

The C.S.I. Effect:
Exploration of its Influence on Perception of Criminal Behavior

by

Alexandra L. McConnell

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major program in Psychology
in the College of Sciences
and in the Burnett Honors College
at the University of Central Florida.

Fall Term 2014

Thesis Chair: Dr. Karen Mottarella

ABSTRACT

This study explores the C.S.I. effect in relation to its influence on criminal activity. Expansive research exists concerning the C.S.I. Effect, but very little pertains to the influence it has on individuals' perception of crime and their ability to get away with it. The study explores whether heavy viewers of crime show dramas such as Law & Order and C.S.I. display increased confidence in their ability to commit and get away with a crime. Essentially, this study explores whether these crime television shows are not only entertainment, but also may serve as guides on how to commit crimes. Participants in the study were University of Central Florida students. Participants read a description of a crime scene, and provided judgments from the criminal's point of view. They also completed the Crime Drama Viewing Questionnaire and the Levenson Psychopathy Scale in order to explore the possible correlation between reported confidence in "getting away" with criminal activity, type of television viewing, and psychopathy in participants. Using a correlational design, the relation between heavy and light crime drama viewing and criminal activity decision making was examined. The results of this study add to knowledge about how television crime drama potentially increases criminal confidence and competency in criminal behavior.

DEDICATION

To my father, my biggest fan, and my best friend.

Rest in peace.

ACKNOWLEDGMENT

To Dr. Karen Mottarella for inspiring me to pursue research as well as providing me the tools to surpass my educational confines.

A special thank you to my committee members for their constant feedback and for providing me with an enjoyable thesis experience.

TABLE OF CONTENTS

| | |
|---------------------------------------------------------|----|
| INTRODUCTION..... | 1 |
| METHOD..... | 11 |
| RESULTS | 14 |
| DISCUSSION..... | 17 |
| APPENDIX A: Murder Scenario Scale | 22 |
| APPENDIX B: Murder Scenario Rating Scale | 24 |
| APPENDIX C: Levenson Self-Report Psychopathy Scale..... | 26 |
| APPENDIX D: Crime Drama Viewing Questionnaire..... | 29 |
| APPENDIX E: Participant Information Questionnaire | 35 |
| REFERENCES..... | 38 |

INTRODUCTION

Every Thursday evening between 7-10 P.M., over 100 million people around the world watch crime dramas on their televisions (Shelton, 2008). In this three hour time frame, there can be 60 murders, 20 rapes, and 17 robberies witnessed on these shows (Durnal, 2010). The television crime series C.S.I.: Crime Scene Investigation, which premiered in 2001, is among the most popular shows across the entire globe. In 2009, 73.8 million viewers on average, tuned into the show each week (Gorman, 2010). Even the re-runs today are aired in over 200 territories (Rice, 2009). Television crime shows such as C.S.I. range from 30 minutes to 1 hour in length and are broadcast on a variety of television networks. These television shows follow law enforcement or crime fighting teams as they race against the clock in order to solve a crime that has occurred and provide justice to the victim/s. Investigators on these shows usually uncover physical evidence that directly links the suspect to the crime, which is rarely a possibility in the real world, as this type of evidence is almost nonexistent (Shelton et al., 2011). Although meant to be roughly based on real life law enforcement, viewers tend to believe that the careers depicted in these shows are mirror images of real life. In actuality, this is not the case. The lines between reality and fiction are blurred because these shows depict unrealistic crime fighting techniques.

The more popular these television crime shows became, the more researchers began to notice the relevant side effects. Heavy viewers were starting to exhibit a range of negative and positive effects; effects that were, in turn, beginning to influence the legal and criminal justice

systems. As researchers began to study these influences, the term “C.S.I. effect” was coined to describe the phenomenon. Durnal (2010, p.2), describes, “ the success of TV shows such as C.S.I., N.C.I.S., Criminal Minds, and the numerous other scientifically based crime-solvers has given the public an extremely skewed view of the resources available to law enforcement personnel, dramatically increased the expectations of would be jurors, judges, and attorneys, given criminals insight as to what and how “not to do” things, as well as initiate and perpetuate numerous basic myths about the reality and limitations of forensic science.” In recent media, the C.S.I. effect has been discussed in connection to high-profile trials throughout the United States. Currently, debate exists over the possible impact of these shows on high profile acquittals, such as in the Casey Anthony and Trayvon Martin cases.

Cultivation theory suggests that individuals who view television heavily are more likely to internalize and to accept the messages promoted by the media, while individuals who are light television viewers will not (Hayes & Levett, 2012). Thus, heavy television viewers are more likely to apply these beliefs and perceptions to their social reality. Obviously, the messages that are being portrayed on television are unrealistic representations of life, as they are sensationalized for the purpose of entertainment. Individuals who frequently view television violence are far more likely to exaggerate levels of crime and even violence in reality. As a result, these individuals are more fearful of crime than those who rarely watch violent television (Hans & Dee, 1991). Cultivation theory helps to explain the C.S.I. effect. Cultivation theory supports the idea that fictional television crime dramas can affect individuals’ perception of criminal investigations, and thereby produce a real-world effect (Hayes & Levett, 2012).

Another aspect of the C.S.I. effect concerns program-type dominance. Individual's values and perceptions of reality may be influenced by exposure to specific television program genres. In other words, it does not matter how much television a person is watching, but rather, what they are watching. Through repeated exposure to crime television dramas, viewers are learning, over time, about crime (Mancini, 2011).

Various potential influences or components of the C.S.I. effect have been investigated. One of these is known as the prosecutor's effect and is one of the most widely researched and discussed aspects of the C.S.I. effect. The prosecutor's effect suggests that during trials, juries hold unrealistically high expectations for scientific evidence because of the unrealistic portrayals of evidence-gathering on television (Wise, 2011). For example, C.S.I. and other crime television display evidence-gathering techniques and technology that are not yet developed in real life. In this sense, the shows are science fiction. Then, in a real court room, when these television-based expectations are not satisfied, juries are acquitting defendants based on reasonable doubt (Mancini, 2011). A case in Illinois reached an unhappy ending when a jury acquitted a man for attempted murder of his girlfriend simply because investigators did not test bed sheets for DNA evidence. The suspect, upon being acquitted, went directly to his girlfriend's residence and successfully committed the murder (Tapscott, 2011). In cases such as this one in Illinois, juries, rather than forensic experts, are deciding what they deem "appropriate" scientific evidence for trial. Consequently, prosecutors are now not only having to explain why particular evidence is present, but also why certain evidence is not, even in situations where the evidence was not applicable to the case (Smith, Stinson & Patry, 2011). For example, in 2004, a trial in Los

Angeles led to complaints from jurors over a dearth of DNA evidence. No DNA testing had been completed on a jacket worn by the suspect who had openly admitted to being at the crime scene. The jurors believed that this constituted a lack of evidence (Durnal, 2010). In response, the prosecutors had to bring in expert witnesses simply to explain to the jury why DNA testing was not necessary in this instance. As a result, what should have been a routine court case, turned into an unnecessarily expensive and time-consuming trial. To complicate matters even further, the technology shown on most television crime dramas is not available in the real world. It is estimated that over 40% of the technology used on C.S.I. has not yet been invented (Schweitzer & Saks, 2007). In addition, DNA and the testing of other scientific evidence never produce 100% positive results, because there is always a considerable possibility that the DNA match was incorrect. In contrast, on crime shows, the results are always described as a “match”, but in reality for even the very strongest match, the best that can be concluded is that the DNA evidence “could have come from” (Durnal, 2010.) Crime scene investigators now have to gather more physical evidence than ever before; and in most cases, more than is necessary. This so-called Tech Effect is also causing storage facilities to surpass their capacity. As options for storing evidence decrease, investigators have to leave behind valuable evidence simply because they have nowhere to store it (Durnal, 2010).

The defendant’s effect is another component of the C.S.I. effect impacting the legal system. On the majority of television crime dramas, expert witnesses are present. In nearly every episode, these expert witnesses are consistently accurate. In the real world, this is creating a sense of trust within jurors, who automatically believe everything an expert witness presents,

even when inaccurate (Smith, Stinson & Patry, 2011). Related to this phenomenon is also what has been called the producer's effect. This effect involves the belief displayed by heavy viewers of crime shows that they are "in the know" of real life investigations (Ramsland, 2009). Because of the popularity of the crime shows on television, juries believe that they know everything there is to know about what goes on behind the scenes in criminal investigations, but in reality their knowledge is inaccurate.

Students' interest in forensic science has also substantially increased since these shows began (Durnal, 2010) which has been deemed the educator's effect. Student interest seems to be steadily increasing as more and more are exposed to the overly glamorous portrayal of law enforcement and crime investigation via television. The amount of students pursuing criminal justice majors has increased, and many law enforcement positions around the globe have been filled, but there are also negative aspects of this trend. While students who view television crime dramas see young, sexy, intelligent actors who are able to solve a crime in less than 60 minutes, in reality, a career in law enforcement is far less glamorous and quite time-consuming. Investigations can take months before any leads are even discovered, and the trials usually do not take place for over a year from when the crime was committed. Most professional investigators are not as young as portrayed on television, and there are a lot more criminal justice employees involved than the small teams on these shows (Ramsland, 2009).

While the crime show genre may be increasing the number of people interested in careers related to law enforcement, on the other end of the spectrum is a phenomenon known as the police chief effect (Cole & Dioso-Villa, 2011). The police chief effect involves the debate as to

whether criminals may be watching crime dramas on television and learning how to adapt to avoid apprehension. To date, this topic has received little empirical research or attention in comparison to other aspects of the C.S.I. effect. However, it appears that criminals are beginning to take notice of what television shows such as C.S.I. have to offer in the way of how to go undetected. Although the guilty party is apprehended in almost every episode of a crime show, viewers who are criminally inclined are able to take note of what the offender did incorrectly, and learn from it. Richard Ernest, a forensic firearms expert, suggests, “What I’ve heard is that it’s closely watched in prisons. And prisons become almost like a crime school for certain individuals. They’ll look at a particular segment and say, ‘So that’s how they caught me. Well, I won’t make those mistakes again’” (Mirsky, 2005, p. 1). Another example of the police chief effect involves the use of bleach in order to cover up a crime scene and to destroy potential DNA evidence. In the past, such use of bleach was unheard of in the criminal justice system. Today, it is one of the most practiced methods of hiding a homicide, and the increase in use of it has been attributed to the C.S.I. effect and the fact that it has been repeatedly demonstrated on crime television shows (Durnal, 2010). However, attempts to cover up a crime can actually backfire on the criminals. Sometimes the more careful they try to be, the more evidence they leave behind for investigators. Max Houck, the director of West Virginia University’s Forensic Science Initiative, provides a good example of this, “Instead of licking an envelope [to prevent leaving DNA from their saliva] they’ll use adhesive tape. Well, they’ll probably leave fingerprints on the tape, and it’ll pick up hairs and fibers from the surroundings” (Mirsky, p. 1).

Just as television crime show viewing may influence and educate criminals, it can also do the same for victims. The victim effect, another branch of the C.S.I. effect, suggests that victims are being influenced both positively and negatively based on their viewing of television crime dramas such as C.S.I. Crime dramas may be educating citizens as potential victims. Take for example the case of serial rapist, Lance Corporal Jonathan Haynes. Over a six month period, Haynes kidnapped and raped women including a girl as young as 16 years of age, and a pregnant woman. His capture finally took place when an unidentified victim, while being held captive in the backseat of Haynes' vehicle, left DNA evidence. The female victim pulled out her own hair to hide in the car, as well as spit on the seat. Being an avid C.S.I. television show viewer, she reported that she knew exactly what to do from watching television and purposely left physical evidence. The DNA she left behind ultimately helped lead to the conviction of Haynes of rape and kidnapping. Although crime television dramas are not how-to guides, they certainly can provide viewers with an understanding of how law enforcement works. In cases such as this one, knowledge that the victim ascertained from crime show viewing helped apprehend and convict a real-world predator (Orr, 2011).

It is important not to overlook the positive influence that the C.S.I. effect has on the criminal justice system as well. The increase in jury awareness of the process of investigations has made the system more accountable overall (Ramsland, 2009). The public awareness of law enforcement has significantly increased. As noted above, the C.S.I. effect has increased student interest in receiving criminal justice education and pursuing careers in the field. Because of these

increases, there has been increased funding to improve crime lab and investigative resources (Ramsland, 2009).

One of the best known studies on the C.S.I. effect, the 2005 Maricopa County Study, surveyed 102 prosecutors to assess their perception of the influence of television crime dramas on legal proceedings. The results supported the presence of C.S.I. effects, as perceived by these attorneys. The prosecutors who were surveyed reported having to adapt the way they present their cases. Of the attorneys surveyed, a total of 38% reported having lost a case because of the C.S.I. Effect; 45% were convinced that jurors rely on scientific evidence more than they should; and 70% of prosecutors now ask jurors about their television crime drama viewing habits during voir dire. A total of 52% of the prosecutors indicated they reached plea agreements for cases that they believed C.S.I.-educated jurors would possibly object to the lack of evidence presented in that particular case (Maricopa County Attorney's Office, 2005).

In a study involving a sample of 53 prosecuting and defense attorneys in Florida, the attorneys were asked their views on television crime dramas' effects on juries. All of the participants agreed that potential jurors are forming unrealistic expectations from crime shows. As many as 50% of the prosecuting and defense attorneys reported having to include in questions in the voir dire process about television crime watching. The attorneys described having to modify their current trial procedure in order to adapt to the new juror perception (Wise, 2010).

Podlas (2006) investigated whether heavy television crime drama viewers held particular beliefs concerning forensic evidence that affected their verdict in a rape case where no forensic

evidence was provided. This mock jury study consisted of 306 undergraduate and graduate students. Each participant's viewing habits were measured and placed into one of two categories: frequent viewers of C.S.I., and non-frequent viewers. The mock jurors then reviewed a scenario of an alleged rape. The case rested only on the credibility of witnesses. After reading this, the participants provided their verdict as well as an explanation. There was no difference between frequent and non-frequent viewers of C.S.I. on the influence of the evidence. However, results did show that frequent viewers were significantly more likely to convict. The results of this study suggest that heavy crime drama viewers are more likely to convict, which could potentially suggest that innocent individuals are being wrongly convicted.

A reoccurring issue with a number of past studies investigating the C.S.I. effect involves how the level of crime viewing is categorized. In some instances, participants were only placed in the light viewer category if they had never watched the shows. Participants who had watched only one show were placed in the heavy viewer category (Such as in Podlas, 2006). This is an issue because also included in the heavy viewer category are participants who have seen every episode ever aired of C.S.I. Research concerning the C.S.I. effect is a very important undertaking because of its real-world implications. The presence and nature of the C.S.I. effect could directly affect the criminal justice as well as the legal system. Citizens who are misinformed based on television dramas may acquit a guilty murderer based on a simple lack of DNA evidence. Criminals who watch crime dramas may become increasingly more informed on how to commit their crimes with every new episode that is aired. The present study will explore the possible relationship between viewing television crime dramas and perception of criminal behavior.

Numerous studies have measured the impact of the C.S.I. effect on jury decisions, but there has been little research pertaining to the producers effect or the effect that television crime drama has on those committing the offenses. It is possible that the C.S.I. effect actually becomes an issue when the crime is taking place, well before the legal system comes into play with an actual trial and jury. Therefore, the present study focuses on the C.S.I. effect in terms of its impact on criminal behavior

Hypothesis 1: Participants with high viewing of televised crime dramas will have significantly greater reported knowledge about crime in relation to leaving little evidence and covering up the crime on the Scenario Rating.

Hypothesis 2: Participants with high viewing of televised crime dramas will have significantly greater reported confidence in going un-apprehended for the crime on their Scenario Rating.

Hypothesis 3: The very highest viewers of criminal television dramas will score significantly higher on the Levenson Psychopathy Self-Report Scale than participants who are less frequent viewers.

METHOD

Participants

A sample of individuals enrolled in undergraduate psychology courses at the University of Central Florida participated and received course credit via SONA for their participation in the study (N = 364). Undergraduate students have been determined to represent a suitable sample of mock criminals (Tapscott, 2011), although a community sample may show different results. All participants provided informed consent. Of the students who participated, 70.8% were female (n = 257) were female and 28.4% (n = 103) were male. Three participants chose not to disclose their gender. In the sample, 60.4% of the participants were aged 17-20 (n = 219), 28.5% were aged 21-25 (n = 103), and 11.8% were aged 26 or older (n = 41, range = 17-56). 56.5% of participants identified themselves as Non-Hispanic White (n = 205), 23.7% as Hispanic (n = 86), 12.9% as African American (n = 47), 6.3% as Asian American (n = 23), and .6% as American Indian (n = 2).

Procedure

The study online was administered online. First, participants were asked to imagine themselves in the role of a person having just committed a murder and to complete the *Murder Scenario Rating Scale* comprised of questions related to their confidence in getting away with the murder. Then participants were asked to complete a *Crime Drama Viewing Questionnaire*, the *Levenson Self-Report Psychopathy Scale*, and the *Participant Information Questionnaire*.

Materials

Murder Scenario. The scenario was formulated specifically for this research and involved a vague description of a murder that had just been committed. Basic details were provided including the time and location. No information concerning how the murder was committed or the circumstances were provided for the participants in order to leave details up to the participants' imagination. Participants who did not provide an answer were rated with a "0," a scenario relating to self-defense was rated "1," an accidental scenario was rated "1.5," a murder of passion was rated "2," a crime showing premeditation was rated "3," and a crime involving a mental issue such as hearing voices, was rated "4." Five more questions followed, asking participants for more specific details pertaining to the murder including weapon used, and prior planning.

Murder Scenario Rating Scale. This scale was created specifically for this study. Questions 1 through 6 in this scale utilize a 5-point Likert-style response from ranging from *1-Very Unconfident* to *5- Very Confident*. These questions pertained to the participant's confidence in getting away with the murder.

Amended Crime Drama Viewing Questionnaire (CDVQ, Tapscott, 2011). The *Crime Drama Viewing Questionnaire* (CDVQ) measures the crime drama viewing habits of participants. The original CDVQ was amended for the purpose of this study. The television crime dramas in the scale were updated to the shows still on air as of 2012. The CDVQ asked participants what specific television crime dramas they watch, their favorite and least favorite, the frequency and average amount they view these shows, and their total television viewing. The CDVQ

determined the amount and average of crime drama viewed by participants. Estimated crime drama viewing was assessed on a 7-point scale ranging from 1= *I never watch this type of show*, to 7= *I watch this show every day*. The first category, heavy viewers, were those who responded with a 4, (I watch this show 2-3 times per week) or greater, on the 7-point scale to at least one of the specific television crime dramas included in the questionnaire. The second category, light viewers were those participants who responded with a 3 or less (I only watch this show 2-3 times per month) on the 7-point scale to all of the specific shows included on the questionnaire. Categorizing heavy and light viewers in this way allows for a better differentiation between those who hardly ever watch television crime dramas and those who watch them regularly.

Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995).

The 26-item *Levenson Self-Report Psychopathy Scale* was utilized for the present study. This scale measures the psychopathic tendencies of participants. This scale is based on a 5-point Likert-style response format ranging from 1 = *strongly disagree*, to 5= *strongly agree* (e.g., “for me, whatever is right is what I can get away with”). Individuals who score high on the *Levenson Self-Report Psychopathy Scale* are more likely to exhibit psychopathic tendencies. Extensive research has found good convergent and discriminant validity of this scale as a measure of psychopathy (Sellbom, 2011).

Participant Demographic Form. This form gathered basic personal information from each participant. The questions included general demographic questions, as well as questions concerning the participant’s criminal history.

RESULTS

A total of 364 individuals participated in this study. One participant was excluded because he/she did not properly answer the questions. Therefore, the final sample included 363 participants, 70.8% female (257 female participants and 103 male participants) and 56.5% Caucasian.

In order to better code the open-ended questions, content-based experts were utilized. By having three anonymous law enforcement agents with the total combined work experience of 57 years on both the state and federal level, the responses were able to be categorized into particular groups.

In relation to the Murder Scenario, participant responses to the scenario prompt fell into four categories: self-defense, accidental, crime of passion, and premeditated murder. The following is an example of a participant's response that involved self defense is, *"I walked into my kitchen, and there was an intruder. I had no other option but to stab them. It was them or me."* An accidental murder response was *"We had a couple drinks and began wrestling. I shoved him really hard and he slammed his head onto my coffee table. He died instantly."* An example of crime of passion response is, *"Walking in on her with another man, infuriated me. I didn't even realize I grabbed a knife until it was inside of the guy's stomach. I couldn't stop. She ran off."* Lastly, a response that involved premeditated murder response is as follows: *"I was stalking the woman on the way home from the bar. I immediately felt anger and misery towards her. During the murder there was a lot of shouting as I cut deeply into her throat. Immediately after the murder, I felt cold. I felt accomplished."*

The *Murder Scenario Rating Scale* asked participants to elaborate on the murder scenario itself. This scale included the question, *“What will you do after you leave the scene of the crime?”* Participants responses fell into one of four types of responses: remorse & calling authorities; fleeing; going back to normal routine; and covering up the crime. A participant that responded with “remorse & calling authorities” stated, *“I wouldn’t leave the scene of the crime because I would sit there and wait for police so I’d pay for what I did.”* A participant that responded with fleeing stated, *“I would move to Canada.”* A participant responding with going back to normal routine stated, *“I will go home and finally get a good nights sleep because you’re dead.”* A participant that responded with covering up the crime responded, *“I will go to a movie theater and buy a ticket to a movie that was already going on so that I have a time stamped ticket that gives me an alibi.”* Concerning the question, *“What weapon did you use in the murder and why?”* participants choice of method fell into the following categories: gun, poison, blunt object, knife/stabbing weapon, and strangulation/suffocation weapon. For both of the questions, *“What prior planning, if any, did you do before the murder occurred?”* and *“How will you control/hide evidence at the crime scene?”* the number of listed methods from each response was added together to reach the participant’s score for that question.

For the purpose of this study, the results were at a 95% level of confidence, and thus, the alpha value utilized was .05. Hypothesis 1 was not supported. Participants who often watch crime television dramas did not score higher on the Murder Scenario Scale. Furthermore, the hypothesis that heavy crime drama viewers would have more confidence concerning their

criminal activities was not supported. Contrary to the initial hypothesis, the results showed, $r(363) = .071, p > .095$.

Hypothesis 2 was not supported in this study. The initial hypothesis was that participants who viewed crime television dramas would be more confident in their ability to get away with murder. Upon analysis, it appears that the opposite was the case. Participants who were heavy crime television drama viewers were less confident in their ability to get away with the murder they committed. Participants who were low crime television drama viewers reported more confidence in going un-apprehended, $r(363) = .014, p = .129$.

Hypothesis 3 was not supported but some interesting results did emerge related to it. The participants with the highest viewing of crime television dramas did not score higher on the *Levenson Psychopathy Scale*, $r(363) = .785, p = .014$. Interestingly, participants who noted having a criminal past scored highest on the *Murder Scenario Scale*, the *Murder Scenario Rating Scale*, and the *Levenson Psychopathy Scale*. This suggests that even those who are involved with minor crimes such as “petty theft” and “driving under the influence (DUI)” have a criminal mindset that provides them with a stronger response to the idea of murder. The participants with a criminal past were not, however, the highest viewers of crime television dramas. The results were significant, $r(363) = .750, p = .017$.

DISCUSSION

The purpose of this study was to explore certain aspects of the C.S.I. Effect. Much of the prior research on the C.S.I Effect focused on the jury and trial aspects of the C.S.I. Effect and minimally on the aspect of criminal activity itself. The purpose of this study was to expand upon the known research concerning how the C.S.I. Effect influences criminal behavior.

The C.S.I. Effect encompasses not only the legal process, but the motivation and act of committing crimes as well. The results of this study did not show directly the presence of the C.S.I. Effect in relation to perspectives on criminal behavior. The results do not suggest that individuals learn “how to get away with murder” from the television shows they watch. More specifically, people do not learn criminal behavior from viewing television crime dramas. It is possible that the effects of crime television drama viewing are not powerful enough to influence an individual’s criminal behavior. It is more likely a variety of factors that contribute to this behavior.

An interesting finding in this study was the fact that only one respondent noted that they would hire a hit man instead of having to commit the murder themselves. All other participants responded that they would commit the murder themselves. Another intriguing response was how participants identified their victims. While the Murder Scenario simply contains a bland paragraph that allows for the victim to be a random stranger, 76% of respondents ($X = 275.88$) had a victim known to them such as spouse, parent, best friend, and ex-partners. While there was still a substantial amount of participants that kept their victim as a stranger, it should be noted that some felt the need to identify a victim.

As technology such as Ipads become readily available, it is even easier to view crime television dramas anywhere. Through websites such as Netflix and Hulu, these shows can be viewed anytime and even by children under the age of 17. Parental controls are not an automatic feature, allowing children full access to content that includes criminal television dramas. These shows are known to be violent and graphic. As children are exposed to more and more of these shows, they are becoming desensitized to violence and more importantly, crime (Ramsland, 2009). Some of the responses from the *Murder Scenario Scale* were startling. For example, to the question, “*What weapon did you use in the murder and why?*” One response was, “*A kitchen knife, because a knife is one of the most playful ways to go. I wanted to make sure he suffered.*” Another question asked, “*What prior planning, if any, did you do before the murder occurred?*” One response stated, “*I put on all black clothes and a backpack. I grabbed my sharpest knife and put it in the bag. I also grabbed duct tape and a rope just in case. As I walked out of my house, I looked in the mirror, and smiled at myself.*” These responses exhibit just how desensitized one can become from viewing crimes over and over again. It becomes a game, and something to be enjoyed. There were quite a few responses that were worded in a similar fashion. In future studies, it would be interesting to look more directly at the desensitization process based on criminal television dramas. The fact that the hypotheses were not supported in this study may also be attributable to the concept of a general cultural “tech effect”. This concept involves the idea that the greater expectations of jurors in relation to expectations about scientific evidence is broad and not just found among individuals who are high watchers of televised crime drama. Instead, all of us are influenced by the science and technology-saturated culture in which we live (Shelton, Barak, & Kim, 2011). Similarly, Hans and Dee (1991) propose the idea of a general

“Media Effect” on all of us such that the entire venire and not just high crime drama viewers has a particular image of law and justice, Media effects from television news, crime dramas, newspapers and films contribute to the public’s incidental learning and a distorted concept of crime, law and the legal system. *“Because most of the public has little direct experience with the justice system system, public knowledge and views of law and the legal system are large dependent on media representations. The media provide many lessons about law and justice. In the average American household, a TV set is on for over 7 hours each day, and individual members of the family watch television for about 3 hours.”*(p. 136).

Between 1949 and 1987, there were 134 police dramas aired on television (Hans & Dee, 1991). This proves that the C.S.I. Effect may not necessarily be a new phenomenon. However, there are a variety of factors that should be taken into account. For example, television shows during this period of time were substantially less graphic, and more appropriate for a broad audience. It would be interesting to take a look at the progression of television crime dramas throughout the years and how the ratings and graphic nature has evolved. Further, it may be beneficial to look at individuals who have watched these shows for a long period of time, versus someone who may have recently become interested in crime television dramas. Someone who has been viewing these types of shows steadily since the 1970s, may have a different scoring then someone who recently started viewing these shows within the last month. Concerning this study, both could be considered heavy viewers based on how many episodes a week they watch these shows. If these viewers were better differentiated, different results may be found. In additional research, it would be beneficial to look at the possibility that heavy television crime

drama viewers may be heavy television viewers in general. If someone is viewing a lot of television in general, they are not honing in on a specific genre like others might.

Where in the past, having a jury attempt to understand scientific evidence was a challenge (Ramsland, 2009), it has now become an issue of trying to de-educate them, correcting their misconceptions. Criminals are learning the exact same information, but for more sinister purposes. Although this study did not provide supporting evidence that criminal behavior is necessarily learned from crime television drama viewing, this study certainly does not disprove the idea. Being that this was the first study where the Murder Scenario Scale and the Murder Scenario Rating Scale were implemented; there will certainly be room for improvement for future studies.

Although there are certainly the positives of the C.S.I. Effect that are being exhibited such as the increased interest in forensic careers, as well as more accountability within the field, the negative aspects are something that cannot be ignored. This study took an in-depth look at aspects of the C.S.I. Effect that were ignored in prior research. It is vital that research continues to take place in order to truly understand this phenomenon and its effects on society as a whole. One lasting note concerns an eerie response received from 17 participants on the *Murder Scenario Scale*. The question asked, “*What will you do after you leave the scene of the crime?*” A total of 17 respondents said, “*I would do it again.*” This is a response suggests that people have the drive and will to commit murder. While they were only asked to describe the committing of one murder, these individuals felt such an adrenaline rush and overall satisfaction from the first one, that they were already brainstorming their next murder. The fact that

participants have the confidence and in their opinion, the knowledge to commit not only one, but multiple murders, suggests a very sinister theory. Whether viewers of crime television dramas are truly learning how to commit murder is moot. Instead, it is the confidence and belief that they know how to kill another human being that is important. If they end up getting caught, that is minimal to the fact that a murder will take place nonetheless. The belief that one can do something, is enough drive for them to take action.

The finding that participants with a criminal background scoring among the highest on the Levenson Psychopathy Scale, the Murder Scenario Scale, and the Murder Scenario Rating Scale is interesting. Those with experience committing crimes, were able to describe the steps of committing a murder more in-depth in comparison to those who have never committed a crime. Although, the crimes mentioned by participants were non-violent in nature and related to fraud and petty theft. Nonetheless, this is an important finding as it shows that criminals in general, who have experience with the criminal justice system, may be more knowledgeable about committing crimes in general. Further, these individuals show more psychopathic tendencies.

APPENDIX A
MURDER SCENARIO SCALE

Murder Scenario Scale:

It is 2:00 A.M. on a Sunday morning. You have just committed murder. The reason why is irrelevant, just the fact that your victim is most definitely dead. You are currently standing over the body of the victim at their residence, and there seems to be no one else at the home. There is no turning back from the crime you just committed, only the opportunity to cover up the crime and avoid detection from police.

The following questions will have a blank paragraph box in order for participants to provide their responses.

- 1) What prior planning, if any, did you do before the murder occurred?
- 2) What weapon did you use in the murder and why?
- 3) How will you control/hide evidence at the crime scene? (If you do not do anything, please type, "Nothing").
- 4) What will you do after you leave the scene of the crime?

APPENDIX B
MURDER SCENARIO RATING SCALE

Murder Scenario Rating Scale:

The following questions will have the following response options: very unconfident, slightly unconfident, neutral, slightly confident, very confident, or prefer not to answer.

- 5) How confident are you that you can get away with murder?
- 6) If the police interview you (as a witness, and not yet a suspect), how confident are you that you will not be apprehended?
- 7) If you are considered a suspect, and interrogated, how confident are you that you will get out of it?
- 8) If you get away with it for 1 month, how confident are you that you will never get apprehended?
- 9) If you get away with it for 6 months, how confident are you that you will never get apprehended?
- 10) If you get away with it for 1 year, how confident are you that you will never get apprehended?
- 11) If you get away with it for 5 years, how confident are you that you will never get apprehended?

APPENDIX C

LEVENSON SELF-REPORT PSYCHOPATHY SCALE

Levenson Self-Report Psychopathy Scale:

The following questions each have the responses of: strongly disagree, slightly disagree, neutral, slightly agree, strongly agree, or prefer not to answer.

1. Success is based on survival of the fittest; I am not concerned about the losers
2. I find myself in the same kinds of trouble, time after time
3. For me, what's right is whatever I can get away with
4. I am often bored
5. In today's world, I feel justified in doing anything I can get away with to succeed
6. I find that I am able to pursue one goal for a long time
7. My main purpose in life is getting as many goodies as I can
8. I don't play anything very far in advance
9. Making a lot of money is my most important goal
10. I quickly lose interest in tasks I start
11. I let others worry about higher values; my main concern is with the bottom line
12. Most of my problems are due to the fact that other people just don't understand me
13. People who are stupid enough to get ripped off usually deserve it
14. Before I do anything, I carefully consider the possible consequences
15. Looking out for myself is my top priority
16. I have been in a lot of shouting matches with other people
17. I tell other people what they want to hear so that they will do what I want them to do
18. When I get frustrated, I often "let off steam" by blowing my top

19. I would be upset if my success came at someone else's expense
20. Love is overrated
21. I often admire a really clever scam
22. I make a point of trying not to hurt others in pursuit of my goals
23. I enjoy manipulating other people's feelings
24. I feel bad if my words or actions cause someone else to feel emotional pain
25. Even if I were trying very hard to sell something, I wouldn't lie about it
26. Cheating is not justified because it is unfair to others

APPENDIX D

CRIME DRAMA VIEWING QUESTIONNAIRE

Crime Drama Viewing Questionnaire (CDVQ):

How often do you read books (other than school-related textbooks) about, or related to the criminal justice system (i.e., crime, law, police)?

- Every day
- Almost every day
- About 2-3 time a week
- A couple of times a month
- About once a month
- I almost never read these types of books
- I never read these types of books

How often do you read newspaper, magazine, and/or internet articles about, or related to the criminal justice system (i.e., crime, law, police)?

- Every day
- Almost every day
- About 2-3 time a week
- A couple of times a month
- About once a month
- I almost never read these types of articles
- I never read these types of articles

How often do you play video game or computer games that have content about, or related to the criminal justice system (i.e., crime, law, police)?

- Every day
- Almost every day
- About 2-3 time a week
- A couple of times a month
- About once a month
- I almost never play these types of games
- I never play these types of games

Compared to two or three years ago, how many crime drama or cop shows do you watch on television?

- A lot more than two or three years ago
- A little more
- About the same amount
- A little less
- A lot less than two or three years ago
- Don't know

How long have you been watching television crime dramas?

- Several weeks

- Several Months
- Almost a Year
- Over a Year
- Several Years
- I do not watch these television shows

For the following questions (1-8), please answer using the following scale:

- A. 0 hours
- B. 1/2 hour
- C. 1 hour
- D. 1 1/2 hours
- E. 2 hours
- F. 2 1/2 hours
- G. 3 hours
- H. 3 1/2 hours
- I. Between 4-4 1/2 hours
- J. Between 5-6 hours

On a typical week day (Monday through Friday), for how many hours do you watch cable, satellite, broadband, or internet TV during each of the following times?

1. Between 6 am and Noon on a week day, I usually watch TV for about:
2. Between Noon and 6 pm on a week day, I usually watch TV for about:
3. Between 6 pm and Midnight on a week day, I usually watch TV for about:
4. Between Midnight and 6 am on a week day, I usually watch TV for about:

On a typical weekend day (Saturday or Sunday), for how many hours do you watch cable, satellite, broadband, or internet TV during each of the following times?

5. Between 6 am and Noon on a weekend, I usually watch TV for about:
6. Between Noon and 6 pm on a weekend, I usually watch TV for about:
7. Between 6 pm and Midnight on a weekend, I usually watch TV for about:
8. Between Midnight and 6 am on a weekend, I usually watch TV for about:

The following questions will be addressing the CSI Effect. The CSI Effect was proposed by the media around 2004. The CSI Effect can be defined as an influence on people's decisions in trials because they have a tendency to watch crime shows and view them as real. Keep in mind that for these questions crime shows includes any crime type show that is not a news show.

For the following statements, please check the option that best reflects your opinion on each statement.

Please click the next button at the bottom of the page when you are finished.

For the following statements, please click the option that best reflects your opinion on each statement.

(Please check only one option for each statement. To uncheck a box simply click on it)

Criminals who watch crime shows will make decisions differently than those who do not watch crime shows

Victims who watch crime shows will make decisions differently than those who do not watch crime shows

What are your five favorite crime or courtroom dramas or police shows?

a. Title #1: _____

How realistic do you think this show is? Not at all: 1 2 3 4 5:Extremely

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5: Extremely

How believable is this show? Not at all: 1 2 3 4 5: Extremely

How much do you learn about the criminal justice system from this show?

Not at all: 1 2 3 4 5:Extremely

a. Title #2: _____

How realistic do you think this show is? Not at all: 1 2 3 4 5:Extremely

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5: Extremely

How believable is this show? Not at all: 1 2 3 4 5: Extremely

How much do you learn about the criminal justice system from this show?

Not at all: 1 2 3 4 5:Extremely

a. Title #3: _____

How realistic do you think this show is? Not at all: 1 2 3 4 5:Extremely

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5:Extremely

How believable is this show? Not at all: 1 2 3 4 5: Extremely

How much do you learn about the criminal justice system from this show?

Not at all: 1 2 3 4 5:Extremely

For the following items (9-51), please answer using the following scale:

A. Every day

B. Almost every day

C. About 2-3 times a week

D. About once a week

E. A couple of times a month

F. About once a month

G. I almost never watch this

H. I never watch this

9. How often do you watch Almost Human?

10. How often do you watch The Americans?
11. How often do you watch Beauty & the Beast?
12. How often do you watch the Blacklist?
13. How often do you watch Blue Bloods?
14. How often do you watch Boardwalk Empire?
15. How often do you watch Bones?
16. How often do you watch Breaking Bad?
17. How often do you watch Brooklyn Nine-Nine?
18. How often do you watch Burn Notice?
19. How often do you watch Castle?
20. How often do you watch Covert Affairs?
21. How often do you watch Crime 360?
22. How often do you watch CSI (Including CSI: New York, CSI: Miami, etc.)?
23. How often do you watch Criminal Minds (Including Criminal Minds: Suspect Behavior)?
24. How often do you watch Dexter?
25. How often do you watch Elementary?
26. How often do you watch Flashpoint?
27. How often do you watch The Following?
28. How often do you watch Franklin & Bash?
29. How often do you watch The Good Wife?
30. How often do you watch Hannibal?
31. How often do you watch Hemlock Grove?
32. How often do you watch Hawaii Five-0?
33. How often do you watch Homeland?
34. How often do you watch Justified?
35. How often do you watch The Killing?
36. How often do you watch Law and Order (Including SVU and CI)?
37. How often do you watch Leverage?
38. How often do you watch Lie to Me?
39. How often do you watch The Mentalist?
40. How often do you watch Murder, She Wrote?
41. How often do you watch NCIS (Including NCIS: Los Angeles)?
42. How often do you watch Nikita?
43. How often do you watch Person Of Interest?
44. How often do you watch Psych?
45. How often do you watch Rizzoli & Isles?
46. How often do you watch Scandal?
47. How often do you watch Sherlock?
48. How often do you watch Sons of Anarchy?
49. How often do you watch True Detective?
50. How often do you watch Weeds?
51. How often do you watch White Collar?

Criminal television dramas accurately describe what happens in the criminal justice system

- Strongly disagree
- Slightly disagree
- Neutral
- Slightly agree
- Strongly agree

Criminals who watch crime shows will make decisions differently than those who do not watch crime shows

- Strongly disagree
- Slightly disagree
- Neutral
- Slightly agree
- Strongly agree

Victims who watch crime television shows will make decisions differently than those who do not watch crime television shows

- Strongly disagree
- Slightly disagree
- Neutral
- Slightly agree
- Strongly agree

APPENDIX E

Participant Information Questionnaire

Participant Information Questionnaire:

- 1.What is your gender?
- 2.What is your current age in years? _____
- 3.What is your racial/ethnic background? (Multiple answers: White, non Hispanic / Hispanic / African American, Non-Hispanic / Asian / American Indian / Other _____)
- 4.Have you ever been the victim of a crime?
- 5.Have you ever been convicted of a felony? (e.g., rape, murder, armed robbery, arson, sale of illegal drugs, kidnapping, grand theft)
- 6.If yes, describe (_____)
- 7.Have you ever been convicted of a misdemeanor? (e.g., taking illegal substances, underage drinking, prostitution, shoplifting, speeding/traffic ticket, vandalism)
- 8.If yes, describe (_____)
- 9.Have you ever committed a felony? (e.g., rape, murder, armed robbery, arson, sale of illegal drugs, kidnapping, grand theft)
- 10.If yes, describe (_____)
- 11.Have you ever committed a misdemeanor? (e.g., taking illegal substances, underage drinking, prostitution, shoplifting, speeding/traffic ticket, vandalism)
- 12.If yes, describe (_____)
- 13.Have you ever been victim of a theft?
- 14.Have you ever committed a theft?
- 15.Have you ever been the victim of an auto theft?

16. Have you ever committed an auto theft?
17. Have you ever been the victim of a robbery?
18. Have you ever committed a robbery?
19. Have you ever been the victim of an assault?
20. Have you ever committed an assault?
21. Have you ever been the victim of forgery or fraud?
22. Have you ever committed forgery or fraud?
23. How many times have you been arrested? (___)

REFERENCES

- Adams, A. (2009, February 11). 'csi' = crime scene instructions?. Retrieved from http://www.cbsnews.com/2100-207_162-1259502.html
- Baskin, D. R., & Sommers, I. B. (2010). Crime-show-viewing habits and public attitudes toward forensic evidence: The "csi effect" revisited . *Justice System Journal*, 13(1), 97-113.
- Cole, S. A., & Dioso-Villa, R. (2011). Should judges worry about the "csi effect"?. *Court Review: The Journal of the American Judges Association*, 47(1-2), 20-31.
- Durnal, E. W. (2010). Crime scene investigation (as seen on tv). *Forensic Science International*, 199, 1-5. doi: 10.1016/j.forsciint.2010.02.015
- Greene, E. (1990). Media effects on jurors. *Law and Human Behavior*, 14(5), 439-450. doi: 0147-7307/90/1000-0439\$06.00/0
- Gummelt, H. D., Anestis, J. C., & Carbonell, J. L. (2012). Examining the levenson self report psychopathy scale using a graded response model. *Personality and Individual Differences*, 53, 1002-1006.
- Hans, V. P., & Dee, J. L. (1991). Media coverage of law: Its impact on juries and the public. *American Behavioral Scientist*, 35(2), 136-149.
- Hayes, R. M., & Levett, L. M. (2012). Community members' perceptions of the csi effect. *American Criminal Justice*, 38, 216-235. doi: 10.1007/s12103-012-9166-2

- Hayes-Smith, R. M., & Levett, L. M. (2011). Jur'ys still out: How television and crime show viewing influences jurors' evaluations of evidence. *Applied Psychology in Criminal Justice*, 7(1), 29-46.
- Huey, L. (2013). 'i've seen this on csi': Criminal investigators' perceptions about the management of public expectations in the field. *Crime Media Culture*, 6(1), 49-68. doi: 10.1177/1741659010363045
- 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, 452-460. doi: 10.1016/j.jcrimjus.2009.07.005
- Littlefield, M. M. (2011). Historicizing csi and its effect(s): The real and the representational in american scientific detective fiction and print new media, 1902-1935. *Crime Media Culture*, 7(2), 133-148. doi: 10.1177/1741659011406700
- Mancini, D. E. (2011). The csi effect reconsidered: Is it moderated by need for cognition?. *North American Journal of Psychology*, 13(1), 155-174.
- Mirsky, S. (2005). Crime scene instigation. *Scientific American*, Retrieved from <http://www.scientificamerican.com/article.cfm?id=crime-scene-instigation>
- Orr, J. (2011, September 09). Victim used own dna to trap serial rapist soldier. Retrieved from <http://www.telegraph.co.uk/news/uknews/crime/8751393/Victim-used-own-DNA-to-trap-serial-rapist-soldier.html>

- Ramsland, K. (2009). The facts about fiction: What grissom could learn about forensic psychology. *The Journal of Psychiatry & Law*, 37(1), 37-50.
- Schweitzer, N.J., & Saks, M.J. (2007). The CSI Effect: Popular fiction about forensic science affects the public's expectations about real forensic science. *Jurimetrics*, 47, 357-358.
- Sellbom, M. (2011). Elaborating on the construct validity of the levenson self-report psychopathy scale in incarcerated and non-incarcerated samples. *Law & Human Behavior*, 35(6), 440-451. doi: 10.1007/s10979-010-9249-x
- Shelton, D. E. (2008). The 'csi effect': Does it really exist?. *National Criminal Justice Reference Service*, (259), 1-7. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/221501.pdf>
- Shelton, D. E., Barak, G., & Kim, Y. S. (2011). Studying juror expectations for scientific evidence: A new model for looking at the csi myth. *Court Review: The Journal of the American Judges*, 47(1), 8-18.
- Smith, S. M., Stinson, V., & Patry, M. W. (2011). Fact or fiction? the myth and reality of the csi effect. *Court Review: The Journal of the American Judges Association*, 47(1-2), 4-7. Retrieved from <http://digitalcommons.unl.edu/ajacourtreview/355/>
- Tapscott, Ryan, "Media effects and the criminal justice system: An experimental test of the CSI effect" (2011). *Graduate Theses and Dissertations*. Paper 10254.
- Wise, J. (2010). Providing the csi treatment: Criminal justice practitioners and the csi effect. *Current Issues in Criminal Justice*, 21(3), 383-399.