of judges agreed or strongly agreed that they had observed an increase in expectations for forensic science from the jury since the popularity of *CSI*. Despite these findings, when asked if they believed *CSI* has made it harder to convict defendants in their court, only slightly more than half of the judges agreed or strongly agreed. Along these same lines, Robbers (2008) found stronger support than Hughes and Magers (2007) for the idea that *CSI* had affected court outcomes, with 79% of attorneys and judges citing instances in which they believed juries had delivered a verdict influenced by *CSI*. The issue cited most frequently by attorneys and judges alike is the jury's preference for forensic evidence while discounting eyewitness testimony (Robbers, 2008).

Similar results were found in two studies of college students. In a mock jury study of 48 students, Schweitzer and Saks (2007) found that viewers of forensic science television programs were more critical of forensic evidence in the simulated trial transcript and more confident in their verdicts than those who identified themselves as nonviewers of forensic-science-type shows. Although forensic science viewers had higher expectations of forensic evidence than nonviewers, this did not have an impact on the decision to either acquit or convict in the trial scenario (Schweitzer & Saks, 2007). Holmgren and Fordham (2011) echoed the claim that viewers of forensic science shows expect more forensic evidence at trial and have higher beliefs about the capability of forensics; however, they did not discuss whether these expectations impacted jury decision-making.

The strongest evidence of *CSI* affecting jury decision-making comes from Baskin and Sommers' (2010) telephone survey of 1,201 California voters. They found that those who had watched a greater amount of *CSI* perceived forensic evidence to be more reliable than those who viewed *CSI* less often or not at all. Along with greater perceptions of reliability, respondents who watched 3 or more hours of *CSI* per week also reported being less likely to convict in murder and rape cases in which forensic evidence was not present. Baskin and Sommers (2010) reported that race was a predictor of willingness to convict in murder cases without forensic evidence with white respondents being less likely to convict without forensic evidence compared to black respondents.

Impact on Police and Crime Labs

The final claimed *CSI* effect that we present is the impact the *CSI* effect may have on other criminal justice professionals, namely police officers and crime lab technicians. Although *CSI*'s primary discussion centers on its impact on attorneys, *CSI* is also believed to affect the way police officers carry out their jobs (Huey, 2010). As a result of what viewers watch on television, the general public may believe that police officers and lab personnel operate in a similar manner. Additionally, as prosecutors demand more forensic evidence to pacify jurors, they may require the police to collect more forensic evidence (Durnal, 2010; Houck, 2006; Stephens, 2007). This can negatively impact "real" crime labs, as they have to process larger amounts of evidence to simply show jurors that forensic evidence was collected. According to the most recent count by the National Institute of Justice, by the end of 2009 there was a national backlog of 111,647 pieces of DNA evidence awaiting analysis in crime labs across the country (National Institute of Justice, 2011). *CSI* is credited for this backlog as the amount of forensic evidence submitted to crime labs increased more than 1,000% in a 5-year period during *CSI*'s early years on television (Stephens, 2007).

In a qualitative study of Canadian police investigators, Huey (2010) reported that the majority of investigators (28) stated that they had been questioned by a victim, an associate of a victim, or a witness about the way they were doing their job. The investigators attributed these questions to unrealistic expectations about the abilities of police officers based on *CSI*-type shows (Huey, 2010).

Interestingly, only a small group of these officers felt frustration due to these citizen queries whereas most investigators treated these interactions as an opportunity to provide education about law enforcement practices (Huey, 2010).

Similarly, Stinson, Patry, and Smith (2007) studied forensic investigator's and police officer's views of the public's expectations of them. Overwhelmingly, 94% of forensic investigators believed that shows like *CSI* have affected public expectations of them. Specifically, half of the respondents reported that shows like *CSI* have changed the way they do their jobs to correspond with the public's changing perceptions of their roles (Stinson et al., 2007). Moreover, two-thirds of the respondents reported that shows like *CSI* have changed the way investigators interact with the general public, with the most common effect being that they had to spend more time explaining forensics (Stinson et al., 2007). As far as the views of police officers, Stinson and colleagues (2007) found that 92% of officers believed that *CSI*-styled shows have altered what the public expects of them; however, a much smaller percentage (31%) claimed to have changed the way they perform their jobs due to this occurrence (Stinson et al., 2007).

Moving Forward

As presented above, the empirical literature examining the *CSI* effect has shown limited support for the existence of the *CSI* effect, particularly its influence on jury decision-making, and often times simply highlights anecdotal reports. This may be due in part to the lack of access to juries to measure the effect of *CSI*-type shows on trial outcomes. As seen above, only three studies were found that utilized actual jurors, with the rest using mock jurors. Research on the *CSI* effect lacks methodological consistency (some studies use mock juries, some use university students, and some use registered voters and police officers), thus making it tough to determine whether the anecdotal evidence indicates an actual phenomenon or merely an impression formed among those who must worry about maintaining the integrity and legitimacy of jury trial. In this current study, we were able to obtain secondary data to analyze factors influencing juror decision-making as a function of juror perceptions about evidence and viewing habits of *CSI*-type shows. In the following section, we present our analysis and discussion of the findings.

Method

Our analysis is based on secondary data collected by a mid-Atlantic local police department from a convenience sample of post-trial jurors surveyed from five malicious wounding juries in one jurisdiction between July and December 2006. Originally, seven juries were to be surveyed; however, two defendants appealed their verdict, and therefore those jurors were excluded from the sample. The intention of the police department was to survey homicide juries as well; however, during the time in which the data were collected, plea agreements were made before juries were impaneled. Malicious wounding cases were the only cases in which a trial occurred with an impanelled jury.

Juries were selected as a result of an agreement reached by the prosecutor's office, defense attorney, and judge as to which specific jury members would be surveyed providing the case on which jurors served was not appealed. Although there were other jury trials during the same timeframe, our study only examined those cases in which the involved parties reached an agreement. The reduced number of trials was likely due to the aggressive efforts of police to develop strong cases coupled with the high conviction rates of the prosecutor's office. In this jurisdiction, over 400 jury trials are requested annually—an average of nearly 33 cases per month.

All 60 jurors were approached, and the purpose and anonymous nature of the study was explained by a representative of the police department. Upon consenting to participate, jurors were given the option to complete the questionnaire at the courthouse or a later time. Those who chose the latter option were instructed to mail the questionnaire back to the police department in the provided self-addressed, stamped envelope. All 60 jurors consented, and most completed the survey at the courthouse. Although a 100% response rate is rare, it could be that the small size of the sample and the particular nature of just having served jury duty in an actual trial compelled jurors to share their thoughts.

Although we do not have personal background or demographic information about jurors, we are able to provide basic U.S. Census Bureau data from this jurisdiction. According to the 2010 Census Bureau, the population is roughly 204,000 with 40% being white, 50% being black, and roughly 6% being of Hispanic decent; over half of the citizens are female (52%). Per capita income is less than \$27,000 with 25% of citizens living below the poverty rate. As far as home ownership rates, nearly 45% of the population owns a home.

The survey instrument posed seven questions to jurors: (1) whether or not jurors felt that the prosecution should always have evidence to convict a defendant (*no* = 0; *yes* = 1), (2) whether jurors believed police should always find evidence at crime scenes in order to convict a defendant (*no* = 0; *yes* = 1), (3) whether or not jurors have ever watched the *CSI* television program (*no* = 0; *yes* = 1), (4) whether or not the *CSI* program influenced the jurors verdict (*no* = 0; *yes* = 1; *does not apply because I do not watch CSI* = 2), (5) verdict (*not guilty* = 0; *guilty* = 1), (6) whether or not a defendant should be found guilty if all the forensic evidence testing does not link him/her to the crime scene (*no* = 0; *yes* = 1), and (7) whether jurors believed in the scientific methods used in the television show *CSI* accurately illustrated techniques used by real-life police departments and crime labs (*no* = 0; *yes* = 1).

Results

An analysis of the descriptive statistics in Table 1 provides us with an understanding of how jurors were distributed over each of the independent variables. For instance, jurors felt that both police and prosecutors needed to present evidence to obtain a guilty verdict (76% and 91%, respectively). Jurors also believed they could convict a defendant even when all evidence does not link him or her to the crime scene (for example fingerprints were found at the scene, but not DNA); over three-fourths of jurors believed this to be true. Most jurors (95%) reported that they watched *CSI*, whereas 73% reported that watching *CSI* influenced their verdict. Moreover, 60% of jurors reported that they believed the scientific methods on TV accurately illustrated techniques used by real-life police departments and crime labs.

Table 1: Distribution of Variables

Variable	Mean
Prosecution should always have evidence (0 = no; 1 = yes)	.77
Police should always find evidence (0 = no; 1 = yes)	.95
Jurors watched <i>CSI</i> -type shows (0 = no; 1 = yes)	.95
<i>CSI</i> influenced jurors verdict (0 = no; 1 = yes; 2 = not applicable)	.85
Evidence linked to crime scene (0 = no; 1 = yes)	.79
<i>CSI</i> accurately illustrates techniques used by police (0 = no; 1 = yes)	.67
Verdict (0 = not guilty; 1 = guilty)	.43

Because the purpose of this study was to empirically analyze the relationship between crime television watching, views about evidence, and juror outcomes, our dependent variable is a dichotomous measure of verdict as a function of jurors believing the prosecutor should always present physical evidence to render a guilty verdict, whether a defendant should be found guilty if all forensic evidence testing does not link him or her to the crime scene, whether the police should always find evidence at a crime scene, whether jurors watch *CSI*, and whether jurors believe that the scientific methods used by *CSI* shows accurately illustrate the techniques used by real-life police departments and crime labs. As a result, we employ a logistic regression model. Multicollinearity was tested with no problems indicated.

Table 2 presents the findings of the logistic regression model predicting whether the respondent voted guilty or not guilty (chi-squared 12.76, $p < .05$) with only one variable being statistically significantly related to juror verdicts: belief in the accuracy of the scientific methods used on *CSI* as accurately illustrating techniques used by real-life police departments and crime labs ($p < .05$). The belief in accuracy variable was statistically significant but negative, suggesting that respondents who believed in the accuracy of the science portrayed on the television crime shows were 78% less likely to deliver a guilty verdict. The practical implications of this finding, limitations, and suggestions for future research are presented in the following section.

Table 2: The Relationship Between CSI Watching, Evidence Presented at Trial, and Juror Outcomes (N = 60)

Variable	Verdict	
	b(SE)	Odds Ratio
Police evidence	22.00(23202.445)	.000
Prosecutor evidence	-.166(.874)	.847
Prosecutor links all evidence	.463(.775)	1.589
Watches <i>CSI</i> on TV	21.76(28420.737)	2.840
Belief in accuracy of <i>CSI</i> methods	-1.535(.745)	.215*
Cox and Snell R ²	.225	
Nagelkerke R ²	.305	
Chi-square	12.76*	

Note: * $p < .05$; “An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure” (Szumilas, 2010, p. 227).

Discussion and Conclusion

Our finding provides some support for the notion that prosecutors, defense attorneys, and judges have legitimate concerns about the impact of juror decision-making as a result of the influence of watching television crime shows. As our data showed, jurors’ belief in the scientific methods used on television accurately illustrated techniques by real-life police departments and crime labs was a significant predictor of voting not guilty. This finding backs the claim that jurors who believe that crime television dramatizations accurately portray the work of “real” police officers and lab technicians will likely feel the need for the glamorized version of forensic evidence to be presented in their trial to render a guilty verdict. It is important to note, however, that our findings may also be influenced by the tech effect offered by Shelton and colleagues (2009), in that increased knowledge of and rapid changes in scientific technology created expectations of jurors that forensic evidence in trials must be subjected to modern technological testing. Even though the tech effect was not directly studied, it is clear that crime dramatizations highlight technological advances, and as a result, high exposure to these types of shows could enhance the tech effect. Our findings may provide further evidence on the changing nature of the *CSI* effect and the role of advanced technology in criminal trials.

Anecdotes about the existence of a *CSI* effect seem to have some empirical support, but it still largely remains an empirical question. The lack of systematic evidence can lead to the reification of the issue before a thorough analysis can be completed. We do not suggest this has happened here, because there have been a number of documented incidents in which the *CSI* effect may have played a role (Deutsch, 2006; Gavin, 2011; Hoffmeister, 2011; Roe, 2005); however, until a more robust literature can be compiled based upon strong empirical evidence, we cannot make any confident claims about the *CSI* effect. It is possible that such shows have played a role in shaping the perceptions of individuals who regularly watch them, but there is a great deal of uncertainty about whether the effects of watching such shows have had a significant and patterned effect on juror decision-making. Nevertheless, this is an issue that concerns court personnel, including judges, prosecutors, and defense attorneys—which shows both empirical and social value to systematically studying the alleged effect.

Our study contributes to the literature in a number of ways. First, the data presented here is from actual trial jurors from malicious wounding cases in a mid-Atlantic city. Second, in each of the trials, forensic and other high-tech evidence played a role in the trial process. Third, the concurrence between attorneys (prosecutor, defense counsel, and judge) to survey jurors indicates the importance of understanding the *CSI* effect; however, our data and thus this study are not without limitations. First, we were not able to examine how the findings might have varied across some of the demographic variables, which might shed further light on how evidence influenced individual jurors. Second, the sample size was limited for reasons that were out of the researchers' control. Working with courts and other governmental organizations sometimes means having to limit certain types of data collection due to legal or other considerations. In this case, we could not collect more data on the jurors or additional trials, which would have helped in further contextualizing our results. Moreover, the dataset suffers from having a small sample size, issues of generalizability due to a lack of demographic data on jurors, and a limited number of survey items, including no control variables. Furthermore, the restrictive nature of *yes* or *no* responses to the questions posed to jurors likely impacted our results. Richer data that includes higher levels of measurement and more questions pertaining to jurors' television show viewing habits and understanding of science would provide a clearer snapshot of the impact of *CSI*-type shows. Indeed, given the many influences that possibly confront jurors during trials such as perceived injustices, mistrust of police officers, concerns of legitimacy of the criminal justice system, and prior experiences with the system, we cannot isolate the true significance of the *CSI* effect in comparison to other jury influences.

Nevertheless, the dearth of academic studies in the literature beckons even modest attempts such as ours to start filling in the knowledge with more systematic accounts. Future research should seek to investigate the *CSI* effect to include specific measures such as those analyzing the tech effect and to determine juror television viewing habits and their understanding of science in order to provide a more definitive account of these effects. As well, the limited reality aspect of crime-based television dramatizations needs to be examined further.

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