

# The CSI Effect: Reflections from Police and Forensic Investigators

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## ABSTRACT

Television shows such as *CSI* and *Law and Order* are extraordinarily popular with viewers. Recently, the media has reported on the "CSI effect", generally referring to the notion that watching these types of shows skews the public's understanding of forensic science and practice, distorts their expectations of the criminal justice system, and biases their relevant behavior. Although lawyers believe in the authenticity of this so-called CSI effect (Maricopa County, 2005) and there is evidence that legal professionals are already changing their trial strategies to compensate for this psychological phenomenon, the present research is the first to measure police professionals' opinions of the CSI effect. Results of two studies (Study 1: 127 forensic investigators; Study 2: 36 police officers) suggest that most professionals surveyed believe that these shows affect the public's perceptions of day-to-day police work, police investigations, court processes, and the legal system in general. Moreover, there is some evidence suggesting that the CSI effect is affecting the work of forensic and law enforcement professionals.

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Shows such as *CSI* and *Law and Order* are topping TV ratings across North America and internationally. Recently, media outlets have reported on a phenomenon they are calling the "CSI effect", that is, the notion that watching these types of shows skews the public's understanding of forensic science and practice, distorts their expectations of the criminal justice system, and biases jury decisions. These immensely popular television programs provide a synthesis of fiction, often based on real-life criminal cases, with engaging, scientifically-grounded, and theoretically viable forensic techniques and procedures. As such, these television crime dramas often blur the line between reality and fiction.

Given the popularity of these shows, it is not surprising that the media and other groups (such as legal professionals) are starting to wonder about the repercussions that these shows may produce. A large body of research (see, e.g., Bandura, 1969, 1978), has shown that our social environment provides a powerful source of information, and that much human learning occurs through observation of others. In the legal arena, a number of studies have shown that television news coverage can influence prospective jurors' perceptions of both civil (see, e.g., Robbenolt & Studebaker, 2003) and criminal cases (see e.g., Kovera, 2002; Moran & Cutler, 1997; Studebaker, Robbenolt, Pathak-Sharma, & Penrod, 2000; Vidmar, 2002; Wilson & Bornstein, 1988). But what is the CSI effect?

The news media has typically described the CSI Effect in one of four different ways (Patry, Smith & Stinson, in press). One perspective on the CSI effect is that television crime dramas induce jurors to believe they have expertise in forensic science, resulting in increased expectations of law enforcement officers (specifically, forensic investigators and detectives) and prosecutors. These professionals are less likely to meet these jurors' heightened expectations, leading to acquittals. Another description of the CSI effect that the media has provided focuses on how legal professionals have changed their behavior in order to deal with these perceived changes in juror behavior (e.g., lawyers requesting cautionary instructions, extended voir dire). A third element of the CSI effect involves how television crime dramas have piqued student interest in topics related to forensic sci-

ence and enrollments in forensic science programs. Finally, some media outlets have suggested that television crime dramas instruct criminals on how to destroy evidence and avoid capture.

Although there is little empirical research in this area, most references to the CSI effect reflect the notion that it is an undesirable effect exhibited by jurors which results from their perceived expertise about forensic techniques and police investigations (see Tyler, 2006; Podlas, 2006). When the scientific evidence presented at trial fails to meet jurors' expectations, they are more likely to acquit the defendant. Believing that this is the case, lawyers are changing their behavior to address these apparent changes in juror expectations (e.g., Maricopa County, 2005).

Although many news reports have documented lawyers' perceptions of the CSI effect, there is little empirical research about this topic. One notable exception is an analysis of the perceptions and behaviors of 102 prosecutors in Maricopa County (Maricopa County, 2005). The report showed that prosecutors believe there is a CSI effect: 38% of lawyers reported they had lost a case because of the CSI effect; 45% contended that jurors relied on scientific evidence more than they should; and 72% maintained that CSI fans exerted undue influence on other jurors. The Maricopa county report also documented the approaches prosecutors had taken to reduce the CSI effect such as asking jurors about television viewing habits, taking the time to explain police procedures to jurors, and even plea bargaining cases that they would ordinarily try when they expected that the CSI effect might produce an acquittal.

Despite all of these assumptions, it is not clear whether or not the CSI effect actually exists. Only a few studies have assessed the CSI effect in a legal context (see Podlas, 2006; Reardon, Cooper, Morales, & O'Neil, 2006; York, O'Neil, & Evans, 2006). These studies suggest that watching CSI and other law-related programs may influence mock jurors' perceptions of evidence and may play a role in decision processes. Smith, Patry and Stinson (2006) demonstrated that viewers of CSI and similar shows have inflated perceptions of the accuracy, reliability and usefulness of forensic evidence (but not "non-scientific" evidence). To some extent, these effects were causal (see Smith et al., 2006).

However, no research has addressed how legal professionals other than prosecutors may be affected by the CSI effect. It is important to understand how these professionals perceive the CSI effect and how these perceptions influence how they deal with crimes, criminals, and crime victims. For example, forensic investigators who deal with crime victims may find it difficult to manage crime victims' expectations. They may also expect judges and/or jurors to harbor some misunderstandings about investigative techniques.

To begin to address these issues, we conducted two studies exploring how police officers and forensic investigators perceive and react to the purported CSI effect. In Study 1 we explored police investigators' perceptions

of the nature and consequences of the CSI effect. Participants in Study 1 were primarily forensic investigators who worked for the Royal Canadian Mounted Police (RCMP), but also included Medical Examiners and Fire Investigators. In Study 2, we expanded on Study 1, exploring some of the reported effects in more depth, but focusing primarily on "on the beat" police officers working for the RCMP.

## STUDY 1 METHOD

### Participants

Participants were 127 of approximately 180 forensic and law enforcement professionals who attended a regional training symposium on death investigation. Of those who responded, 83 were police forensic investigators, 28 were Medical Examiners, and seven were Fire/Arson Investigators. The six other respondents identified themselves as Occupational Health and Safety professionals or other types of investigators or consultants. Three respondents did not report their occupation. The 101 men and 24 women (2 did not report gender) ranged in age from 24-69 ( $M = 42.84$ ,  $SD 8.77$ ). Participants also varied dramatically in terms of their job tenure in their current occupation from 1 to 42 years, with a mean of 15.32 years ( $SD = 9.47$ ).

### Procedure

Respondents were approached when they registered on the first day of the conference. Respondents were told participation was completely voluntary. Participants were given the opportunity to respond immediately, or were allowed to return their surveys the next day. Almost all opted to complete the survey immediately.

### Questionnaire

The questionnaire asked professionals to report their age, sex, occupation and time in that occupation. Next, respondents were asked the extent to which science and technology influenced the way they do their job. Participants responded on a 1 to 7 scale with response anchors of "not at all" to "a great deal". For all Likert-type items, participants had the option to add additional comments. The next item requested a description (in their own words) of the "CSI effect". Next, respondents were asked to indicate how many episodes of CSI, *Law and Order*, or other shows dealing with forensic issues they watched per week (0, 1-2, 2-4, 5-10, or "other"). The subsequent items asked participants to rate the extent to which television crime dramas had changed the way they practice/investigate their cases, how they interact with the public, the public's expectation of their profession, the way they behaved in court (1= "not at all" to 7="a great deal") and the extent to which these crime dramas accurately portray what happens in real cases (also on a 1-7 scale; from "not at all accurate" to "completely accurate"). The exact wording of these items is provided in Table 1.

**Table 1: Item wording, Mean, Standard Deviation, & Distribution of Participant Responses to Questionnaire Items - Study 1**

Question wording	Percentage Responding in each Category							Mean	SD
	1	2	3	4	5	6	7		
1. To what extent have changes in science and technology changed the way you do your job?	1	2	1	8	24	39	23	5.67	1.17
2. In your opinion, have TV crime dramas changed the way in which you practice/investigate in your cases?	49	20	11	7	8	3	2	2.21	1.58
3. In your opinion, have TV crime dramas changed the way in which you interact with the public?	38	14	11	15	12	8	2	2.78	1.82
4. In your opinion, have the public's expectations affected your behavior in court (if applicable)?	47	23	10	11	8	3	0	2.18	1.45
5. In your opinion, have the public's expectations of your profession (conduct, investigations, etc.) changed due to these shows?	6	6	9	9	24	31	17	4.96	1.71
6. In your opinion, how accurate are TV crime dramas in portraying what happens in real court cases and investigations?	21	37	21	11	3	0	0	2.35	1.06

Note: Percentages do not necessarily add to 100% due to non-responses and rounding.

## RESULTS

The data was analyzed using descriptive statistics on responses to the Likert-type items. Although the different occupational categories (see *Participants* above) were initially compared to explore differences across groups, no meaningful variations were found. Thus we have presented the data as a whole, rather than split according to occupational category.

Somewhat more than half of participants (61%) watched at least some crime dramas in a regular week. Most of these watched 1-2 episodes per week, and only 2% of total respondents watched 5 or more episodes. Although we correlated hours of crime dramas watched with responses to the survey items, none of the item responses correlated with hours watched (all  $p$ 's > .12). Moreover, there was no difference in responses on the key survey items between professionals who did not watch television crime dramas and those who did. Ninety-eight of 127 respondents offered definitions of the CSI effect. In Table 2, we report the most common categories of definitions provided by participants. Participants' responses were content coded by two independent raters.

As shown in Table 2, inter-rater reliabilities were high, and definitions tended to be consistent with how the CSI effect has been described in the media. Specifically, over 80% of our sample indicated that shows such as *CSI* were increasing the public's general expectations about criminal investigations and criminal justice; more than 35% commented specifically about increased expectations at crime scenes. Over 40% characterized the CSI effect as the public's increased sense of knowledge about forensic investigations, and substantial numbers of participants commented about enhanced belief in scientific evidence (33%) and interest in crime investigation (24%). Interestingly, the potential effects on juries were one of the least mentioned categories (8% of respondents). Finally, a few respondents also indicated that the *CSI* shows were "educating the bad guys".

**Table 2: Content analysis of Study 1 Participant Responses to the Question "In Your Opinion, What is the CSI Effect?" (N = 127)**

Participant Characterization of 'CSI Effect'	% (n)	Kappa
Unrealistic expectations about criminal investigation / justice	81.1 (103)	.78
Increased 'knowledge' about investigation	40.9 (52)	.70
Expectations of more (e.g. staff, science) at crime scenes	36.2 (46)	.78
Increased faith / belief in scientific evidence	33.1 (42)	.85
Increased interest in crime investigation	24.4 (31)	.98
Crime dramas affect trial outcomes	7.9 (10)	.81
Crime dramas are educating criminals	2.4 (3)	1.0

Note: Content analysis was conducted by two independent raters. Inter-coder disagreements were counted in the affirmative for the purposes of computing percentage of participants' responses for each characterization category. Percentage counts amount to larger than 100% because some responses contained multiple characterizations.

In Table 1, we present the results of the remaining items used on the questionnaire, including the mean and standard deviation for each item. Because scores were consistently skewed for each item, mean and standard deviation may not be the most useful metric to understand participant responses. Therefore, we also provide the distribution of responses for each item. Furthermore, for each item, participants had the opportunity to provide written explanations for their rating. These open-ended responses were content coded by two independent raters. With the exception of one somewhat low kappa for one variable (.64) inter-rater reliabilities were good (kappas ranged from .74 to 1.00).

As illustrated in Table 1, the vast majority of participants indicated that science and technology had changed the way they do their job at least to some extent. This finding is not surprising given the significant changes in

technology in forensic practice in the last 20 years. Thirty-five percent of respondents offered explanations for how technology has changed their work. The most common changes mentioned were the use of DNA analysis (20%), computers (19%) and other techniques and analyses (49%, e.g., microbiological specimens, new laboratory equipment and design, and evidence collection). Over half of the participants reported that these programs have changed the way in which they practice and/or investigate crimes at least to some extent. Twenty percent of respondents provided comments, the most common (12%) being that the public's perceptions of them had changed. Interestingly, 9% of respondents indicated that these changes could be useful to police (e.g., the exaggerated information portrayed on the shows could be used during interrogations to bluff suspects into confessing).

Almost two thirds of professionals indicated that television crime dramas had at least some influence on the way in which they interact with the public (see Table 1). Of the 31% who provided comments to this question, many (20%) indicated that this was due to having to spend time explaining forensic investigations to the public. About half of participants who testified in court believed that the shows had some influence on their behavior. Interestingly, the most common comment (5%) concerned how public "knowledge" increased accountability in court. Four percent indicated that they spent more time explaining issues in court, and 1 respondent mentioned it had an effect on defense strategy such that people were less likely to plead guilty.

Almost all respondents (94%) indicated that television crime dramas have had some effect on the public's expectations of their profession (see Table 1). Their comments revealed the sense that the public had generally increased expectations of their profession (20%), both in terms of the time needed to conduct an investigation and/or process the crime scene and evidence (10%), and in terms of the type and availability of evidence at a crime scene (10%). Finally, as shown in Table 1, these professionals overwhelmingly confirmed that crime dramas are less than completely accurate. However, almost 80% of respondents indicated that the shows were at least slightly accurate. The most common inaccuracy was the unrealistic portrayals of investigations (17%), and timelines (13%) but also the availability of evidence (4%) and the inaccurate portrayal of law and in-court procedures (3%).

## DISCUSSION

The results of Study 1 were in many ways consistent with our expectations. Participants perceive that the public is affected by television crime dramas. In many respects, the effects reported by these investigators are consistent with the way in which the CSI effect has been

described in the literature. Most professionals were familiar with the CSI effect, and most believed that television crime dramas affected people's perceptions of the police and forensic investigations, and most participants had changed their behavior in some way in order to deal with these effects. However, these investigators mentioned a number of issues that had not been addressed in the media or in the small amount of empirical literature on the topic. For example, some officers mentioned that television crime dramas misrepresented police work and the legal system. In addition, a number of respondents indicated that the misconceptions people have because of these shows can have both positive effects (e.g., accountability, interviewing of suspects) as well as negative effects (e.g., creating unrealistic expectations). Furthermore, it should be noted that these individuals were all forensic investigators; they may be limited in terms of the type of people (or clients) they deal with on a regular basis. Thus, we conducted a follow-up study with "on the beat" police officers. In order to have some consistency across the two studies, we asked this second group the same questions as in Study 1, but we also added a number of items to address more specifically some of the issues raised by our respondents.

## STUDY 2 METHOD

### Participants

Participants were 38 police officers. Two officers were excluded from analyses because they had participated in Study 1 while attending the seminar at which that data was collected. The remaining 36 officers (29 men and 7 women) were primarily constables. Age ranged from 22-58 ( $M = 38.00$ ,  $SD = 11.94$ ) as did time as a police officer ( $M = 8.29$  years,  $SD = 9.82$ , range 1 to 34 years).

### Procedure and Questionnaire

Study 2 was conducted with a group of police officers attending a half-day workshop on forensic investigation practices. The purpose of the workshop was to provide continuing training on how to avoid contaminating evidence at a crime scene. Before the training session began, officers were asked to complete the survey. In addition to the scale response and open ended questions used in Study 1, participants were asked Likert-type items concerning estimates of the extent to which television crime dramas influence jury verdicts, criminal behavior, and crime victim's expectations of the police. Next, respondents were asked to indicate the extent to which television crime dramas oversimplify police investigations, how the legal system works, and the extent to which these shows hinder or enhance peoples' understanding of the Canadian legal system, all measured on 1 to 7 rating scales from "not at all" to "a great deal". The next

two items asked respondents to rate the accuracy of these shows in terms of their representation of the availability and diagnostic value of evidence at crime scenes. These two items were measured on 1 to 7 scales from "not at all accurate" to "completely accurate". All of these items are presented in their entirety in Table 3. Finally, respondents were asked to estimate the percentage of crimes which are solved on these shows and in real life.

## RESULTS

As in Study 1, most police officers (75%) watched at least some crime dramas in a regular week. Thirty-three of 36 officers offered definitions of the CSI effect. The definitions provided were consistent with Study 1, reflecting themes of increased expectations from the public about police practices (89%), increased faith in science and forensic techniques (31%), greater expectation in terms of staff and behavior at the crime scene (22%) and increased public knowledge and interest in criminal investigation (28%).

**Table 3: Survey Questions, Response Distributions, Means, & Standard Deviations of Responses to Questionnaire Items - Study 2**

Survey questions	Percentage Responding in each Category							Mean	SD
	1	2	3	4	5	6	7		
1. To what extent have changes in science and technology changed the way you do your job?	14	3	17	14	14	19	14	<b>4.36</b>	<b>1.93</b>
2. In your opinion, have TV crime dramas changed the way in which you practice/investigate in your cases?	69	11	11	6	3	0	0	<b>1.61</b>	<b>1.08</b>
3. In your opinion, have TV crime dramas changed the way in which you interact with the public?	50	14	8	17	6	6	0	<b>2.31</b>	<b>1.62</b>
4. In your opinion, have the public's expectations of your profession (conduct, investigations, etc.) changed due to these shows?	8	3	8	11	33	25	11	<b>4.78</b>	<b>1.66</b>
5. To what extent do you think that television crime dramas influence crime victim's expectations of the police?	0	0	11	8	17	44	17	<b>5.49</b>	<b>1.22</b>
6. In your opinion, have the public's expectations affected your behavior in court (if applicable)?	61	6	0	14	0	0	0	<b>1.35</b>	<b>1.20</b>
7. To what extent do you think that television crime dramas influence how juries make their decisions?	3	14	6	31	17	19	0	<b>4.03</b>	<b>1.59</b>
8. To what extent do you think that television crime dramas influence a criminal's behavior?	3	3	8	11	45	22	8	<b>4.91</b>	<b>1.34</b>
9. Do you think that TV crime dramas can be useful during police interrogations (i.e., because officers can "bluff" the suspect into)	11	18	19	8	22	11	6	<b>3.58</b>	<b>1.87</b>
10. To what extent do you think that shows like <i>CSI</i> oversimplify how police investigate crimes?	3	3	3	3	8	33	47	<b>6.00</b>	<b>1.45</b>
11. To what extent do you think that shows like <i>CSI</i> oversimplify how the legal system works?	0	3	6	0	14	33	44	<b>6.03</b>	<b>1.25</b>
12. To what extent do you think that shows like <i>CSI</i> hinder people's understanding of the Canadian legal system?	0	6	3	11	6	36	36	<b>5.77</b>	<b>1.44</b>
13. To what extent do you think that shows like <i>CSI</i> enhance people's understanding of the Canadian legal system?	42	33	8	6	2	8	0	<b>2.19</b>	<b>1.53</b>
14. In your opinion, how accurate are TV crime dramas in portraying what happens in court cases?	28	28	28	17	0	0	0	<b>2.34</b>	<b>1.08</b>
15. To what extent do you think that shows like <i>CSI</i> are accurate in representing the availability of evidence at crime scenes?	19	36	19	17	0	8	0	<b>2.67</b>	<b>1.41</b>
16. To what extent do you think that shows like <i>CSI</i> are accurate in representing the diagnostic value of evidence at crime scenes?	16	31	8	28	17	3	0	<b>3.17</b>	<b>1.42</b>

Note: Percentages do not necessarily add to 100% due to non-responses and rounding.

In Table 3, we provide the mean, standard deviation, and distribution of responses for each of the remaining items. For the six items repeated from Study 1, we also conducted independent samples t-tests<sup>a</sup> to assess group differences. These results are illustrated in Table 4. As one might expect, although most police officers indicated that science and technology had changed the way they do their job, overall they were less likely to agree than the forensic investigators. As with Study 1, the most common changes mentioned were the use of DNA analysis (19%), computers (39%) and other techniques and analyses (47%)<sup>b</sup>.

<sup>a</sup> Because sample sizes differed across groups, we conducted Levine's test for equality of variances. The variances were not equal across groups. Nonetheless, analyses using the corrected tests do not change the significance of any test, thus we report the standard t-test results.

<sup>b</sup> As with Study 1, respondents' comments were content coded by two independent raters. In general, inter-rater reliability was good (kappas ranged from .72 to 1.00)

With regards to how these shows have changed the officers' behaviors, in contrast to Study 1, 69% of the participants in Study 2 reported that these programs have not changed the way in which they practice and/or investigate their cases,  $t(160) = 2.13, p < .05$  (see Table 4). The two most common changes mentioned were in terms of changes in public perceptions and expectations (11%) and the need to explain investigations or dispel myths (6%). As can be seen in Table 3, consistent with Study 1, half of participants indicated that television crime dramas had influenced the way in which they interact with the public. Open-ended responses were also consistent with Study 1.

**Table 4: A Comparison of Study 1 and Study 2 Participant Responses to Items**

	Study 1 (Forensic Professionals)		Study 2 (Police)		df	t
	Mean	SD	Mean	SD		
1. To what extent have changes in science and technology changed the way you do your job?	5.67	1.17	4.36	1.93	158	5.03*
2. In your opinion, have TV crime dramas changed the way in which you practice/investigate in your cases?	2.21	1.58	1.61	1.08	160	2.13*
3. In your opinion, have TV crime dramas changed the way in which you interact with the public?	2.78	1.82	2.31	1.62	159	1.40
4. In your opinion, have the public's expectations of your profession (conduct, investigations, etc.) changed due to these shows?	4.96	1.71	4.78	1.66	161	.57
5. In your opinion, have the public's expectations affected your behavior in court (if applicable)?	2.18	1.45	1.35	1.20	137	3.00*
6. In your opinion, how accurate are TV crime dramas in portraying what happens in court cases?	2.35	1.08	2.34	1.06	145	.01

Note: \* indicates  $p < .05$ .

Almost all (92%) indicated that *CSI* and similar shows had at least some effect on the general public's expectations of police behavior (see Table 3). Interestingly, all respondents indicated 3 or more on a 1 to 7 scale that *CSI* and similar shows influenced *crime victims'* expectations of the police. These officers felt that crime victims were particularly influenced by these shows, more so than the general public. Indeed, a paired samples t-test confirmed perceived differences between victims and the general public were significant ( $t_{(34)} = 2.47, p < .02$ ). As with Study 1, respondents' comments revealed that

these expectations presented themselves in terms of the time needed for police conduct their investigations and solve crimes (14%), and the availability of evidence and sophisticated investigations for every crime (28%).

Sixty-one percent of officers who testified in court believed that the shows had no influence on their behavior in court. Interestingly, the law enforcement officers in Study 2 were less likely than the forensic professionals in Study 1 to agree with this item (see Table 4). Yet consistent with Study 1, officers reported that jurors expected more complete answers about their investigations, and that this forced them to be more prepared in court. Almost all of the officers (97%) reported their perception that television crime dramas influenced jury decision making to some extent (see Table 3). A similarly high percentage predicted that the shows had some influence on criminal behavior. As suggested by the results of Study 1, 89% of officers reported that these shows were useful during police interrogations because officers could exaggerate the probative value and amount of evidence they have in order to elicit confessions.

As can be seen in Table 3, 97% of officers reported that television crime dramas oversimplified how the police investigate crimes, and 80% of respondents answered 6 or 7 on the 7 point scale. Similarly, 100% of respondents maintained that these shows oversimplified the legal system, with 91% of respondents selecting 5 or above on the 7-point scale. Officers had a stronger sense of the negative impact of television crime dramas, relative to the positive impact of these shows. As Table 3 shows, respondents maintained that the harm done by these shows ( $M = 5.77$ ) was higher than the benefit obtained from watching these shows ( $M = 2.19$ ). A paired samples t-test confirmed this difference was significant ( $t_{(34)} = 9.58, p < .01$ ).

Consistent with Study 1, 72% of officers felt that the shows were at least somewhat accurate in terms of how they depict trials. In addition, most respondents indicated that the shows were somewhat inaccurate in their portrayals of investigations and the availability of evidence, but only 19% indicated the shows were completely inaccurate with regards to availability of evidence (see Table 3). The vast majority of respondents (84%) indicated that the shows were at least somewhat accurate in terms of the diagnostic value of evidence.

Finally, officers estimated the percentage of crimes that are solved on television crime dramas in comparison to the percentage of crimes solved in the real world. Officers predicted that 94.4% of crimes shown on these television crime dramas were solved (range 60-100%;  $SD = 7.72$ ), but the officers estimated that only 41% of crimes are solved in real life (range 7-80%;  $SD = 20.72$ ). A paired

sample t-test confirmed this difference was significant ( $t_{(33)} = 14.15, p < .01$ ).

## DISCUSSION

The findings of Study 2 generally confirmed the findings of Study 1. Specifically, these police officers had similar views of the nature of the CSI effect and how it manifests itself. In addition, Study 2 provided some important insights into police perceptions of the CSI effect, how it influences public expectations and how the police do their work. Officers indicated that crime dramas influence criminal behavior, and that there was a rather dramatic difference in the percentage of crimes solved on television crime dramas versus real life.

## GENERAL DISCUSSION

As we described above, the Maricopa County study (2005) demonstrates that at least some prosecutors believe that *CSI* influences potential jurors. Our research presented here supports that contention, and indicates that police officers and forensic investigators also believe that the CSI effect exists. One interesting issue is how television crime dramas affect the work of forensic and police professionals. Professionals in the two studies presented here report spending more time explaining police procedure and standard operating practices to the public. Thus, the *perception* that television crime dramas influence the public is clear. Professionals involved in the criminal justice system believe that the public's expectations have changed, and they are changing their behavior (including in-court behavior) to counter the CSI effect, even though there is little empirical evidence to elucidate the nature of this effect.

Although, there are a number of studies that have measured the effectiveness of legal remedies designed to reduce juror bias and improve juror decision-making (e.g., Dexter, Cutler & Moran, 1992; Fein, McCloskey, & Tomlinson, 1997; Kramer, Kerr, & Carroll, 1990) these remedies are, at best, only marginally effective and may even increase the bias (see Lieberman & Arndt, 2000; Studebaker & Penrod, 1997). Wegener and Petty (1995, 1997) argue that social biases can be corrected, but that bias correction depends in large part upon awareness of the bias and motivation to make corrections. Importantly, and most relevant to this context, they argue that we can over- or under-compensate for biases if we inaccurately assess their nature or magnitude. Thus, it is important to understand the nature of the CSI effect before we can develop appropriate, legally viable interventions (Tyler, 2006; Wegener et al., 2000).

Although this study adds to the empirical research about legal professionals' perceptions of the nature and impact of the CSI effect, a number of questions remain. One issue worth considering is the time-limited nature of the CSI effect and the broader effect of crime dramas and how they affect the legal system. Because we specifically asked for a definition of the CSI effect on our questionnaire, one might expect that our respondents might limit their responses just to the temporal period since *CSI* began. However, as we believe the broader effect of crime shows is important, we specifically mentioned on the questionnaire that we were interested in the effect of all crime dramas, and specifically mentioned *CSI*, but also *Law & Order*, which has been on the air for 17 years. Thus, our paper might be better thought of as an exploration of the effect of "crime dramas" rather than the CSI effect specifically. Of course, it would be virtually impossible to explore the influence of one show, rather than a category of shows.

Typically, the media has described the CSI effect as an issue that harms the prosecution. That is, news stories usually give anecdotal examples of how "clearly guilty" defendants were acquitted due to the lack of forensic evidence. Wondering whether defense lawyers share this perception, we conducted a series of interviews and surveys with a small sample of Nova Scotia criminal defense lawyers (9 Nova Scotia criminal defense lawyers (Stinson, Patry, Smith & White, 2006). Interestingly, these lawyers reported that television crime dramas have had little or no effect on day-to-day administration of justice or their practice of law. Most of the defense lawyers indicated that these shows have influenced jurors' opinions and expectations of the criminal justice system. Most of the lawyers reported that their clients have increasingly distorted expectations of the legal system. One lawyer indicated that clients often expect defense lawyers to do what is often portrayed in television crime dramas - "pull a rabbit from a hat and get them off on a technicality." Another lawyer noted that his clients seem to be assessing his competence by using the television lawyers' behaviors as an anchor or point of comparison. One defendant even fired his lawyer and insisted on representing himself at trial when his lawyer refused to engage in the dramatic antics depicted by lawyers on these shows.

Several defense lawyers also indicated that their clients often express their belief that the "system" is infallible and that their innocence will lead to an acquittal. As Kassin (2005) suggests in his discussion of false confessions, these notions may put innocent defendants at risk. Thus one fruitful direction for future research would be a broader study to explore the opinions and expectations of criminal defendants regarding their legal counsel, the

extent to which their observations match their expectations, and their interpretations of justice. Consistent with the police officers in Study 2, most lawyers we interviewed thought that U.S.-based television crime dramas were contributing to Canadian jurors' misunderstandings of the Canadian legal system. Several lawyers commented on the importance of explaining to jurors the difference between television fiction and the realities of the administration of justice.

It is worth noting that the fact that the media can influence the public's beliefs is not new (e.g., Kovera, 2002; Vidmar, 2002). However, the research that we report here provides evidence that forensic professionals believe that *CSI* is causing the public to have unrealistic expectations about the police and police investigations. One promising direction for future research is the potential impact of television crimes dramas such as *CSI* on jury verdicts. Presumably, if *CSI* and other legal dramas influence public expectations, regular viewers of these programs might expect a higher (unrealistic) level of evidence collection than non-viewers of these programs, and this could influence jury decision making and jury verdicts. To date, no empirical study has convincingly demonstrated that the *CSI* effect influences trial outcomes (Tyler, 2006; Patry et al., in press) or that it favors the prosecution or the defense.

The effect that television crime dramas may be having on the criminal justice system is still not clear. However, based on the available data, we contend that to some degree, the *CSI* effect exists. Although the full extent, nature, and implications of this effect are yet to be determined, legal professionals seem to be changing their behavior. Such changes (e.g., in-court testimony) could be unwise in the absence of conclusive evidence about the exact nature and consequences of this effect. Because many questions remain unanswered, it would be worthwhile for researchers to continue exploring the *CSI* effect, how it manifests itself, and what its ramifications might be. Clearly, additional research in this area is required before meaningful policy changes or changes in practice should be developed.

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