



JCJPC

Copyright © 2024 *Journal of Criminal Justice and Popular Culture*
All rights reserved.
ISSN: 1070-8286

Verdict Confidence as a Function of Perceived
Crime Drama Realism and College Major

Addison Meeks

Troy University

Frank Hammonds

Troy University

Kirk Davis

Troy University

Abstract

This study builds on research regarding the CSI Effect by examining participants' verdict confidence as a function of their college major and their perception of the realism of crime dramas. Undergraduate students read a transcript describing a fictitious murder case before rendering a verdict and rating the confidence of their verdict. A two-way ANOVA revealed a significant interaction between perceived realism and college major, with criminal justice majors who perceived crime dramas as realistic reporting the highest levels of verdict confidence. Additionally, criminal justice majors were significantly more confident in their verdicts than nursing and psychology majors, and participants who perceived crime dramas as realistic were significantly more confident in their verdicts. A follow-up one-way ANOVA did not reveal any difference among college majors with respect to the perceived realism of crime dramas.

Keywords: CSI Effect, college major, juror confidence, forensic evidence, crime dramas

Introduction

Researchers have long recognized the potential influence of television viewing on individuals' perceptions of everyday events. One frequently studied example of this is the CSI Effect, which refers to the supposed impact of viewing crime dramas on people's expectations and beliefs about the evidence presented in criminal trials (e.g., Baskin & Sommers, 2010; Hayes-Smith, & Levett, 2011; Maeder & Corbett, 2015; Mancini, 2011; Mancini, 2013; Schweitzer & Saks, 2007; Shelton, Kim, & Barak, 2009). Mancini (2013) defined the CSI Effect generally as "the influence of heavy forensic television program viewership on perceptions of scientific evidence and juror decision-making" (p. 543).

The CSI Effect can manifest in several ways. For example, viewing crime dramas has been associated with differences in expectations for, attitudes regarding, and perceived understanding of evidence (Hawkins & Sherr, 2017; Holmgren & Fordham, 2011; Maeder & Corbett, 2015; Rhineberger-Dunn, Briggs, & Rader, 2016; Shelton, Kim, & Barak, 2009), perceptions of forensic science, especially the use of DNA (Rhineberger-Dunn, Briggs, & Rader, 2016), and confidence in verdict decisions (Hayes-Smith & Levett, 2011; Maeder & Corbett, 2015). Viewers of crime dramas are also more likely to request forensic evidence and/or refuse to convict when forensic evidence is absent (Franzen, 2002; Mancini, 2013; Willing, 2004), and may also see themselves as possessing a high degree of knowledge regarding forensic evidence (Maeder & Corbett, 2015; Schweitzer & Saks, 2007). Of course, forensic evidence and jurors' reactions to it are only parts of the more extensive, complex factors contributing to the final decision to render a guilty or not guilty verdict (Mancini, 2011; Schweitzer & Saks, 2007). Overall, research has not shown that viewers of crime dramas are more or less likely to render guilty verdicts (Maeder & Corbett, 2015). However, some studies have produced different results. For example, Mancini (2013) found that participants who viewed more crime dramas rendered fewer guilty verdicts than participants who viewed more crime documentaries despite the fact that the groups did not have different attitudes towards evidence.

Previous studies have investigated potential interactions of certain variables with the CSI Effect, including how much forensic evidence was available at trial (Hayes-Smith & Levett, 2011), whether there is a need for cognition (Mancini, 2011), whether participants were engaged with the television shows (Hawkins & Scherr, 2017), and influences of technology on the decision making of jurors (Shelton, Kim, & Barak, 2009). Some studies have focused on individuals' perceptions of the realism of crime dramas. Perceived realism has been shown to be associated with greater willingness to render a guilty verdict as well as more positive attitudes towards various types of evidence including DNA and eyewitness testimony (Ewanation, Yamamoto, Monnik, Maeder, & McCartan, 2017; Maeder & Corbett, 2015). The degree to which criminal justice students view crime dramas as being realistic is unclear and may have changed over time (Collica-Cox & Furst, 2019; Weaver, Salamonson, Koch, & Porter, 2012).

The variables of interest in the current study were college major, verdict confidence, and perceived realism of crime dramas. Our research question was whether verdict confidence would vary as a function of college major or perceived realism of crime dramas. The current study is the first to our knowledge to compare findings on this topic from college students who are criminal justice majors to those from students in other majors. It seems reasonable that criminal justice majors should have greater knowledge of, and/or be more interested in, criminal and forensic issues and thus may respond differently than other individuals. While research into the views of criminal justice majors and the factors influencing them is lacking, there is some evidence that criminal justice students see themselves as being unaffected by crime dramas, at least in terms of deciding to study criminal justice or choosing it as a career, even though they believe their fellow students' choices were influenced by watching crime dramas (Collica-Cox & Furst, 2019).

Method

Participants

A convenience sample of undergraduate students enrolled at a medium-sized university in the southeastern United States were asked to participate in an IRB-approved study. No incentives were provided. Although data were collected from 195 undergraduate students, only the data from 175 students were appropriate for the study's design primarily because the sample sizes for majors other than criminal justice, nursing, and psychology were too small, and some participants did not respond to the questions regarding perceived realism or verdict confidence. The most common academic majors were criminal justice ($N = 37$), nursing ($N = 32$), and psychology ($N = 25$). Students not majoring in criminal justice, nursing, or psychology were labeled as “other.” The “other” group contained undeclared students as well as anthropology, applied health sciences, biomedical sciences, biology, business, chemistry, communications, education, English, environmental sciences, exercise science, graphic design, human services, rehabilitation, sports medicine, social work, and sociology majors. Because the “other” group was so heterogenous, comprising 17 majors, we were unable to draw conclusions across majors within the group. Among the 175 participants included in the analysis, ages ranged from 18 to 56, with a mean age of 19.65. African Americans ($N = 52$) and Caucasians ($N = 110$) collectively comprised 93% of the sample, while females ($N = 117$) outnumbered males ($N = 56$). Tables 1 and 2 provide additional descriptives regarding demographics and the variables of interest (college major and perceived realism of crime dramas). Two participants did not include complete demographic information and so are not represented in Table 1.

Table 1

Frequencies for Gender, Ethnicity, and Student Classification

Ethnicity			Student Classification				Total
			Freshman	Sophomore	Junior	Senior	
African American	Gender	Female	13	10	5	8	36
		Male	5	4	2	5	16
	Total	18	14	7	13	52	
Caucasian	Gender	Female	37	21	12	4	74
		Male	18	8	3	7	36
	Total	55	29	15	11	110	
Other	Gender	Female	3	1	2	1	7
		Male	1	2	0	1	4
	Total	4	3	2	2	11	
Total	Gender	Female	53	32	19	13	117
		Male	24	14	5	13	56
	Total	77	46	24	26	173	

Table 2

Frequencies for College Major and Perceived Realism of College Major

		Perceived Realism of Crime Dramas			Total
		Unrealistic	Somewhat Realistic	Realistic	
College Major	Criminal Justice	14	11	12	37
	Nursing	10	11	11	32
	Psychology	11	7	7	25
	Other	29	27	25	81
Total		64	56	55	175

Materials and Procedure

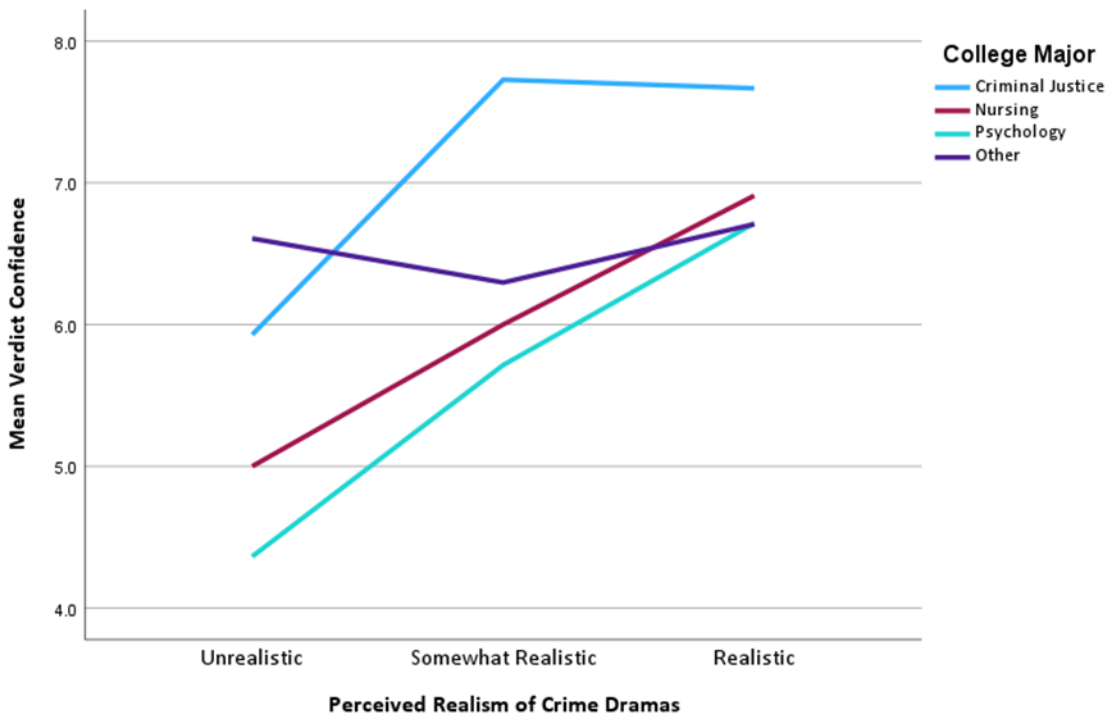
The survey was administered online through Qualtrics. Participants read trial transcripts adapted from the transcripts used by Schweitzer and Saks (2007) and Hawkins and Sherr (2017). The transcripts described the circumstances and evidence concerning a fictitious murder case. After reading the transcript, participants completed a questionnaire including items related to their television viewing habits, their opinions of crime dramas, and demographics. Some of the survey questions were outside the scope of the current analysis. The relevant questions asked participants to rate (1 – 10) the confidence of their verdict, and rate (1 – 10) the realism of the following crime dramas: *Bones*, *CSI*, *Law and Order*, and *NCIS*. For the purpose of analysis, participants were separated into three groups (unrealistic, somewhat realistic, and realistic) according to their perception of the realism of the shows in a manner that kept the sample sizes of the groups as equivalent as possible. Participants who rated crime dramas with realism scores between 1 – 4.5 were classified as unrealistic ($N = 64$), participants who rated crime dramas with realism scores between 4.51 – 6.0 were classified as somewhat realistic ($N = 56$), and participants who rated crime dramas with realism scores between 6.1 - 10 were classified as *realistic* ($N = 55$). Unfortunately, the limited sample size did not allow for a more precise classification scheme.

Results

The data from 175 undergraduate college students were analyzed using the statistical data analysis software Statistical Package for Social Sciences (SPSS, Version 29). We conducted a between-groups, two-way ANOVA to determine if verdict confidence differed as a function of college major (criminal justice /nursing/psychology) and perceived realism of crime dramas (unrealistic/somewhat realistic/realistic). The two-way ANOVA revealed a significant interaction between college major and perceived realism, $F(6, 161) = 11.35, p < .001, \eta^2 = .079$. This moderate interaction (Cohen, 1992) can be seen in Figure 1.

Figure 1

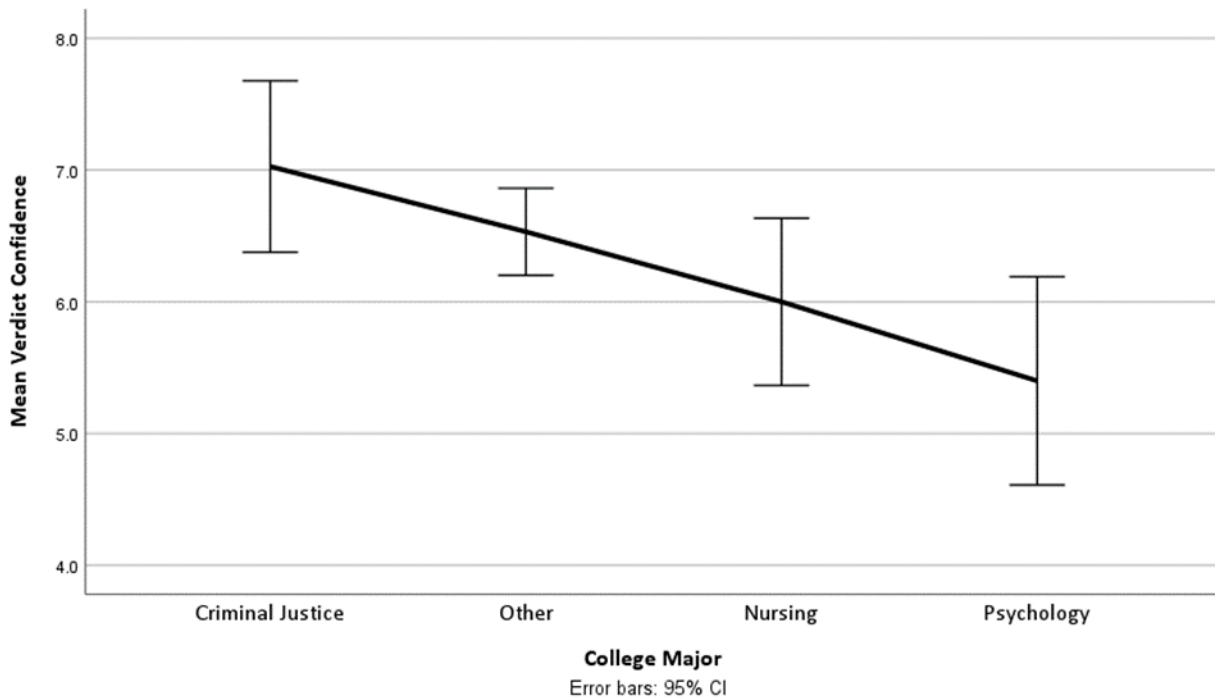
Verdict Confidence as a Function of College Major and Perceived Realism of Crime Dramas



Both perceived realism of crime dramas ($F(2, 161) = 11.35, p < .001, \eta^2 = .124$) and college major ($F(3, 161) = 5.28, p = .002, \eta^2 = .09$) yielded significant main effects with medium-large effect sizes (Cohen, 1992). A Tukey's HSD post hoc test revealed that criminal justice majors ($M = 7.03$), reported higher verdict confidence levels than nursing ($M = 6.00, p = .044$) and psychology ($M = 5.40, p < .001$) majors. However, criminal justice majors did not differ significantly from students classified as "other" in terms of verdict confidence ($M = 6.53, p = .413$). These results can be seen in Figure 2.

Figure 2

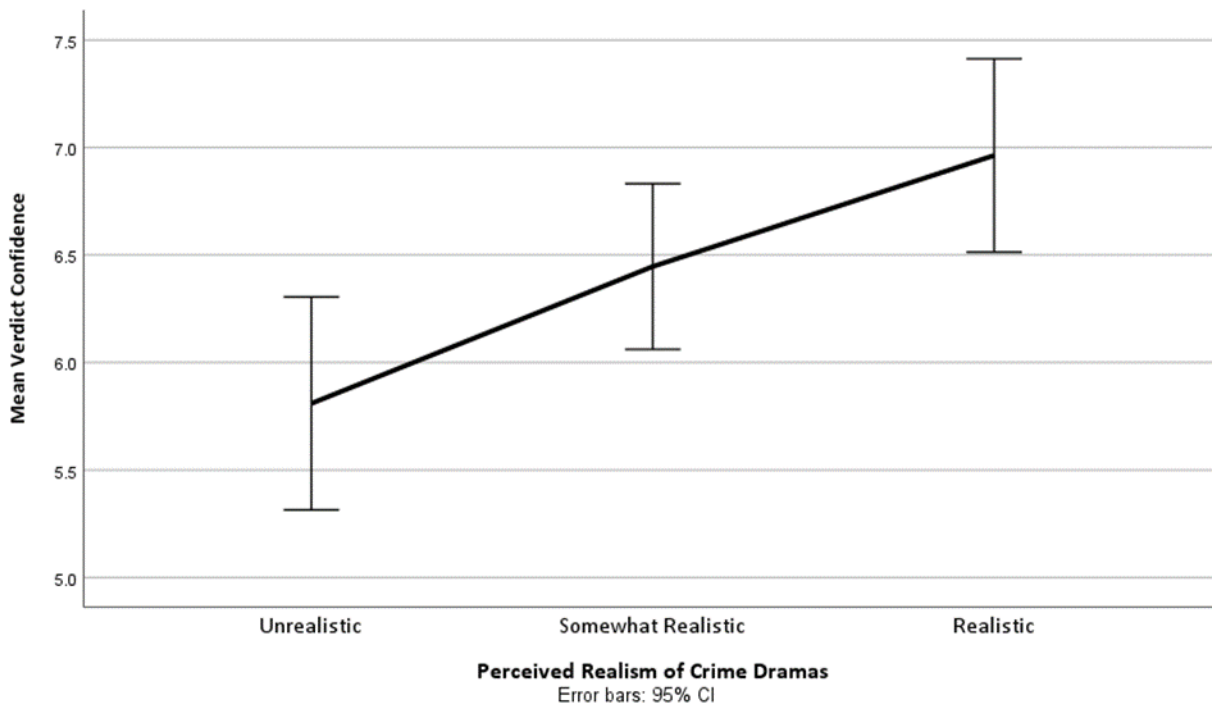
Verdict Confidence as a Function of College Major



A Tukey's HSD post hoc test revealed that participants who perceived crime dramas as realistic ($M = 6.96$) reported significantly higher confidence than those who perceived them as unrealistic ($M = 5.81$, $p < .001$). Participants who perceived crime dramas as somewhat realistic ($M = 6.45$) did not differ significantly from either the realistic group ($p = .31$) or the unrealistic group ($p = .082$). These results can be seen in Figure 3.

Figure 3

Verdict Confidence as a Function of Perceived Realism of Crime Dramas



After determining that criminal justice majors, regardless of their perceived realism of crime dramas, were more confident in their verdicts, we conducted a one-way ANOVA to determine if criminal justice majors ($M = 4.96$) differed from psychology majors ($M = 4.92$), nursing majors ($M = 5.33$), and other majors ($M = 5.08$) in their perceived realism of crime dramas. The analysis revealed no significant differences ($F(3, 171) = .319, p = .812$).

Discussion

The current study builds on previous research regarding the CSI Effect by examining participants' verdict confidence as a function of their college major (criminal justice/nursing/psychology) and their perception of the realism of crime dramas (realistic/somewhat realistic/unrealistic). Our results revealed a significant interaction between college major and perceived realism. Additionally, criminal justice majors reported higher confidence levels than nursing and psychology majors, regardless of their perception of the realism of crime dramas and participants who perceived crime dramas as realistic reported higher confidence levels regardless of their majors. Criminal justice majors did not differ from nursing or psychology majors in their perceived realism of crime dramas. These findings support one dimension of the CSI Effect; people who perceive crime dramas as realistic may be more confident in their verdicts. An interesting contribution of this study is that majoring in criminal justice was associated with the same outcome regarding verdict confidence as was perceiving crime dramas as realistic.

If potential jurors are being influenced by what they see in crime dramas, any instances where the content of those shows differs from reality could be problematic and lead to unrealistic expectations on the part of the viewers who may be misled if they believe that shows provide accurate depictions of real-life events.

Potter (1986) states that while people know that most television is fictional, they also believe that these fictional characters are based on how people act in real life. Many authors (e.g. Mann 2006; Mosteller, 2006) have pointed out that crime dramas exaggerate the availability, importance, and/or accuracy of forensic evidence. One example of this is that crime dramas tend to overemphasize the use of DNA in solving crimes (Rhineberger-Dunn, Briggs, & Rader, 2016). Schroeder and White (2009) reviewed 593 investigations of homicide cases in Manhattan between 1996 and 2003. They discovered that DNA evidence was collected in less than half (45.5%) of the cases. During only 6.7% of the cases were results of DNA analysis available to detectives during their investigations. In addition to overestimating the availability of DNA evidence, crime dramas may exaggerate the importance of DNA in some cases. In cases that take a long time to clear, DNA availability may not relate to the probability of clearance (Schroeder & White, 2009). Durnal (2010) pointed out that crime dramas include four themes that lead to the creation of myths about forensic evidence: the capability of each test, how much evidence is found at a crime, how long the forensic tests take, and the reality of the roles of each character.

The current study has several limitations. First, the sample size was limited to only 175 participants. Second, the participants were college students rather than actual jurors in a criminal trial. Thus, the setting did not involve actual juror decisions involving real-life consequences. Third, the fictional trial transcript used in this study contained limited information, and the information was presented more briefly than would be the case in an actual trial. Finally, the participants did not interact with one another and had no knowledge of other participants' verdicts or their verdict confidence. Schweitzer and Saks (2007) discussed the fact that interactions with other jurors might impact a juror's beliefs. Although the current study involved typical research procedures, these differences from actual courtroom settings must be noted. Our participants, materials, and setting may have produced responses different from those that might have been obtained from actual jurors in a criminal trial. Previous studies on the CSI Effect have varied regarding the ecological validity of their procedures and settings. For example, some studies have surveyed college students (e. g. Bergslien, 2006; Busselle, 2001; Busselle, 2003; Hawkins & Scherr, 2017; Holmgren & Fordham, 2011; Kahlor & Eastin, 2011; Lee, Hust, Zhang, & Zhang, 2011; Maeder & Corbett 2015; Mancini (2011); Potter, 1986; Schweitzer & Saks, 2007; Taylor, 2005; Weaver, Salamonson, Koch, & Porter, 2012), while others have used actual or potential jurors in courtroom settings (e. g. Durnal, 2010; Hayes-Smith & Levett, 2011; Kim, Barak, & Shelton, 2009; Mancini, 2013; Shelton, Kim, & Barak, 2006; Shelton, Kim, & Barak, 2009). Mancini (2011, 2013) asked participants to base their verdict decisions on a "beyond a reasonable doubt" basis, whereas other studies have not included this instruction. Studies of the CSI Effect studies involving simplified presentations of trial material suffer from reduced ecological validity but also serve to facilitate the investigation of essential variables (Mancini, 2011). The current study does just this with respect to college major, perceived realism, and verdict confidence.

References

- Baskin, D. R., & Sommers, I. B. (2010). Crime-show-viewing habits and public attitudes toward forensic evidence: The "CSI Effect" revisited. *The Justice System Journal*, 31(1), 97-113. <https://doi-org.libproxy.troy.edu/10.1080/0098261x.2010.10767956>
- Bergslien, E. (2006). Teaching to avoid the "CSI Effect." *Journal of Chemical Education*, 83(5), 690–691. <https://doi-org.libproxy.troy.edu/10.1021/ed083p690>
- Busselle, R. W. (2001). Television exposure, perceived realism, and exemplar accessibility in the social judgment process. *Media Psychology*, 3(1), 43–67. https://doi-org.libproxy.troy.edu/10.1207/S1532785XMEP0301_03
- Busselle, R. (2003). Television realism measures: The influence of program salience on global judgments. *Communication Research Reports*, 20(4), 367–375. <https://doi.org/10.1080/08824090309388836>
- Cohen, J. (1992). Statistical Power Analysis. *Current Directions in Psychological Science*, 1(3), 98-101. <https://doi.org/10.1111/1467-8721.ep10768783>
- Collica-Cox, K., & Furst, G. (2019). It's not the CSI effect: Criminal justice students' choice of major and career goals. *International Journal of Offender Therapy and Comparative Criminology*, 63(11), 2069-2099. <http://dx.doi.org.libproxy.troy.edu/10.1177/0306624X19834414>
- Durnal, E. W. (2010). Crime scene investigation (as seen on TV). *Forensic Science International*, 199(1–3), 1–5. <https://doi-org.libproxy.troy.edu/10.1016/j.forsciint.2010.02.015>
- Ewanation, L. A., Yamamoto, S., Monnink, J., Maeder, E. M., & McCartan, K. (2017). Perceived realism and the CSI-effect. *Cogent Social Sciences*, 3(1), 1–13. <https://doi-org.libproxy.troy.edu/10.1080/23311886.2017.1294446>
- Franzen, R. (2002). 'CSI Effect on potential jurors has some prosecutors worried.' *San Diego Union-Tribune*.
- Hayes-Smith, R. M., & Levett, L. M. (2011). Jury's still out: How television and crime show viewing influences jurors' evaluations of evidence. *Applied Psychology in Criminal Justice*, 7(1), 29–46.
- Hawkins, I., & Scherr, K. (2017). Engaging the CSI effect: The influences of experience-taking, type of evidence, and viewing frequency on juror decision-making. *Journal of Criminal Justice*, 49, 45–52. <https://doi-org.libproxy.troy.edu/10.1016/j.jcrimjus.2017.02.003>
- Holmgren, J. A., & Fordham, J. (2011). The CSI effect and the Canadian and the Australian jury. *Journal of Forensic Sciences*, 56, S63–S71. <https://doi-org.libproxy.troy.edu/10.1111/j.1556-4029.2010.01621.x>
- Kahlor, L., & Eastin, M. (2011). Television's role in the culture of violence toward women: A study of television viewing and the cultivation of rape myth acceptance in the United States. *Journal of Broadcasting & Electronic Media*, 55(2), 215–231. <https://doi-org.libproxy.troy.edu/10.1080/08838151.2011.566085>
- Kim, Y. S., Barak, G., & Shelton, D. E. (2009). Examining the "CSI-effect" in the cases of circumstantial evidence and eyewitness testimony: Multivariate and path analyses. *Journal of Criminal Justice*, 37(5), 452–460. <https://doi-org.libproxy.troy.edu/10.1016/j.jcrimjus.2009.07.005>
- Lee, M., Hust, S., Zhang, L., & Zhang, Y. (2011). Effects of violence against women in popular crime dramas on viewers' attitudes related to sexual violence. *Mass Communication & Society*, 14(1), 25–44. <https://doi-org.libproxy.troy.edu/10.1080/15205430903531440>
- Maeder, E. M., & Corbett, R. (2015). Beyond frequency: Perceived realism and the CSI effect. *Canadian Journal of Criminology & Criminal Justice*, 57(1), 83–114. <https://doi-org.libproxy.troy.edu/10.3138/cjccj.2013.E44>
- Mancini, D. E. (2011). The CSI effect reconsidered: Is it moderated by need for cognition? *North American Journal of Psychology*, 13(1), 155–174.

- Mancini, D. E. (2013). The "CSI effect" in an actual juror sample: Why crime show genre may matter. *North American Journal of Psychology*, 15(3), 543–564.
- Mann, M. D. (2006). The "CSI Effect": Better jurors through television and science? *Buffalo Public Interest Law Journal*, 24, 157-183.
- Mosteller, R. P. (2006). Evidence history, the new trace evidence, and rumblings in the future of proof. *Ohio State Journal of Criminal Law*. 3(2), 523-541.
- Potter, W. J. (1986). Perceived reality and the cultivation hypothesis. *Journal of Broadcasting & Electronic Media*, 30(2), 159–174. <https://doi-org.libproxy.troy.edu/10.1080/08838158609386617>
- Rhineberger-Dunn, G., Briggs, S. J., & Rader, N. (2016). Clearing crime in prime-time: The disjuncture between fiction and reality. *American Journal of Criminal Justice*, 41(2), 255–278. <https://doi-org.libproxy.troy.edu/10.1007/s12103-015-9300-z>
- Schroeder, D. A., & White, M. D. (2009). Exploring the use of DNA evidence in homicide investigations: Implications for detective work and case clearance. *Police Quarterly*, 12, 319–342. <https://doi.org/10.1177/1098611109339894>
- Shelton, D. E., Kim Y.S., & Barak, G., (2006) A study of juror expectations and demands concerning scientific evidence: Does the "CSI Effect" exist? *Vanderbilt Journal of Entertainment and Technology Law* 9(2), 331-368.
- Shelton, D. E., Kim, Y. S., & Barak, G. (2009). An indirect-effects model of mediated adjudication: The CSI myth, the tech effect, and metropolitan jurors' expectations for scientific evidence. *Vanderbilt Journal of Entertainment and Technology Law*, 12(1), 1–43.
- Schweitzer N. J., & Saks, M. (2007). The CSI effect: popular fiction about forensic science affects the public's expectations about real forensic science. *Jurimetrics*, 47 357-364.
- Taylor, L. D. (2005). Effects of visual and verbal sexual television content and perceived realism on attitudes and beliefs. *Journal of Sex Research*, 42(2), 130–137. <https://doi-org.libproxy.troy.edu/10.1080/00224490509552266>
- Weaver, R., Salamonsen, Y., Koch, J., & Porter, G. (2012). The CSI effect at university: Forensic science students' television viewing and perceptions of ethical issues. *The Australian Journal of Forensic Sciences*, 44(4), 381–391. <https://doi.org/10.1080/00450618.2012.691547>
- Willing, R. (2004, August 8). 'CSI effect' has juries wanting more evidence. https://usatoday30.usatoday.com/news/nation/2004-08-05-csi-effect_x.htm.