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Media effects and the criminal justice system: An experimental test of the CSI effect

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Media effects and the criminal justice system: An experimental test of the CSI effect

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ABSTRACT

Across two studies, factors hypothesized to be involved in the CSI effect were examined. In study 1 (N = 245), a correlational design was used to determine relations between heavy crime drama viewers and their knowledge and expectations for scientific evidence. Heavy viewers were more knowledgeable about the criminal justice system and held greater expectations for scientific evidence than light crime drama viewers. In study 2 (N = 239), participants were randomly assigned to view four episodes of a crime drama, a medical drama, or no show and then complete measures of knowledge and expectations. Although no differences were found between conditions, results of study 2 replicated the results of study 1, showing that heavy crime drama viewers were more knowledgeable about the criminal justice system and held greater expectations for scientific evidence. Together, these studies provide support for the existence of the CSI effect. In addition, tests of mediation showed that knowledge completely mediated the relationship between crime drama viewing and expectations. Implications for future research on the CSI effect are discussed.

CHAPTER 1. INTRODUCTION

In 2005, Hollywood star Robert Blake, most well known for playing detective Tony Baretta in the 1970's crime drama "Baretta", was charged with first-degree murder in the 2001 death of his wife of six months, Bonnie Lee Bakley. Bakley was shot and killed while sitting in a parked car outside a restaurant in Studio City, CA. Blake stated that he had re-entered the restaurant to retrieve his gun which he had left at the table when the shooting occurred, though none of the other patrons could recall Blake re-entering the restaurant that evening (Steinhaus, 2007).

The prosecution's case, which lasted over five weeks, was mostly composed of circumstantial, rather than direct, evidence. Whereas direct evidence directly links a defendant to a crime (e.g., eyewitness testimony or physical evidence such as DNA, or blood), circumstantial evidence is indirect evidence in which the jury must use logic and reason to infer a defendant's guilt or innocence (e.g., a defendant's behavior around the time of the crime). Although direct evidence is viewed as more powerful, in many cases little or no evidence of this type is available. In the eyes of the law, circumstantial evidence is seen as equal to direct evidence, and a majority of successful prosecutions are based largely on circumstantial evidence alone, including such high profile cases as the prosecution of the Oklahoma City bomber, Timothy McVeigh, and the Scott Peterson trial (Heller, 2006).

In the Blake case, the prosecution presented circumstantial evidence in the form of testimony of more than 70 witnesses; some testified about Blake's character (e.g., he was abusive to his wife) and others testified about the alleged murder plot. Two former stuntmen for the show "Baretta" testified that Blake had tried to hire them to kill Bakley and that they had even scouted locations for the murder, though both presented credibility issues and

inconsistencies in their stories under cross-examination. Prosecutor Steven Cooley felt that the evidence showed beyond a reasonable doubt that Robert Blake was the only person with motive and opportunity to kill Bakley (Dakss, 2005).

However, in spite of all the circumstantial evidence presented by the prosecution, on March 6, 2005, a jury found Blake not guilty of Bakley's murder after 36 hours of deliberation (Montaldo, 2005). When asked how they reached a not-guilty verdict, the jurors stated that there was little physical evidence linking the defendant directly to the crime, and that the circumstantial evidence presented was not sufficient to prove the prosecution's case. In post-verdict interviews jurors said that they found Blake not guilty because the prosecution did not deliver television-style forensic evidence. Jury foreman Thomas Nicholson noted that there was no blood from Bakley or gunshot residue on Blake's person. He further stated, "They couldn't put the gun in his hands." Fellow juror Cecilia Maldonaldo said that she expected much more from the prosecution, that she had "a higher expectation" of evidence from television shows (Robertson, 2006).

News of this verdict and the subsequent juror statements sent shockwaves through the legal community. For the first time on record, jurors seemed to expect the prosecution to present scientific evidence directly linking a suspect to a crime (Shelton, Kim, & Barak, 2006). They also seemed to enter the jury box with some understanding and awareness of the criminal justice system (e.g., types and tests of forensic evidence, legal procedures, and due process). Although most people do not have enough exposure to the criminal justice system to know the specific details of its operation, they appear to be obtaining this information in other ways. Yet, people who are not regularly exposed to the criminal justice system (i.e.,

through employment, classes, arrest) are obtaining this type of information (Read & Desmarais, 2009).

To assess what potential jurors understand about eyewitness topics, Read and Desmarais (2009) had jury-eligible residents of Vancouver, B.C. complete a 29-item questionnaire. Participants were given a statement regarding an eyewitness concept (e.g., lineup instructions: police instructions can affect an eyewitness's willingness to make an identification) and were then asked to respond using a 4-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree). An additional response criterion of "Don't Know" was also included to discourage guessing. The questionnaire was identical to that created by Kassin, Tubb, Hosch, & Memon (2001), with the lone exception being that one item regarding color perception was dropped. In Kassin et al., 64 experts completed the questionnaire in order to determine the amount of agreement for experts on 30 eyewitness topics. The criterion for general agreement was 80%, and this consensus was reached on 16 of the 30 items judged to be reliable enough for courtroom presentation. Furthermore, the majority of experts deemed 12 of the 16 'reliable' items not to be topics of "common sense" to the lay person.

Read & Desmarais (2009) found that their participants responded with greater accuracy than anticipated. Contrary to prior research, they showed increased awareness and understanding of the eyewitness topics: the ways they responded to survey items often closely resembled the responses of the experts. Participants' overall rate of agreement (66%) was only marginally lower than the overall rate of agreement (69%) concerning item reliability provided by the experts, though participants' responses did statistically differ from the experts on a majority of the items for which the experts were in consensual agreement.

Kassin et al. (2001) also had experts rate whether 'most jurors believe each statement to be true as a matter of common sense.' Comparisons of the experts' judgments with responses of participants in the Read and Desmarais study (whose responses reflect common sense understanding of the items) revealed considerable differences. For many eyewitness statements, experts drastically underestimated participant "common sense," and this primarily occurred for items in which experts had reached consensus. For instance, only 5% of experts thought that the statement describing a weak relationship between accuracy and confidence is common sense, but 67% of participants agreed with the statement and with 90% of the experts.

Although the two studies mentioned above are specific to eyewitness issues, they support the notion that the general public has an awareness and understanding of some of the processes and procedures of the criminal justice system. Yet, these studies are silent as to the potential source of this information. Because of this gap in the literature, a content analysis of television shows was recently conducted in order to gain a better understanding of one potential source of juror knowledge about eyewitness concepts (Desmarais, Price, & Read, 2008). Programs for the content analysis were selected for two reasons. First, a program was chosen if it covered both the police investigation and trial components of the criminal justice system. Second, a program had to be popularly viewed; to be included in the study it had to consistently appear within the top 10 in the Nielsen ratings. The coding protocol used in the study was developed to assess the presence and absence of 35 forensically and psychologically relevant topics. The topics were selected from those used by Read and Desmarais (2009), of which 27 had been developed by Kassin et al. (2001). The content

analysis revealed that 25 of the 30 issues discussed by Kassin et al. appeared in the sampled television programming.

Although this content analysis focused on eyewitness issues, it provided evidence that lay knowledge regarding the criminal justice system could be learned from television. Furthermore, eyewitness issues are only one aspect of a criminal case, and therefore are usually only one aspect of crime dramas. Successful shows tell a complete story in which multiple aspects form a united, holistic message to its viewers. Therefore, it is reasonable to assume that in addition to eyewitness issues, most crime dramas will deal with other relevant components of the criminal justice system (e.g., police procedure, interrogation, evidence testing, and trial) within the same show. For this reason, it is probable that crime dramas are informing the lay audience about other pertinent concepts of the criminal justice system, beyond those related to eyewitnesses.

The content analysis also found that the prevalence of eyewitness issues in the media has nearly doubled since the 1980s. Moreover, not only have eyewitness issues increased, but so too have the number of crime dramas (in both quantity and popularity), which suggests that individuals have been considerably more exposed to these topics in the past 20 years.

Television Viewing

Television has long been a staple of American households. It has been reported that 99% of all households own at least one television, and that 66% of families have three or more television sets ("Television & Health," 2007). Between September 2007 and September 2008, the average U.S. household watched television for 8 hours and 18 minutes a day. This is a record high amount of daily television consumption. Additionally, the average person watches more than 5 hours of television per day, which translates into nearly 40 hours of

television per week, nearly as much as one spends working a full-time job (Nielsen Company, 2009). Even infants and toddlers are watching up to, and in some cases, more than two hours of television each day (Kaiser Family Foundation, n.d.; Zimmerman & Christakis, 2005). During the fourth quarter of 2008, Americans watched more than 151 hours of television, and they spent 50% more time watching time-shifted television (e.g., through a DVR). Moreover, 73.9 million Americans now use some form of television recorder to record their favorite shows and watch them at their convenience (Nielsen Company).

With people regularly consuming this much television, it is important to understand its effects. One of the most robust findings from research in this area is that viewing violence on television leads to subsequent aggression, including aggressive thoughts, feelings, attitudes, and behaviors (Gentile, 2003). Television viewing is also associated with other negative outcomes such as lower language and intellectual functioning (Huston, Wright, Marquis, & Green, 1999; Zimmerman & Christakis, 2005), poor grades in school (Sharif & Sargent, 2006), attention problems (Christakis, Zimmerman, DiGiuseppe, & McCarty, 2004; Landhuis, Poulton, Welch, & Hancox, 2007), anti-social behavior (Anderson, Huston, Schmidt, Linebarger, & Wright, 2001), and obesity (Robinson, 1999). However, not all effects of television viewing are negative. Just as watching violent television can lead to increased aggression, watching prosocial television can generate prosocial attitudes and behaviors, where prosocial is defined as intent to help others. Additionally, studies that have examined the effects of children's educational television programs have found many positive outcomes, such as more reading, greater reading fluency and comprehension, higher grades, less aggression, and more value placed on academics (Anderson, Huston, Schmitt, Linebarger, & Wright, 2001; Brickam, Wright, & Huston, 2001; Rice, Huston, Truglio, &

Wright, 1990; Wright et al., 2001; Zill, Davies, & Daly, 1994). Combined, the results of these diverse studies suggest that many of the effects of television are due not only to the amount of television watched but also to the content viewed.

Nielsen ratings

To better understand the content of programs that are widely viewed, Nielsen network television ratings were observed for a period in 2005 and again in 2008-2009. Nielsen ratings were first examined for one week in June, 2005 and then for each week beginning in July, 2005 and ending in December, 2005. For the week of June 13-19, 2005, nine of the top twenty shows (45%) were crime dramas. Included in this group were CSI and its spin-offs, CSI: Miami and CSI: New York, as well as Law & Order and its two spin-offs, Special Victims Unit and Criminal Intent. Keep in mind that these ratings were released only three months after the Robert Blake acquittal in which the jurors openly admitted to watching crime dramas on television and expecting more 'television-like forensic evidence' to be presented in the case. When examining the rest of the 2005 ratings, similar numbers emerge. For the week ending July 31, 2005, seven of the top ten shows were crime dramas (marking the largest percentage, 70%, of crime dramas in the ratings for this period). For the week ending December 18, 2005, nine of the top twenty shows were crime dramas (marking the smallest percentage). It is worthwhile to note that CSI and its spin-offs dominated the ratings over this period. Of the 21 weeks of ratings examined, at least one of the CSI shows was in the top three 19 of the 21 weeks (90.5%). For 15 of the 21 weeks (71.4% of time), CSI (the original) was rated as the number one show on television (Nielsen Media Research, 2005).

Additionally, Nielsen ratings for the 2008-2009 season (ending April 26, 2009) as well as the week ending on February 15, 2009 were observed. For the week of February 9-

15, 2009, eight of the top twenty shows (40%) were crime dramas. Similar to the ratings of 2005, all three versions of the CSI franchise were in the top 20. However, none of the Law & Order franchise shows were in the top 20 (Nielsen Media Research, 2009a), probably because none of the Law & Order series were airing new episodes at that time. Across the 2008-2009 season, nine of the top twenty shows (45%) were crime dramas, including all three CSI shows (Nielsen Media Research, 2009b). These viewing trends suggest that crime dramas are a large part of our television world. They also indicate that crime dramas are a possible source for people's information and knowledge about the criminal justice system, although some theories would dispute this notion.

Cultivation Hypothesis

The Cultivation Hypothesis posits that people who spend more time watching television are more likely to view the "real" world in terms of the images, values, portrayals, etc. depicted on television than those who watch less television (Gerbner, 1969). Based on this assumption, there should be a difference in how heavy television viewers perceive the world when compared to light television viewers. This is the research paradigm traditionally used to test the Cultivation Hypothesis.

A large body of research has found results that support the relation between amount of television exposure and viewer perceptions consistent with the messages displayed on television. These studies have found cultivation effects in relation to racism (Gerbner, Gross, Morgan, & Signorielli; Morgan, 1986), gender stereotypes (Gross & Jeffries-Fox, 1978), anti-social behavior (Greenberg, 1980; Potter & Ware, 1987), fear of crime (Chiricos, Eschholz, & Gertz, 1997; Gross & Aday, 2003), and the likelihood of being a victim of crime (Romer, Jamieson, & Aday, 2003). These findings suggest that exposure to television's

repeated messages and themes has an impact on viewers' perceptions of the real world regarding these issues.

When discussing cultivation effects, theorists distinguish between first-order and second-order effects. First-order effects are characterized as the beliefs and perceptions held by individuals. In studies of first-order effects, participants are asked to provide their estimates, perceptions, and likelihood of various events or actions that occur in society. Second-order effects are general attitudes about the everyday world. It is possible that first-order effects can influence second-order effects (Hawkins & Pingree, 1990). For example, negative portrayals of psychiatrists on television may lead people to develop similar perceptions of psychiatrists in real life (first-order effect), which may generate poor or negative attitudes toward psychiatrists and their services in general (second-order effects). In a study designed to assess this, Vogel, Kaplan, & Gentile (2008) had college students complete a battery of measures, including the stigma associated with seeing a therapist, the anticipated risks and benefits of seeking help from a therapist, attitudes toward therapy, intentions to seek therapy, and a measure of television exposure. They found a positive association between television exposure and perceptions of stigma associated with seeking therapy; viewers reported negative attitudes about the process and ultimately made were less willing to seek such help.

The original Cultivation Hypothesis makes several assumptions about the nature of television and its audience: 1) Overall exposure to television rather than to specific genres or programs is the most important factor that leads to cultivation effects; 2) Because most television programs are designed for the same broad audience they are similar in makeup and appeal, and therefore viewing depends more on the time of day than the actual program; 3)

The viewer is non-selective because of the uniformity of the messages portrayed via television shows. More parsimoniously, the original Cultivation Hypothesis states that television is a world of uniform messages and it does not matter *what* one watches, but *how much* one watches (Gerbner, Gross, Signorielli, Morgan, & Jackson-Beeck, 1979; Potter, 1993).

In the late 1960s when Gerbner started his research on the Cultivation Hypothesis, it was quite plausible that the assumptions just mentioned served the theory well. At that time television viewing options were limited, especially when compared to those we have today. The advent of cable and digital television brought more channels and therefore more shows in general, as well as more diversity in programming. In addition, fist VCRs and now more sophisticated, higher quality recording devices such as Digital Video Recorders (DVRs) and TIVO allow people to record the shows they want to watch. As noted previously, almost 74 million people nationwide use some form of television recorder, a number that increases each year (Nielsen Company, 2009). This suggests that the assumptions made by the Cultivation Hypothesis that television messages are 'uniform' and that 'people are non-selective in their television viewing' are outdated and need revision.

Program Type Dominance

In light of these changes in the media landscape over the past several decades, more recent research has been conducted on genre-specific television exposure, or program type dominance (Hawkins & Pingree, 1981; Potter, 1993; Potter & Chang, 1990; Segrin & Nabi, 2002). Results from these studies suggest that total television exposure is not as strong a predictor of individuals' beliefs and perceptions about the real world as is exposure to specific program types. Potter and Chang (1990) directly tested whether total television

exposure or genre-specific television exposure was a better predictor of cultivation effects. To obtain a measure of program type dominance, one must divide the amount of time spent viewing a specific genre of television by total television exposure. Middle- and high-school students completed a television viewing habits questionnaire that assessed how frequently they viewed 12 different program-type categories (e.g., situation comedies, daytime soap operas, sports, etc.). Amount of time watching each of these various types of shows represented the genre-specific television exposure measures. Additionally, Potter and Chang calculated the totals for all 12 categories to get a measure of total hours of television exposure per week, which represented the traditional method used in cultivation research. Participants also completed measures of cultivation, including providing estimates of crime, victimization, violent death, divorce/affairs, and females working (first-order effects), as well as assessment of beliefs regarding crime, divorce/affairs, and females working (second-order effects). Results showed that the program type dominance method of measuring cultivation was a better predictor of cultivation effects than global viewing, opposing the traditional view of cultivation.

This suggests that how much television across all shows an individual is watching is less important than what types of programs are being viewed. The fact that jurors in the Blake trial demanded scientific evidence similar to that presented in crime dramas provides anecdotal evidence supporting the importance of the genre of a show on individuals' attitudes and expectations. Because expectations are built over time and often through repeated exposure to a stimulus, this also suggests that watching television (such as crime dramas like CSI) can lead to learning over time.

General Learning Model

The General Learning Model (GLM) is an expanded version of the more specific General Aggression Model (GAM), which was developed in part to synthesize the numerous existing theories of aggression into one model (Anderson & Bushman, 2002a; Anderson & Dill, 2000; Carnagey & Anderson, 2003; Lindsay & Anderson, 2000). The GAM integrates a number of the most influential theories in the area of aggression, including Bandura's social learning theory (Bandura, Ross, & Ross, 1961, 1963), Zillman's excitation transfer model (1983), Geen's affective aggression model (1990), Dodge and Crick's social information processing model (1990), the social cognitive model of media violence effects (Huesmann, 1986), and Berkowitz's cognitive neoassociationist model (Berkowitz, 1984, 1990). In doing so, the GAM serves as a comprehensive model of the cognitive process by which individuals develop aggressive thoughts, feelings, behaviors, scripts, etc. While the GAM is focused on aggression-related schemata, the GLM is broader in that it attempts to describe other person-environment interactions such as learning from prosocial video games (Gentile et al., 2009). The GLM serves as a multistage theory that attempts to explain both short-term and long-term learning processes. Although previous research has mostly applied the GLM to learning from violent and prosocial video games (Buckley & Anderson, 2006; Gentile et al., 2009; Swing, Gentile, & Anderson, 2008), the GLM can also be applied to learning processes via television.

There are two broad types of input variables present in a learning situation: person variables and situation variables. Both person and situation variables are responsible for learning in the short-term version of the model (Buckley & Anderson, 2006). Person variables are the existing traits of the learner and include one's past experiences, prior

knowledge, attitudes, beliefs, expectations, and other personality characteristics that a person brings to a learning situation (Bushman & Baumeister, 1998; Dill, Anderson, Anderson, & Deuser, 1997). Characteristics of the environment in which the learning episode is happening are classified as situational variables. These variables include other people, setting, and media (such as television) present during the episode. Whereas person variables tend to be somewhat stable over time and across situations, as the same expectation schemata or knowledge structures will direct behavior, situation variables tend to be more diverse.

Besides the common person variables such as intelligence, age, and self-esteem that can affect learning, some are more specific to learning from television or other types of media. Situational variables may be specific to learning from media as well. Compared to television, video games may provide a more natural setting for learning to occur because players interact and affect the outcome of the game (Gentile & Gentile, 2008). Although people are generally considered mere recipients of television's messages without any interactions, situation variables such as the characteristics of the television show (or genre) may affect learning. For example, the frequency and duration that a person watches a particular show or type of show, as well as the show's content and structure all affect what is learned and how well it is learned. Extending this logic, someone who watches four hours of crime dramas is going to experience much different content and receive different information and messages than a person who watches four hours of soap operas. Even within the same genre there are a number of potential situational differences. Those who watch the high-tech, fast-paced fictional world of CSI, are probably going to have a very different experience from that of those who watch the documentary-style non-fiction show "The First 48," where

cameras follow real-life homicide detectives as they attempt to solve cases, with a special emphasis on the first 48 hours following a crime.

The person and situation variables of the GLM interact and affect one's internal state, which includes affect, arousal, and cognition. These elements are affected not only by person and situation input variables but also by each other. For example, violent television (situation variable) can cause an increase in hostile and angry feelings and emotions as well as an increase in arousal, which may then lead to an aggressive response or action sometime in the future (Anderson, Anderson, & Deuser, 1996; Anderson, Anderson, Dill, & Deuser, 1998).

Of the three internal states mentioned, cognition is of particular interest. Input variables can affect cognition in a number of ways, including through attributions, beliefs, behavioral scripts, and perceptual and expectation schemata. In the case of perceptual and expectation schemata, witnessing repeated acts of violence and crime on television can lead a person to develop a schema that the world is a scary, fearful place (Chiricos et al., 1997; Morgan & Shanahan, 1997), or they may overestimate the likelihood that they will be the victim of a crime (Jaehing, Weaver, & Fico, 1981; Romer et al., 2003). These examples represent the activation and influence of knowledge structures that often occur automatically and outside one's conscious awareness. It is unlikely that a single exposure to the violence and crime typically portrayed on a crime drama would lead to the development of these schemata. However, over time and with repeated exposure these schemata develop and become internalized, automatic knowledge structures that simply have to be accessed and activated (e.g., primed) to affect one's immediate behavior.

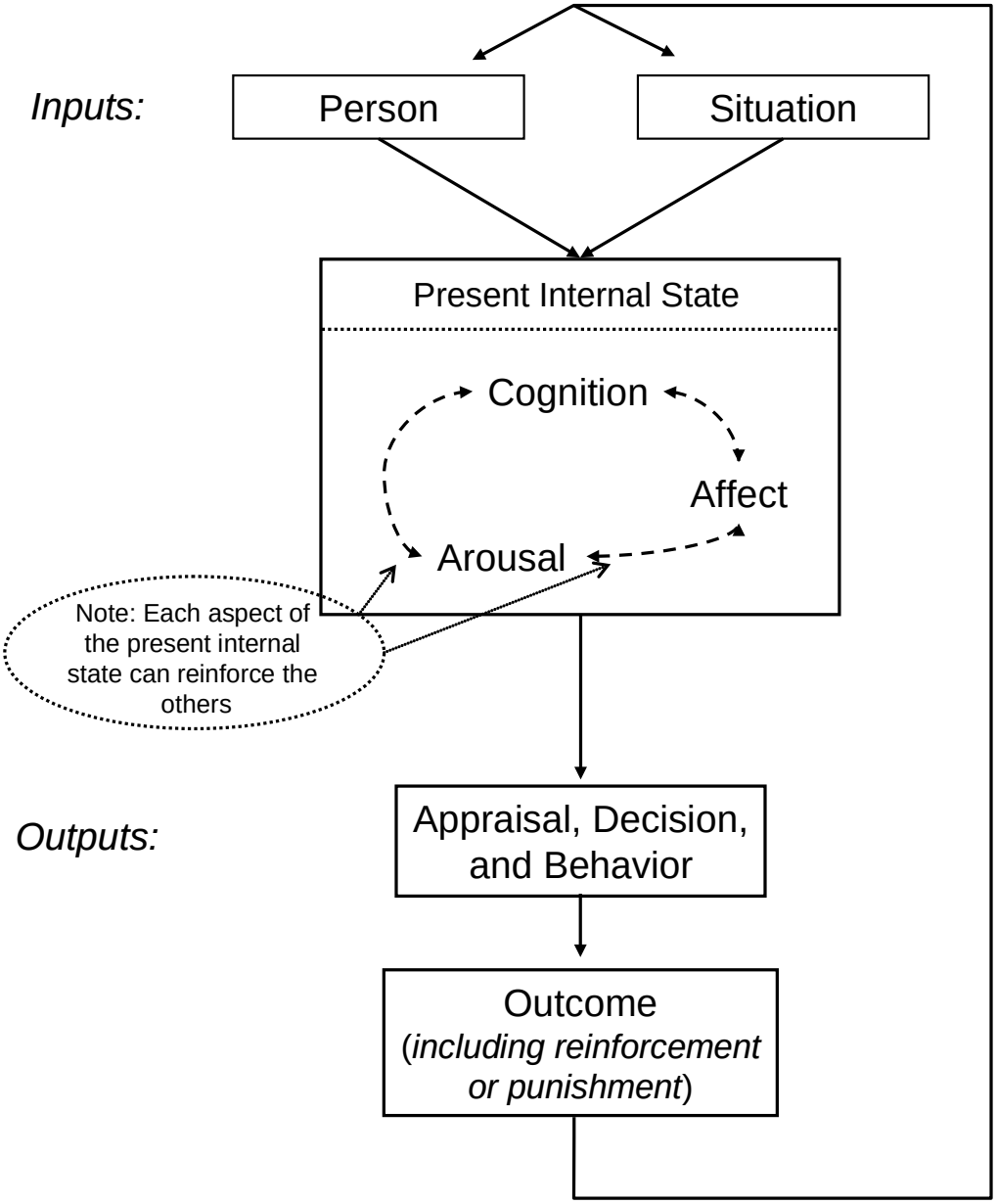
This cognitive priming of knowledge structures can affect one's appraisal and decision processes (see Figure 1) such that one may respond with a thoughtful action or an

impulsive one, as the internal state (cognition, affect, and arousal) determines the type of response (i.e., of the immediate appraisal). However, a behavioral response is not a necessary condition for learning to occur in the short-term version of the GLM. In fact, it is possible that most learning occurs prior to, and at times, without any behavioral act on the part of the individual. While watching television one does not need to make a behavioral response to the content in order for learning to occur.

In the short-term version of the GLM the viewer may experience a simple form of learning such as discrimination, habituation, and/or observational learning. Due to the nature of television, we are almost always engaged in observational learning -- simply the idea that we learn by observing others (Bandura, Ross, & Ross, 1963). Although Bandura's original model of observational learning detailed four processes necessary for this type of learning to occur (attention, retention, motor reproduction, and reinforcement), it is possible for learning to occur outside of the last two processes. In this scenario, by first attending to a model and then creating a code of the information (e.g., a verbal description, vivid image) to be stored in memory, an individual should be capable of observational learning without any reference to a behavioral act. This observational learning framework could aid our understanding of two other simple forms of learning, habituation and discriminative learning.

Habituation is a form of learning in which there is a decrease in psychological and overt behavioral responses over a period of time and exposure to a stimulus. Habituation can and often does occur at an unconscious level. This is possible because over time and through repetition, we develop deeply ingrained expectancies that certain stimuli will continue unchanged over time (Passer & Smith, 2007). A prime example of habituation is in regard to desensitization. When an individual is first exposed to violent images on television, he or she

Figure 1. Short-term Processes in the General Learning Model.



is likely to have a strong response (e.g., increased arousal, negative affect). Over time, however, one becomes accustomed to such violence and the initial responses begin to dissipate, leading to habituation (Funk, Baldacci, Pasold, & Baumgardner, 2004). Again, no behavioral response is required but learning has been demonstrated at the level of one's internal state, through affect and arousal.

At a cognitive level, we may experience discriminative learning -- a procedure in which a response is reinforced in the presence of one stimulus but not in the presence of others. This enables the individual to discriminate between competing stimuli. Keep in mind that this discriminative learning is occurring within the framework of the observational learning model; the response is not occurring for the individual viewer but for the model the individual viewer is watching on television. In relation to crime dramas, through repetitive viewing one may first learn about the broad classes of evidence (e.g., circumstantial, direct) and then the different types of evidence used at trials (e.g., eyewitness, trace, fingerprint, DNA); subsequently the viewer learns to discriminate between them based on the responses elicited by each type of evidence on the show, such as which types of evidence are most powerful and generally lead to a conviction.

All three of these types of learning share one common feature, the lack of a behavioral action or response on the part of the viewer. The ability to learn outside of direct reinforcement and without immediate behavioral action is known as latent learning. In latent learning, one acquires knowledge but there is no immediate reinforcement or incentive to act on that knowledge, so it lies dormant (often outside conscious awareness) until some event or experience requires that knowledge to be utilized (Lilienfeld, Lynn, Namy, & Woolf, 2009). When considered in relation to the three types of learning discussed above, two important

implications regarding the present research arise: 1) through these channels, viewers are able to learn about specific concepts and topics of the criminal justice system, but they need not act on them until the appropriate time; and 2) even though it is unlikely for there to be immediate opportunities for behavioral expression and subsequent reinforcement or punishment, viewers still see models on television being reinforced or punished for their behavior. Because of this, latent learning may occur in the form of attitudes, beliefs, or expectancies such that viewers would be led to believe that certain types of evidence are more valuable than other types, and more importantly, that scientific (or physical) evidence is essential in order to obtain a conviction of or confession from a suspect in a crime.

At a more complex level, associative learning networks may be formed between the early forms of learning and later outcomes. This refers to operant and classical conditioning. At the level of the internal state of an individual, conditioned emotional responses could occur. Viewing reality-based crime dramas (e.g., Cops, America's Most Wanted) could generate certain emotional responses such as fear and anxiety, which subsequently become more easily accessible. In the short-term version of the GLM, this is essentially a priming event: viewing crime on television elicits feelings of fear and worry, and that could lead to protective acts on the part of an individual (e.g., purchase a gun or buy a home security system).

These behavioral outcomes can then either be reinforced or punished via operant conditioning techniques. At times there may be no direct reinforcement or punishment for the behavioral outcome, but in this situation the lack of punishment may serve as the reinforcement. If this is the case, then the behavior as well as the conditioned emotional response will be strengthened and this will feed back into the next learning episode. As short-

term effects begin to accumulate via individual learning episodes, they would begin to have long-term effects for the individual (Gentile et al., 2009). For example, the long-term version of the GLM might hypothesize that repeated viewing of criminal messages on television that generates fear and worry would classically condition a person to respond to actual situations with more trepidation and paranoia. These long-term effects may begin to shape the individual and have the potential to change one's personality as well as other person variables that one might bring to various situations.

When a behavioral response does occur, it will produce some type of learning encounter that, in turn, will influence the inputs of the next learning episode (Gentile et al., 2009). When a television program generates a particular emotional response, the viewer has no opportunity for an immediate behavioral interaction. The knowledge derived from the viewing experience will lie dormant until given an appropriate outlet. When a viewer is given an opportunity to respond, the effects of television viewing are noticeable in the short-term, as has been demonstrated in the literature on violent television viewing and subsequent aggression (Gentile, 2003). But what happens with heavy viewers of crime dramas? Other than potential aggression or violence, one could argue nothing, as opportunities for behavioral interactions with the criminal justice system are extremely limited. Another possibility is that it simply takes longer before behavioral responses are possible.

One of the critical assumptions of the GLM is that a variety of long-term changes occur in individuals over time. One of these long-term changes is increased factual knowledge. It is logical to believe that repeatedly experiencing a construct should increase knowledge of that construct. This should occur at both a general and a specific level. For instance, a heavy viewer of crime dramas should gain increasing knowledge of police

procedures, types of scientific evidence, forensics, etc. Learning should take place at the level of the content of the show, so viewing very specific content should lead to specific learning (e.g., the ability to lift fingerprints with superglue). The accuracy of this knowledge is a separate issue, and a recent content analysis has shown that certain crime dramas are not very accurate in their depictions of eyewitness phenomena (Desmarais et al., 2008).

An accumulation of short-term effects may lead to long-term effects, including changes to (1) precognitive and cognitive constructs, such as beliefs, scripts, and perception and expectation schemata; (2) cognitive emotional constructs, such as attitudes and stereotypes; and (3) affective traits, such as conditioned emotional responses (e.g., equating watching crime dramas with enjoyment, entertainment; Gentile et al., 2009). These possible long-term effects are shown in Figure 2. Some of these changes are likely to occur simply via repeated exposure (such as cultivating expectations). Other changes are possibly the result of viewing multiple television shows of the same genre. Providing multiple contexts that have similar outcomes is one of the top methods to teach for transfer to the real world (Gentile & Gentile, 2008). For example, all crime dramas have a wide variety of episodes that combine new content with prior content or a fixed paradigm (e.g., on Law & Order, in the first half of the show the detectives seek to identify and locate a suspect for a crime; in the second half of the show the district attorney's office prosecutes the suspect). In most cases, the outcome (a conviction) is the same.

Over time, single-episode learning exposures accumulate and knowledge structures become more complex and difficult to change because of the repetitive content individuals have witnessed from media exposure (Bushman & Anderson, 2002). The repetitive activation of these knowledge structures causes them to become more salient and accessible for an

individual. This can create a process of automatization, in which the construct is so readily accessible that it can change one's person variables (Anderson & Dill, 2000; Potter, 1999). This result then feeds back into the short-term learning process and the cycle continues.

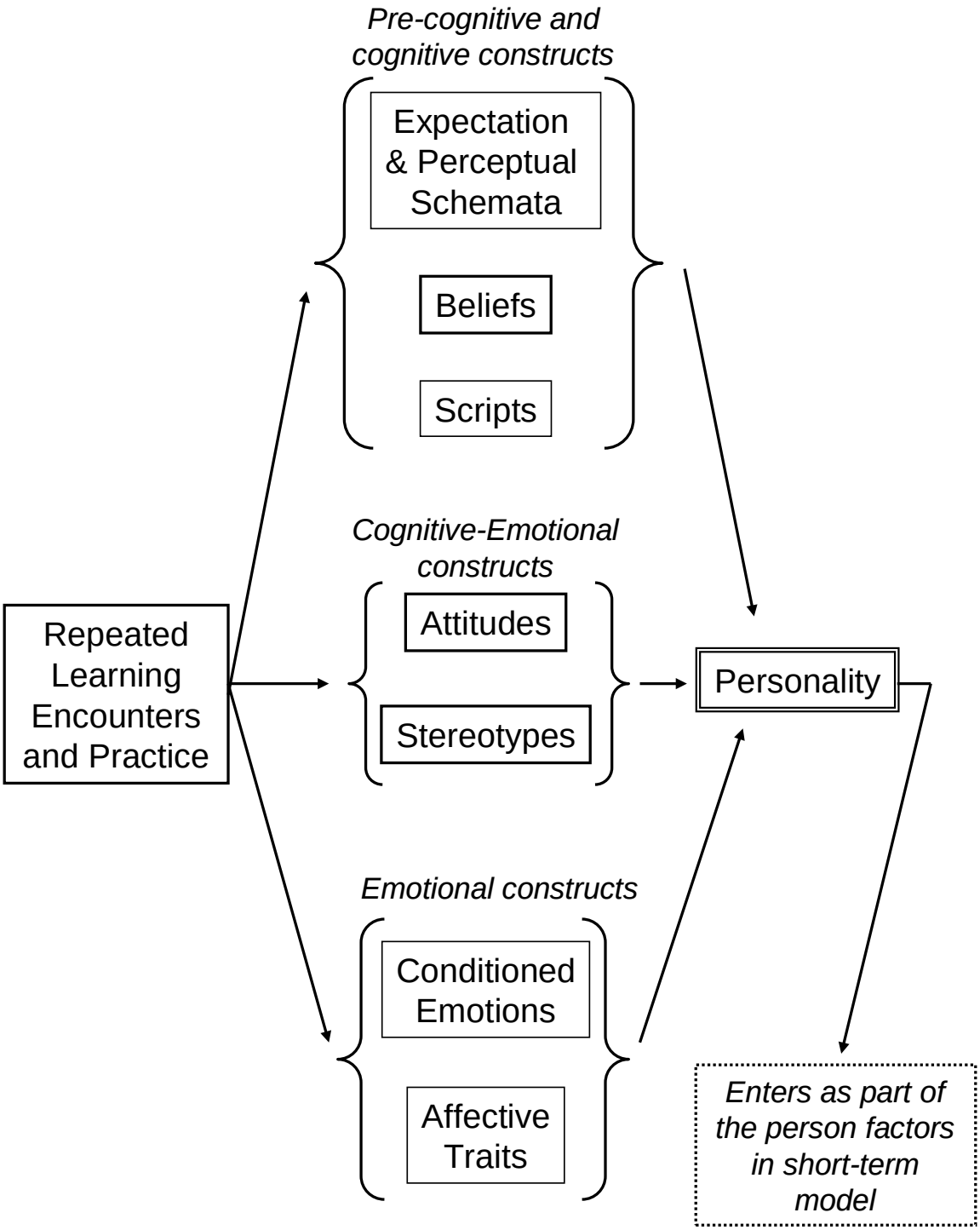
Heuristic Processing Model

Shrum (1995, 2001) developed a heuristic processing model in an attempt to provide a cognitive processes model capable of explaining media effects. The model is based on two main principles: the Heuristic/Sufficiency Principle and the Accessibility Principle. The Heuristic Principle states that when people construct judgments they retrieve only a small portion of the available information. Furthermore, only as much information as is sufficient to construct a judgment is retrieved; this retrieval hinges on concepts such as motivation and the ability to process information (Shrum, 2002).

The Accessibility Principle concerns the nature of accessibility in the formation of judgments. For instance, information that comes most readily to mind (most accessible) will be the information that is retrieved and most likely used when constructing a judgment (Carlston & Smith, 1996; Higgins, 1996). This idea may be based upon simple discriminative learning processes, in which individuals learn to attend to a discriminant stimulus at the expense of all other stimuli, because it serves as an indicator of a possible reinforcer. Over time, the repeated reinforcing of a discriminant stimulus can become more chronically accessible.

Constructs, or knowledge structures, that are frequently and recently activated are recalled most easily. If constructs are activated regularly enough they become chronically accessible, meaning they can be automatically activated under a variety of situations.

Figure 2. Long-term processes in the General Learning Model.



Recency of activation enhances accessibility but only in the short-term; it is probably comparable to a priming event or action. In contrast, more frequent, repetitive activation leads to more long-term accessibility (Shrum, 2002). This idea fits well with cultivation theory and the GLM, as it posits that frequency of television viewing has effects on the attitudes, beliefs, and perceptions of viewers. More specifically, heavy viewers of television would be expected to activate constructs portrayed on television more frequently than light viewers; they are likely to have higher perceptions of crime and greater fear of crime, and generally view the world as a more dangerous place. Program type dominance would state that these cultivation effects would not result from simply watching large amounts of television but would occur only if one watched an extensive amount of crime dramas or others shows or movies that included many criminal acts.

As the accessibility of a construct or knowledge structure increases, so does the accessibility of closely linked constructs or knowledge structures. Similar to the GLM, and consistent with the spreading activation model of memory, constructs are stored in one's memory as nodes. Links are formed between the nodes, and as one node is accessed and activated so too are related nodes in the chain. This may have implications for media effects, as it is plausible that most of the shows in the crime drama genre portray certain concepts in consistent and standard manners (e.g., arrests, investigations, interrogations, trials). These depictions may create scripts or schemas for the viewer that dictate how an individual interprets and reacts to a construct. Furthermore, because of the relation between accessible constructs (e.g., fear, worry), activation of one construct may also activate scripts for behavior that are closely linked to these constructs (e.g., lock doors, buy gun). In addition, constructs associated with the crime drama genre may in fact become more accessible than

other constructs because most individuals have few, if any, competing knowledge structures in relation to the criminal justice system. For most people, their only exposure to the criminal justice system is through the media, so the media may have a proverbial blank slate on which to write its effects (Shrum, 2002).

The Heuristic Processing Model clearly states that the information that is most accessible is most likely to be used to produce judgments. Humans are not as likely to construct judgments through an extensive search of memory (systematic processing). This proposition is very closely related to the availability heuristic, which is a mental shortcut through which people tend to estimate or infer the likelihood or probability of an event by the ease with which a relevant example can be recalled (Tversky & Kahneman, 1973). Because the media, specifically crime dramas, often present large amounts of physical evidence to link a suspect to a crime, people may tend to overestimate the likelihood that large amounts of physical evidence will be put forward during real life trials. There are two possible explanations for the overestimation of the frequency of influential events. First, it is possible that people actually remember more occurrences of these events. We are not always adept at recalling the source of our memories, so people may not realize that the memory may be constructed via crime dramas portrayed on television. Second, it may simply be that people remember such events more readily than other, less pertinent events. If it seems easier to recall, then people might understandably assume that these events occur more frequently (Shrum, 2002).

CSI Effect

Many people live their entire lives without having any encounter with the criminal justice system, and often when they do have personal experience it is brief. Therefore, it is

unlikely that the average person obtains knowledge of the criminal justice system via personal interaction. However, Read and Desmarais (2009) found that lay persons' overall rate of agreement on the 29-item questionnaire that measured understanding of eyewitness issues was only slightly lower than that of experts within the field. One potential source of this lay knowledge is via television (Desmarais et al., 2008).

The idea that watching crime dramas has raised jurors' expectations for the presentation of television-style scientific evidence in the course of a trial has been dubbed the 'CSI effect,' after the popular television series. On this show, investigators meticulously examine crime scenes and victims to collect all possible physical evidence, which allows them to recreate the crime and hopefully identify the perpetrator. These investigators usually discover an abundance of physical evidence that allows them to directly link a suspect to a crime, something that is not often possible in the real world because the evidence simply does not exist (Willing, 2004). CSI has won the title of "The most watched show in the world" in 2007, 2008, and in 2010 (Gorman, 2010). Its widespread, international popularity has led to two spin-off shows, "CSI: Miami" and "CSI: New York." Nearly 60 million viewers tune in to watch the CSI family of shows each week. CSI: Miami has been labeled "The world's most popular show" based on a 2006 TV ratings study (BBC, 2006; Heinrick, 2006). It has been suggested that the CSI effect was a factor in recent high profile cases such as the Robert Blake, Michael Jackson, and Robert Durst trials because the all resulted in acquittals despite what some considered overwhelming evidence of the defendants' guilt (Robertson, 2006).

Other, lower profile cases have also experienced the consequences of the CSI effect. In Illinois, a jury acquitted a man was accused of attempting to murder his ex-girlfriend

because the police did not test blood-stained bed sheets for DNA evidence. The same man later found his ex-girlfriend and stabbed her to death (Heinrick, 2006). In a murder trial in Phoenix, a bloody coat was presented as evidence. Because the defendant in the case admitted that the coat was his, DNA testing was not needed. In spite of this information, the jury took issue with the fact that the coat had not been tested for evidence of DNA. The judge observed that "Television had taught the jury what DNA tests were but didn't teach them in what circumstances they can be used" (Willing, 2004).

As discussed earlier in the introduction, jurors in the Robert Blake case expected television-like forensic evidence to be presented by the prosecution. Because the prosecution did not deliver on such expectations, the jury found Robert Blake not guilty of his wife's murder. This was the first loss for prosecutor Shellie Samuels in 50 murder cases (Dakss, 2005). Ironically, during jury selection all potential jurors were asked if they regularly watched crime dramas like CSI, in order to obtain a final jury that had some knowledge of forensic techniques. Of the 12 members that comprised the final jury, half said they watched such shows frequently, and two said they rarely watched them (information regarding the four remaining members was not released). The Los Angeles District Attorney went so far as to call the jurors in the Blake trial "Incredibly stupid" (Roane, 2005).

Although many in the legal community and the media held the CSI effect accountable for the Blake verdict, others were not as convinced. The President of the National Association of Criminal Defense Lawyers, Barry Scheck, provided a much simpler explanation for the outcome of the Blake trial, stating "There was an absence of evidence." Other legal analysts who followed the case reached the same conclusion (Blankstein &

Guccione, 2005). These analysts felt that the jury made the right decision based on the lack of inculpatory evidence presented by the prosecution.

Despite this plausible alternative explanation, the Blake trial continues to serve as the prototype case for the CSI effect. Consequently, the CSI effect continues to garner attention from the mass media who accept its validity, although most of the initial support for it has come from anecdotal evidence provided by prosecutor observations (Shelton et al., 2006; Tyler, 2006). In light of these conflicting views about the existence of the CSI effect and its potential impact on the legal system, empirical studies of the phenomenon have begun to emerge.

In one correlational study, jury-eligible participants read a trial transcript that included the testimony of a forensic scientist, who connected hair from a ski mask to the defendant. Other than this expert testimony, the case for conviction was somewhat weak. After reading the transcript, participants reacted to the trial evidence, provided a verdict, and completed a measure of television viewing habits. Compared to non-viewers, CSI viewers rated themselves as having a better understanding of the tasks that forensic scientists perform. They were also more critical of the forensic evidence presented in the trial transcript, as they found the evidence less believable than non-viewers. Although 29% of non-CSI viewers voted to convict as opposed to 18% of CSI viewers, this was not a significant difference. In this study no statistical differences were found between viewers and non-viewers of general crime dramas (e.g., Law & Order, Without a Trace; Schweitzer & Saks, 2007).

One potential problem with this study's methodology is the criteria used to classify viewers from non-viewers to test for first-order cultivation effects. Those who never watched

CSI were considered non-viewers, while those who indicated that they watched one or more shows per month were classified as viewers. The standard paradigm for measuring (first-order) cultivation effects is to compare heavy viewers to light viewers. Because these researchers did not employ a true comparison of heavy and light viewers, claims as to the nature of the existence of the CSI effect based on the data provided are questionable. Furthermore, it is not known whether the "average" crime drama viewer watched 15-20 crime dramas per month or merely one or two shows per month (at the low end of the scale). This information is critical for appropriate interpretation of the results presented.

In a more comprehensive correlational study, Shelton et al. (2006) surveyed 1,027 potential jurors in an effort to determine the existence of the CSI effect. Participants in the study provided demographic data, information about their television viewing habits, their expectations for scientific evidence to be presented by the prosecution, and indicated whether they would demand scientific evidence as a necessary condition of a guilty verdict. Regarding expectations, the researchers presented seven types of cases (e.g., murder or attempted murder, physical assault, rape) and for each of these cases they asked respondents whether they expected to be presented with any of seven different types of evidence (e.g., eyewitness testimony, circumstantial evidence, scientific evidence of some kind, DNA evidence). Regarding demands, respondents were asked about the likelihood of finding the defendant guilty or not guilty based on certain types of evidence presented by the defense and the prosecution. Respondents were provided with 13 scenarios that included various combinations of types of cases and types of evidence. They responded on a 5-point scale ranging from 1 (I would find the defendant guilty) to 5 (I would find the defendant not guilty).

Across all respondents, 46% expected to see some scientific evidence in every criminal trial. For specific types of evidence expected in every case, 22% expected DNA, 36% expected fingerprint evidence, and 32% expected ballistic or firearm evidence. In many cases certain types of evidence, such as DNA or ballistics, are not needed or even appropriate (or are simply impossible to obtain), but according to these results respondents expected to see such scientific evidence in every criminal case.

When comparing viewers to non-viewers, CSI viewers had higher expectations for all kinds of evidence (both scientific and non-scientific) than did non-CSI viewers. CSI viewers also had higher expectations regarding scientific evidence that is more appropriate to a particular crime (e.g., DNA evidence in a rape case) than non-CSI viewers, and they also had lower expectations regarding scientific evidence that is less appropriate to a particular crime. This provides some evidence of a positive CSI Effect. In this example, heavy viewers were more cognizant about what types of evidence were appropriate for specific cases than light viewers, and there expectations reflected this awareness. This suggests that viewing crime dramas can lead to increased awareness and knowledge of what types of evidence are appropriate for various types of crime. Having jurors who are more aware and knowledgeable could be a great advantage for the criminal justice system, not a disadvantage, which has been the prevailing thought when discussing the CSI Effect.

Both viewers and non-viewers were more likely to find a defendant guilty than not guilty, even in the absence of scientific evidence, so long as there was testimony from the victim or other witnesses. Regarding the demand for scientific evidence, significant differences between CSI viewers and non-viewers were found for only four of the thirteen scenarios (and three of these were only marginally significant). Overall, the survey results

did not show that demand for scientific evidence as proof of guilt was related to watching crime dramas. There was no significant relation found between CSI viewers and those who insisted upon some form of scientific evidence for conviction.

Although this study provides a more precise measure of television habits, it suffers from a similar problem to that of Schweitzer and Saks (2007) in that the groups compared were CSI viewers to non-viewers, not truly heavy viewers to truly light viewers. Under even closer examination, the authors may have captured light and heavy viewing; the problem is that they may have done so for both groups (CSI viewers and non-viewers). Shelton et al. defined CSI viewers as those who watch CSI 'on occasion, often, or regularly; non-viewers were defined as those who 'never or almost never watch the program.' These terms are highly abstract and allow for potential overlap between so-called viewers and non-viewers. For example, how does one differentiate between 'on occasion' and 'almost never?' What one person considers 'on occasion' may be 'almost never' to another person, and due to different interpretation styles, two individuals that watch the same amount of CSI may have been placed in different groups for analysis. Because of this and other issues mentioned, the results must be interpreted with caution.

Present Study

All published empirical work on the CSI effect has been of a correlational nature, and as noted above these studies have had methodological flaws that compromise results. The correlational and experimental studies presented here attempt to improve upon past studies and provide a more thorough and precise investigation of the CSI effect. In the correlational study I assessed the ability of heavy and light crime drama viewing to predict expectations regarding the presentation of scientific evidence in a trial. It is hypothesized first that heavy

crime drama viewers will have higher expectations for the prosecution to produce scientific evidence directly linking a defendant to a crime over the course of a trial; and second, that heavy viewers not only expect more evidence than light viewers, but that they will also be more skeptical of the evidence that is presented.

In terms of factual knowledge of the criminal justice system, it is predicted that heavy viewers of crime dramas will possess both more accurate and inaccurate knowledge than light viewers. By their very nature, heavy crime drama viewers are more likely to be exposed to a variety of crime dramas (both fiction based and non-fiction based) than low viewers, which is likely to result in the hypothesized differences in factual knowledge.

In this study both total television exposure and genre-specific television exposure will be measured. This will allow for a direct comparison of traditional cultivation theory methods and program type dominance methods used to assess cultivation effects. It is hypothesized that results will replicate those of Potter and Chang (1990), in that program type dominance will serve as a better predictor of cultivation effects. In addition, the crime drama genre will be further broken down into sub-genres (i.e., forensic crime dramas, forensic documentaries, general crime documentaries, general crime/courtroom dramas) to better define the nature of the CSI effect. Because the CSI effect is dependent upon expectations regarding scientific evidence, it is hypothesized that the forensic crime dramas will be the sub-genre that is the best predictor of the CSI effect.

The experimental study to be conducted will serve as a replication and extension of the correlational study. All of the same hypothesized results previously described for the correlational study will also be hypothesized for the experimental study, though additional hypotheses will also be investigated. The main hypothesis of the experimental study is that

previously light crime drama viewers who are randomly assigned to view several episodes of a forensic crime drama (i.e., CSI) will be more likely to hold higher expectations for scientific evidence, thus demonstrating the CSI effect, than participants who view a crime-neutral television drama (i.e., House) and participants who do not view a show at all.

CHAPTER 2. CORRELATIONAL STUDY METHODS AND PROCEDURES

Participants

A total of 245 (123 males, 117 females, 5 unspecified) jury-eligible individuals enrolled in an undergraduate psychology course at Iowa State University participated and received partial course credit for their participation in the study. Participants in the present study either attended a mass testing session in which they completed the CDVQ (see Appendix A; Tapscott, 2006) and were then invited to participant in the full study, or participants selected to participate in the study by signing up via Iowa State University's web-based human subject pool management system.

In total, eighteen participants were excluded from all analyses in this study. Ten were excluded because they satisfied at least two of the following three conditions: 1) Administrative error (e.g., research staff did not follow study procedure); 2) Participant behaved in a manner that violated study protocol (e.g., took significantly longer than one week to complete session two, was talking on phone during experiment); 3) Problems with participant data. Outliers as well as those that had multiple standard deviations of zero on the scales were also excluded from analysis. The other eight participants were excluded from analysis because they were non-native English speaking. The final sample was composed of 227 participants. The final study population was 51.1% male and 90.4% Caucasian.

An a priori analysis through G*Power 3.1.2, an online power calculator, was run to determine the sample size needed for the experiment. The test was an F-test ANCOVA, focusing on fixed effects, main effects, and interactions. The input effect size was set at .25, alpha error probability at .05, power .95, numerator df 1, number of groups 2, and covariates

6. Results indicated the total sample size would need to be N = 210 to obtain sufficient power.

Design & Measures

Using a correlational design, the relation between heavy and light crime drama viewing and mock juror decision making was examined. Participants viewed a videotaped criminal trial, provided a verdict, and then completed a battery of questionnaires. Questionnaires included a Crime Drama Viewing Questionnaire, Knowledge of Legal Evidence and Procedures (KLEP) test, Crime Drama Inventory (CDI), and three measures of Expectations of Scientific Evidence. Measures of legal attitudes, sensation-seeking, and need for cognition also served as dependent measures.

Crime Drama Viewing Questionnaire (CDVQ). This questionnaire was designed to measure participants' crime drama viewing habits, and is based on the General Media Habits Questionnaire (Gentile, Lynch, Linder, & Walsh, 2004; Anderson, Gentile, & Buckley, 2007). The CDVQ asked participants about whether they watch specific crime dramas (e.g., CSI), their favorite crime dramas, the frequency and amount of watching crime dramas, as well as their overall television viewing habits. The CDVQ also collected demographic information as well as participants' prior experiences with law enforcement and the criminal justice system, including how often they consume information about the criminal justice system via the internet, newspapers, magazines, and other sources (see Appendix A).

The CDVQ was used to create an index of the amount and frequency of crime drama viewing, such that participants could be classified as heavy or light television viewers across all shows and genres, heavy or light crime drama viewers, as well as heavy or light viewers of specific crime dramas. Amount of crime drama viewing was assessed on an 8-point scale

ranging from 1 = I never watch this type of show to 8 = I watch this show every day. For all crime drama viewing indices created, heavy viewers had to respond with a 6 (I watch this show 2-3 times per week) or greater on the 8-point scale to at least one of the types of shows included in the index. Light viewers had to respond with a 3 or less (I only watch this show once per week) on the 8-point to all of the shows included in the specific index. By scoring heavy and light viewers in this manner, it was ensured that heavy viewers were at minimum watching eight or more crime dramas per month on the low end and light viewers were watching about one crime drama per month on the high end.

The crime drama viewing indices created served as predictor variables in ANCOVAs and regression analyses used to analyze differences in expectations, knowledge, and verdict, as well as to assess whether cultivation hypothesis or program type dominance provided a more accurate explanation of participants' expectations for scientific evidence. Other variables on this measure served as covariates during analyses.

Knowledge of Legal Evidence and Procedure (KLEP) Test. A 155-question multiple-choice test modified from the one used by Read and Desmarais (2009) was created for the present study. The test assessed knowledge of 12 areas of evidence and procedures within the criminal justice system: eyewitnesses, confessions, trial, experts, competence, insanity, sexual assault, sentencing, scientific evidence, forensics, police, and pretrial. Each question had either four or five answer choices, of which one was the most accurate response. Because I did not want participants to be forced to make a response, the last answer choice for each question was 'I don't know' (see Appendix B).

A total score, as well as subscale scores, were created for the KLEP test. Correct responses were coded as a '1', while incorrect items and "don't know" responses were coded

as a '0.' Scores ranged from .75 to 102.75, with a mean score of 49.19, and a standard deviation of 18.2. Because the responses were scored as dichotomous variables, Kuder-Richardson-21 reliability analysis was conducted for the KLEP. Reliability for the total scale was .91 (see Appendix B).

Crime Drama Inventory. This task consisted of a series of 156 multiple-choice questions pertaining to popular crime and legal dramas shown on basic and cable television between the fall of 2009 and summer of 2010. Shows on the CDI included CSI and CSI: Miami, all three Law & Order shows (the original, SVU, and Criminal Intent), Cold Case, Criminal Minds, NCIS, The Mentalist, and Without a Trace. Rather than simply relying on self-report measures of crime drama viewership, I created this test to more accurately identify heavy and light crime drama viewers. Those who answered more questions correctly were classified as heavy crime dramas viewers, while those who answered fewer correctly were classified as light crime drama viewers. When applicable, pictures of actors who star in crime dramas were displayed via a computer screen to accompany the multiple-choice questions. For example, a picture of Jerry Orbach was presented along with the question, "What show does/did this actor star in?" Answer choices included, (A) CSI, (B) NYPD Blue, (C) The Practice, (D) Law & Order, and (E) Don't Know (see Appendix C). Similar to the KLEP, I did not want participants to be forced to make a response, so the last answer choice for each question was 'I don't know'.

Also like the KLEP, responses to the CDI were re-coded as '1' for correct responses, and '0' for incorrect and "don't know" responses. For each show, I initially asked respondents if they ever watched the show or not (e.g., "Do you ever watch CSI?"). If they answered "no" they did not answer any questions for that show and jumped ahead to the next

show in the CDI. This continued until participants completed the measure. Scores on the CDI ranged from 0 to 74, with a mean of 12.10, and a standard deviation of 14.20. Again, because items were re-coded into dichotomous variables, Kuder-Richardson-21 reliability was conducted. Reliability for the total CDI scale was .95 (see Appendix C).

Juror Bias Scale. This is a 22-item questionnaire that assesses juror bias, specifically if jurors have a pro-prosecution or pro-defense bias. Items are scored on a 5-point Likert type scale which ranges from 1 (strongly agree) to 5 (strongly disagree). The questionnaire can be broken into two subscales, Probability of Commission and Reasonable Doubt. Higher scores on the Probability of Commission subscale indicate a stronger bias to believe the defendant committed the crime (e.g., A suspect who runs away from the police most probably committed the crime). Mean scores on this subscale were 3.05 (SD = .34), while internal consistency as measured by Cronbach's alpha was very low (.274). Higher scores on Reasonable Doubt items represent a pro-prosecution bias and therefore more likely to be pro-conviction (e.g., Extenuating circumstances should not be considered – if a person commits a crime, then that person should be punished). Mean scores on this subscale were 3.16 (SD = .52), and internal consistency for this subscale was also low (alpha = .438). When taking both subscales into account and examining the overall Juror Bias scale, mean scores were 3.08 (SD = .33) and internal consistency, measured by Cronbach's alpha, was only .48 (see Appendix D).

General Attitudes toward the Legal System. This is a 36-item measure that assesses general beliefs about the legal system. The scale can be broken down into two subscales, considered to be at opposite ends of a continuum, with faith in the legal system at one end and cynicism at the other. This scale is generally scored from -3 (strongly disagree) to 3

(strongly disagree), where a response of '0' indicates a neutral attitude. For the current study, responses were scored on a scale from 1 (strongly disagree) to 7 (strongly agree), where '4' indicates a neutral response. High, positive scores on the Belief that the System Works subscale expresses faith in the legal system, while negative scores indicate a lack of confidence in the legal system (e.g., if accused of a crime, I feel confident I would receive a fair trial.). Mean scores for this subscale were 3.98 (SD = .61). This suggests that on average, participants hold neutral beliefs about the efficacy of the legal system. This subscale had an internal consistency, as measured by Cronbach's alpha, of .747.

Positive scores on the Cynical Beliefs that the System is too Lenient subscale demonstrate cynical, pessimistic attitudes about the legal system, while negative scores express more optimistic attitudes (e.g., defendants who are guilty often "get off" because of technicalities). Mean scores on this subscale were 4.41 (SD = .39). Mean scores on this scale suggest participants hold neutral attitudes toward the legal system. Internal consistency, as measured by Cronbach's alpha, was .516 (see Appendix E).

General Expectations for Evidence questionnaire. The identical survey used by Shelton et al. (2006) was used here. Seven questions posed scenarios of a variety of types of cases and charges (e.g., murder or attempted murder, physical assault, rape), and for each scenario respondents were asked about their expectations for the presentation of seven different types of evidence (e.g., eyewitness testimony, fingerprints, DNA). Response options for each of the 49 items were either "yes", "no", or "unsure."

When scoring, Shelton et al. coded all "yes" responses as '1', all "no" responses as '-1', and "unsure" responses were coded as '0'. Mean total scores for expectations was .35 (SD = .38), suggesting that participants were more likely to have expectations for all types of

evidence than to not have expectations for evidence. No report of reliability was reported in Shelton et al., but internal consistency for the current study, as measured by Cronbach's alpha is .94 (see Appendix F).

Burden of Proof (BOP). Taken from Shelton et al. (2006), the BOP consists of 13 short descriptions of a case or charge against a defendant and the evidence that will be used to prosecute that defendant. Using a Likert-type scale ranging from -2 (I would find the defendant guilty) to +2 (I would find the defendant not guilty), respondents are asked to select the option that best represents how likely they are to find a defendant guilty or not guilty based on the description provided (e.g., In a case charging the defendant with murder or attempted murder, the prosecutor presents the testimony of an eyewitness and other witnesses but does not present any scientific evidence.). Mean scores on the BOP were .07 (SD = .44), suggesting that as a whole, participants were undecided about whether to find a defendant guilty or not. Internal consistency for this scale, as measured by Chronbach's alpha, was .78 for the current study (see Appendix G).

Retrospective Expectations for Trial Evidence questionnaire (RETE). Modeled off of the survey designed by Shelton et al., this survey was designed for the current studies to assess expectations for the trial that was viewed by participants. Participants were asked to provide 18 retrospective expectations using a Likert scale ranging from 1 (No expectations) to 5 (Very high expectations) on a variety of topics (e.g., fingerprints, DNA, eyewitness testimony). A sample item from the scale, "What expectations DID YOU HAVE, PRIOR TO THE TRIAL that the prosecution would gather and present the following types of evidence in the trial that you just watched?" Fingerprint evidence from the gun (see Appendix H for the complete questionnaire). Mean scores for this scale were 3.63 (SD = .66), suggesting that on

average, participants had fairly high expectations for evidence to be presented in the trial. Internal consistency for this scale was high (alpha = .895). Because this was a new scale developed for the present research factor analysis was conducted.

Data Screening. Eighteen values, due to a combination of administrative errors, univariate outliers, or general problem cases (see explanation of problem cases in participants section above), were recoded as missing data. A final sample size of 224 was used in the analysis, with over 12.4 cases per variable.

Factor Analysis. The factor structure of the 18 item RETE was examined. Several well-acknowledged criteria for factor analysis were used. First, 17 of the 18 items correlated at least .3 with at least one other item on the scale. Only circumstantial evidence did not correlate with another variable at .3, though it correlated with eyewitness testimony of at least one witness at .29 and eyewitness testimony of more than one eyewitness at .28. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .880, well above the agreed cutoff of .6, and the Bartlett's test of sphericity was significant, $X2\ (153) = 2198.41$, $p < .001$. The diagonals of the anti-image correlation matrix were all over .5, supporting inclusion of each item in the factor analysis. Lastly, the communalities for all 18 items were greater than .3, with all but four items having communalities above .5, indicating shared variances among variables in the scale.

Factor (principal components) analysis procedures were completed on the Retrospective Expectations questionnaire for the purposes of identifying latent constructs and refining the measure. First, an unconstrained solution was computed retaining all factors with Eigenvalues > 1, which resulted in four factors being retained. The first factor explained 38.44% of the variance, the second factor 10.71%, the third factor 9.54%, and the fourth

factor 6.27% of the variance. Collectively, this factor solution accounted for 64.96% of the total variance. Two, three, and four factor solutions were examined, using oblimin rotations of the factor loading matrix. The three factor solution, which explained 58.70% of the variance, was preferred because of its practical and theoretical relevance, the results from parallel analysis suggesting a three factor solution, and the "leveling off" of eigenvalues on the scree plot after three factors.

During the PCA, a total of three items were eliminated because they either did not contribute to a simple factor structure due to their failure to meet a minimum criterion of having a primary factor loading of .5 or above, or because they did not make theoretical or practical sense to the overall scale. The item "Ballistic evidence (in general)" was eliminated because it had factor loadings of .31 on DNA Evidence and .32 on Eyewitness Testimony and Circumstantial Evidence. A second item, "Fingerprint evidence (in general)" was eliminated because it did not have a factor loading of .5 or greater on any factor, and it had cross loadings of .45 on DNA Evidence and .36 on Physical Evidence. Finally, "polygraph evidence" was deleted from the final scale because it did not make practical sense to keep it, as polygraph evidence is not admissible as evidence in a courtroom, and could hurt the external validity of the scale. In the end, all three items were deleted from the scale, leaving 15 total items on the RETE.

A PCA of the remaining 15 items, using oblimin rotations was conducted, with the three factors explaining 63.14% of the variance. Only the item "ballistic evidence from the gun" had a factor loading under .5, but it did not have any cross loadings so it was retained. Only one item had a cross loading above .3 (Fingerprint evidence on a knife), however this

item had a solid primary loading of .52. The factor loading matrix for this final solution is presented in Table 1.

Table 1. *Study 1 Principal Component Analysis: Pattern Matrix Loadings for Retrospective Expectations for Trial Evidence.*

Correlate	1	2	3	4	5	6
Toxicology	.905					
Blood spatter	.839					
Gunshot residue	.807					
Fingerprints on the log	.712					
Reconstruction of crime	.636					
Fingerprints from gun	.582					
Fingerprints from knife	.519	.318				
Ballistics from gun	.452					
DNA (general)		.966				
DNA from defendant		.947				
DNA from victim		.939				
DNA from all those present		.800				
Eyewitness testimony from at least one witness			.894			
Eyewitness testimony from multiple witnesses			.857			
Circumstantial evidence			.565			

Internal consistency for each of the scales was examined using Cronbach's alpha. The alphas ranged from moderate, .669 for Eyewitness Evidence (3 items), to high, .856 for Physical Evidence (9 items) and .922 for DNA Evidence (4 items).No significant increases in alpha for any of the scales could have been attained by removing more items.

Using the means of the items which had primary loadings on each factor, composite scores were created for each of the three factors. Higher scores indicated higher expectations for evidence. Participants had the highest retrospective expectations for Eyewitness

Evidence, followed closely by Physical Evidence. DNA Evidence was expected somewhat less often. Descriptive statistics are presented in Table 3. Small to moderate correlations between each of the subscales existed: .26 between Eyewitness Evidence and Physical Evidence, .18 between Eyewitness Evidence and DNA Evidence, and .51 between Physical Evidence and DNA Evidence.

Met-Expectations questionnaire. This survey is very similar to the Retrospective Expectations for Trial Evidence questionnaire, except that all questions were re-worded to ask for how well their expectations were met for each of the 18 items. Additionally, each rating for this scale was made on a seven point Likert scale ranging from 1 (Not at all) to 7 (Very well). For example, participants were asked "After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case? DNA evidence from the victim." Mean scores for this scale was 2.72 (SD = 1.08), indicating that participants' expectations were not met very well by the evidence presented in the trial. Reliability for this scale was also very high (alpha = .926). In addition to the RETE, the Met Expectations Questionnaire was developed for use in the present research, so factor analysis was conducted on the measure (see Appendix I).

Data Screening. Eighteen values, due to a combination of administrative errors, univariate outliers, or general problem cases (see explanation of problem cases in participants section above), were recoded as missing data. A final sample size of 224 was used in the analysis, with over 12.4 cases per variable.

Factor Analysis. The factor structure of the 18 items of the MEQ was examined. Several well-acknowledged criteria for factor analysis were used. First, all 18 items

correlated at least .3 with at least one other item on the scale. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .914, well above the agreed cutoff of .6, and the Bartlett's test of sphericity was significant ($X2$ (153) = 3561.02, $p < .001$. The diagonals of the anti-image correlation matrix were all over .5, supporting inclusion of each item in the factor analysis. Lastly, the communalities for all 18 items were greater than .4, with all but one item having communality above .5, indicating shared variances among variables in the scale.

Factor (principal components) analysis procedures were completed on the Met Expectations Questionnaire for the purposes of identifying latent constructs and refining the various measures. First, an unconstrained solution was computed retaining all factors with Eigenvalues > 1, which resulted in four factors being retained. The first factor explained 50.23% of the variance, the second factor 10.92%, the third factor 7.53%, and the fourth factor 5.66% of the variance. Collectively, this factor solution accounted for 74.35% of the total variance. Two, three, four, and five factor solutions were examined, using oblimin rotations of the factor loading matrix. The four factor solution, which explained 74.35% of the variance, was preferred because of its practical and theoretical relevance, the "leveling off" of eigenvalues on the scree plot after four factors, the number of EV > 1, and the results from parallel analysis.

For practical reasons, the item "Lie detector test evidence" was deleted from the scale. The purpose of this questionnaire was to determine how well prosecution met jurors' expectations for evidence presented at trial, and because lie detector test evidence is not admissible in a courtroom, this item was deleted from the final version of the questionnaire. Additionally, because the Met Expectations Questionnaire and the RETE assessed identical

items, the item “Fingerprint evidence (in general)” was deleted to maintain consistency between the two scales. “Ballistics evidence (in general)” was retained on the final version of the questionnaire because it served as the requisite third item of the third factor identified on the scale.

A PCA of the remaining 16 items, using oblimin rotations was conducted, with the four factors explaining 75.93% of the variance. All items had primary loadings over .5, though the items “DNA evidence from all present at the party” had a cross-loading of .32 on the Physical Evidence subscale, and “Eyewitness testimony from more than one witness” had a cross-loading of .35 on the DNA Evidence subscale. These two items were still retained on the final version of the scale because they each had very strong primary loadings, including .64 for “DNA evidence from all present at the party” and .73 for “Eyewitness testimony from more than one eyewitness.” The factor loading matrix for the final solution is presented in Table 2.

Internal consistency for each of the scales was examined using Cronbach’s alpha. The alphas ranged from moderate, .656 for Eyewitness Evidence (3 items) and .730 for Ballistics Evidence (3 items), to high, .949 for Physical Evidence (7 items) and .939 for DNA Evidence (4 items).No significant increases in alpha for any of the scales could have been attained by removing more items.

Using the means of the items which had primary loadings on each factor, composite scores were created for each of the four factors. Higher scores indicated that expectations for evidence were satisfied more frequently. Participants had the highest expectations met for Eyewitness Evidence, followed decreasingly by Ballistic Evidence, DNA Evidence, and then

Table 2. *Study 1 Principal Component Analysis: Pattern Matrix Loadings for Met Expectations Questionnaire.*

Correlate	1	2	3	4	5	6
Gunshot residue	.976					
Fingerprints from gun	.957					
Fingerprints from log	.909					
Fingerprints from knife	.801					
Toxicology	.779					
Blood spatter	.746					
DNA (general)		.961				
DNA from victim		.951				
DNA from defendant		.884				
DNA from all those present		.660				
Reconstruction of crime			.834			
Ballistics (general)			.749			
Ballistics from gun			.686			
Eyewitness testimony from at least one witness				.822		
Eyewitness testimony from multiple witnesses		.338		.733		
Circumstantial evidence				.730		

Physical Evidence. Descriptive statistics are presented in Table 3. Small correlations existed between Eyewitness Evidence and Ballistics Evidence (r = .27), Physical Evidence (r = .10), and DNA Evidence (r = .18). Moderate to large correlations existed between the other subscales: .59 between Ballistics Evidence and Physical Evidence, .51 between Ballistics Evidence and DNA Evidence, and .70 between Physical Evidence and DNA Evidence.

Need for Cognition. Cacioppo and Petty's (1982) 18-item Need for Cognition scale was used. Need for Cognition measures the extent to which individuals engage in and enjoy effortful cognitive tasks and activities (e.g., I prefer complex to simple problems).

Respondents on the scale answer each item using a 5-point scale ranging from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). High scores on the Need for Cognition scale indicate an individual who has a natural tendency to engage in cognitive thought, is motivated to do so, and enjoys the thinking process. Reliability for the Need for Cognition scale, as measured by Chronbach's alpha, was .89 for the current study (see Appendix K).

Sensation Seeking. The 40-item Sensation Seeking scale was used to assess the extent to which individuals seek "varied, novel, complex, and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experience" (Zuckerman, 1994, p. 27). Each item is presented as a dichotomy in which respondents are asked to select the option that best describes their likes and/or feelings (e.g., I like "wild" uninhibited parties v. I prefer quiet parties with good conversation). Reliability for this scale, as measured by Chronbach's alpha, was .79 for the current study (see Appendix L).

Videotaped Trial. A 57-minute version of the Sandoval vs. State of Colorado first-degree murder trial was used for this study. The trial consisted of prosecution and defense opening statements, witnesses, and closing statements. Both the prosecution's and the defense's cases consisted mostly of testimony from witnesses who attended a Thanksgiving Day party that left one guest stabbed and murdered. Very little forensic or scientific evidence was presented by either side during the trial. The only expert witnesses presented consisted of a paramedic that tended to the victim, first reporting officer to the scene of the crime, homicide detective, and a police firearms expert.

Analysis of Trial and Verdict response sheet. This response sheet first solicited responses to several open-ended questions that were intended to cause participants to think about several key aspects of the trial that a normal jury would discuss during deliberation (i.e., strength of evidence, burden of proof). Following this deliberation phase, respondents were asked to render a verdict finding a defendant guilty or not guilty. If guilty was chosen, respondents had to select an appropriate degree of guilt from among a selection of possible wrongful death homicide options (i.e., first degree murder, second degree murder, manslaughter; see Appendix J).

Procedure

Jury-eligible individuals enrolled in this two-session study either via telephone invite or via the SONA system. During the first session participants entered the lab, were seated in a cubicle, and given an informed consent document to read and sign. Next, participants watched a 57-minute criminal trial and then completed the Analysis of Trial and Verdict response sheet. Lastly, participants completed the CDVQ, signed up for the second session of the study, and were given credit for their participation.

The second session of the study was completed via the web site Survey Monkey. Participants logged onto the web site and completed the KLEP, CDI, Expectations of Scientific Evidence questionnaire, BOP, Juror Bias questionnaire, Need for Cognition scale, General Attitudes toward the Legal System, and a Sensation-Seeking scale. After completion of these measures participants were debriefed and then given credit for their participation.

CHAPTER 3. CORRELATIONAL STUDY RESULTS

Descriptive Statistics and Bivariate Correlations

All descriptive statistics and bivariate correlations are provided in Tables 3 and 4, respectively.

Several variables were selected as covariates for the analyses performed because of theoretical reasons and/or empirical reasons. Specifically, eight variables were identified as appropriate covariates when using verdict as a dependent variable, including: Beliefs in the Legal System subscale and Cynical Attitudes of the Legal System subscale of the General Attitudes Toward the Legal System scale, Probability of Commission subscale and Reasonable Doubt subscale of the Juror Bias scale, Need for Cognition, Exposure to the Criminal Justice System (which includes experiences as a crime victim as well as experience/contact with the criminal justice system via familial occupations, jury duty service, etc), number of times arrested, realism depicted in three favorite crime dramas. Empirically, the Probability of Commission subscale and Reasonable Doubt subscale were significantly correlated with verdict, as was realism depicted in three favorite crime dramas. Number of times arrested, cynical attitudes toward the legal system, need for cognition, and exposure to the criminal justice system showed marginally significant correlations with verdict. Although not all of these variables were significantly correlated with verdict in study 1 and study 2, they were correlated with verdict in at least one of the studies. In order to maintain consistency throughout both studies, these eight variables were used as covariates when conducting analyses with verdict as a dependent variable.

Table 3. *Study 1 Descriptive Statistics including means, standard deviations, and t-values for light and heavy crime drama viewers.*

	Light viewers N = 107		Heavy viewers N = 47		Mean difference
Measure	Mean	SD	Mean	SD	t-value
Television watched per week	20.20	16.78	31.64	17.77	3.83**
Crime drama viewing	1.84	.69	6.06	1.02	29.78***
CSI viewing	1.58	.71	4.26	1.95	12.42***
Crime drama inventory	4.74	5.96	2.99	1.00	9.47**
Times arrested	1.11	.37	1.06	.25	.82
Times been victim of crime	.58	1.04	.74	1.26	.84
Experience with CJS	.56	1.00	.64	.97	.44
Probability of commission (JBS)	3.03	.35	3.11	.33	.79
Reasonable doubt (JBS)	3.16	.51	3.28	.56	1.18
Beliefs in the legal system	3.95	.59	3.98	.63	.23
Cynical attitudes of legal system	4.42	.52	4.47	.45	.54
Need for cognition	3.34	.55	3.26	.53	-.79
Sensation seeking	1.52	.16	1.49	.15	1.00
KLEP	44.44	18.34	53.79	19.34	2.67**
General expectations total	.35	.36	.45	.38	1.57
Expectations scientific evidence	.37	.48	.54	.47	1.88
Expectations DNA evidence	.12	.52	.39	.55	2.71**
Expectation fingerprint evidence	.31	.52	.49	.50	1.82
Expectation ballistic evidence	.03	.49	.18	.52	1.60
Expectation victim testimony	.56	.46	.56	.43	.04
Expectation other witness testimony	.38	.56	.36	.58	.20
Expectation circumstantial evidence	.65	.37	.65	.42	.26
RETE total	3.54	.65	3.73	.79	1.58
RETE – physical evidence	3.67	.78	3.90	.88	1.59
RETE – DNA evidence	3.09	1.03	3.31	1.09	1.21
RETE – Ballistics evidence	3.86	.90	4.28	.92	2.60**
RETE – eyewitness evidence	3.79	.70	3.82	.82	.23
Met Expectations total	2.95	1.18	2.68	1.10	-1.32
Met Expectations – Physical	2.29	1.47	2.06	1.50	-.86
Met Expectations – DNA evidence	2.47	1.63	2.03	1.47	-1.59
Met Expectations – Ballistics	3.44	1.50	3.08	1.43	-1.38
Met Expectations – Eyewitness	4.59	1.10	4.61	1.31	.11
Burden of Proof	.06	.41	.04	.38	.34
Verdict	2.25	.85	2.57	.99	2.07*

Note. *$p < .05$, **$p < .01$, ***$p < .001$. JBS = Juror Bias Scale; KLEP = Knowledge of Legal Evidence & Procedure; RETE = Retrospective Expectations for Trial Evidence.

Table 4. *Study 1 Bivariate correlations.*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Television viewing	1											
2. Crime Drama viewing	.26***	1										
3. CSI viewing	.26***	.69***	1									
4. Crime Drama Inventory	.19*	.60***	.43***	1								
5. Number Times Arrested	.09	-.06	.01	-.09	1							
6. Victim of crime (#)	-.06	.04	.04	-.01	.05	1						
7. Exposure to CJS	-.02	.06	.06	.00	.04	.76***	1					
8. Probability of Commission	.05	.08	.14	-.02	.10	-.01	.00	1				
9. Reasonable Doubt	.20**	.08	.20**	-.03	-.02	-.04	-.11	.22**	1			
10. Beliefs in legal system	.06	.08	.14	.08	-.08	-.09	-.09	.12	.23***	1		
11. Cynical attitudes to CJS	-.06	-.02	.04	-.03	-.14	.04	.00	.05	.24***	-.16*	1	
12. Need for Cognition	-.16*	-.14	-.14	-.08	-.04	.08	-.01	-.30***	-.07	-.15*	.06	1
13. Sensation Seeking	.02	-.10	.09	.16*	.14*	.13	.20**	.01	-.15*	-.15*	-.12	.07
14. Total Expectations	-.01	.10	.18*	.06	-.10	-.10	-.19**	.19**	.14*	-.03	.03	-.03
15. Expectations: Science	-.11	.10	.16*	.04	-.09	-.06	-.18*	.06	.05	-.02	-.04	.17*
16. Expectations: DNA	.04	.15*	.20**	-.01	-.02	-.06	-.12*	.16*	.15*	-.05	.02	-.08
17. Expectations: Fingerprint	.05	.11	.12	-.01	-.05	-.07	-.13	.17*	.18*	-.03	.05	-.03
18. Expectations: Ballistics	-.02	.10	.09	-.12	-.04	-.12	-.14	.22**	.08	-.10	.04	-.14*
19. Expectations: victim test.	.03	.06	.14*	-.02	-.13	-.04	-.10	.08	.02	-.01	.06	-.03
20. Expectations:witness test.	.01	.00	.13	-.09	-.11	-.13	-.20**	.24***	.19**	.03	.04	-.05
21. RETE total	.06	.17*	.12	.15*	-.16*	.04	.07	.04	.05	.01	.15*	-.01
22. RETE: Physical evidence	.10	.16*	.13	.12	-.14*	.05	.10	.14	.09	-.01	.17*	-.12
23. RETE: DNA evidence	-.04	.13	.07	.10	-.18**	-.03	-.01	-.08	.02	.05	.05	.06
24. RETE: Eyewitness evid.	.02	.02	.01	.04	.07	.06	-.01	.02	-.02	.01	.08	.17*
25. Met Expectations Total	.06	-.10	-.14*	-.16*	.06	-.11	-.17*	.25***	.09	.10	-.03	-.06
26. Met Exp.: Physical evid.	.09	-.08	-.14*	-.11	.05	-.13	-.15*	.26***	.06	.09	-.04	-.05
27. Met Exp.: DNA evidence	.04	-.07	-.11	-.17*	.09	-.09	-.10	.19*	.08	.02	-.11	-.07
28. Met Exp: Ballistics evid.	.03	-.10	-.12	-.08	.03	-.06	-.16*	.18*	.15*	.18*	.03	-.08
29. Met Exp:Eyewitness evid	-.02	-.02	.00	-.12	-.01	.00	-.07	.02	.05	.09	.10	.03
30. KLEP Total	.03	.19*	.19**	.38***	.00	.23**	.22**	.02	.02	.05	.09	.17*

Table 4. (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
31. KLEP: Scientific Evid.	.10	.25**	.28***	.42***	.06	.22**	.15*	.06	.07	.06	.08	.12
32. KLEP: Legal procedure	-.02	.14	.07	.31***	-.01	.07	.12	-.03	-.04	.05	.12	.10
33. KLEP: Police procedure	.05	.19*	.17*	.34***	-.04	.21**	.17*	.02	.07	.04	.08	.04
34. KLEP: Eyewitnesses	-.04	.01	.17*	.13	-.07	.13	.11	-.04	.00	.04	.08	.26***
35. Burden of Proof	-.03	-.04	.01	.01	-.09	-.03	-.03	-.14	-.05	-.10	-.02	.19**
36. Verdict	-.02	.08	.08	-.12	.12	.00	-.03	.07	.20**	.10	-.05	-.04

Table 4. (continued)

	13	14	15	16	17	18	19	20	21	22	23	24
1. Television viewing												
2. Crime Drama viewing												
3. CSI viewing												
4. Crime Drama Inventory												
5. Number Times Arrested												
6. Victim of crime (#)												
7. Exposure to CJS												
8. Probability of Commission												
9. Reasonable Doubt												
10. Beliefs in legal system												
11. Cynical attitudes to CJS												
12. Need for Cognition												
13. Sensation Seeking	1											
14. Total Expectations	.00	1										
15. Expectations: Science	.08	.73***	1									
16. Expectations: DNA	.01	.84***	.68***	1								
17. Expectations: Fingerprint	-.06	.85***	.57***	.81***	1							
18. Expectations: Ballistics	.02	.75***	.43***	.67***	.62***	1						
19. Expectations: victim test.	-.01	.69***	.31***	.39***	.50***	.40***	1					
20. Expectations:witness test.	-.04	.76***	.37***	.46***	.53***	.53***	.66***	1				
21. RETE total	-.01	.21**	.18*	.24***	.22**	.11	.16*	.09	1			

Table 4. (continued)

	13	14	15	16	17	18	19	20	21	22	23	24
22. RETE: Physical evidence	-.01	.17*	.11	.22**	.20**	.15*	.11	.04	.91***	1		
23. RETE: DNA evidence	.00	.24***	.24***	.25***	.23***	.09	.16*	.12	.76***	.51***	1	
24. RETE: Eyewitness evid.	-.03	.09	.08	.01	.04	-.07	.18*	.16*	.43***	.26***	.18**	1
25. Met Expectations Total	-.02	.06	-.02	.08	.09	.16*	.03	.09	-.12	-.06	-.12	-.05
26. Met Exp.: Physical evid.	-.03	-.01	-.08	.04	.04	.10	-.02	.04	-.15*	-.09	-.14*	-.11
27. Met Exp.: DNA evidence	.02	.09	.03	.11	.13	.16*	.00	.11	-.10	-.06	-.07	-.11
28. Met Exp: Ballistics evid.	-.10	.02	-.03	.03	.06	.13	.03	.03	-.08	-.01	-.14*	.02
29. Met Exp:Eyewitness evid	.02	.19**	.11	.12	.13	.19**	.20**	.17*	.10	.09	.03	.24***
30. KLEP Total	-.13	-.01	.08	-.07	-.04	-.12	.04	-.01	.09	.03	.04	.20**
31. KLEP: Scientific Evid.	-.10	.03	.12	.00	.03	-.08	.03	.01	.06	.00	.05	.14
32. KLEP: Legal procedure	-.13	-.06	-.03	-.10	-.07	-.06	-.01	-.03	.18*	.12	.13	.16*
33. KLEP: Police procedure	-.16*	.01	.06	-.02	.01	-.06	.03	.00	.13	.10	.09	.10
34. KLEP: Eyewitnesses	-.12	.03	.11	-.04	-.04	-.10	.10	.05	.10	.04	.05	.24***
35. Burden of Proof	.04	.10	.12	.11	.13	.02	.12	.01	.02	-.01	.07	.02
36. Verdict	-.09	.06	.02	.10	.05	.16*	-.06	.04	.00	-.03	.08	-.02

Table 4. (continued)

	25	26	27	28	29	30	31	32	33	34	35	36
1. Television viewing												
2. Crime Drama viewing												
3. CSI viewing												
4. Crime Drama Inventory												
5. Number Times Arrested												
6. Victim of crime (#)												
7. Exposure to CJS												
8. Probability of Commission												
9. Reasonable Doubt												
10. Beliefs in legal system												
11. Cynical attitudes to CJS												
12. Need for Cognition												

Table 4. (continued)

	25	26	27	28	29	30	31	32	33	34	35	36
13. Sensation Seeking												
14. Total Expectations												
15. Expectations: Science												
16. Expectations: DNA												
17. Expectations: Fingerprint												
18. Expectations: Ballistics												
19. Expectations: victim test.												
20. Expectations:witness test.												
21. RETE total												
22. RETE: Physical evidence												
23. RETE: DNA evidence												
24. RETE: Eyewitness evid.												
25. Met Expectations Total	1											
26. Met Exp.: Physical evid.	.92***	1										
27. Met Exp.: DNA evidence	.85***	.70***	1									
28. Met Exp: Ballistics evid.	.75***	.59***	.51***	1								
29. Met Exp:Eyewitness evid	.35***	.10	.18**	.27***	1							
30. KLEP Total	-.17*	-.15*	-.19**	-.09	-.02	1						
31. KLEP: Scientific Evid.	-.19**	-.15*	-.22**	-.13	-.02	.82***	1					
32. KLEP: Legal procedure	-.14	-.07	-.15*	-.10	-.07	.71***	.50***	1				
33. KLEP: Police procedure	-.18*	-.20**	-.17*	-.12	.05	.78***	.71***	.51***	1			
34. KLEP: Eyewitnesses	-.08	-.07	-.13	.03	.02	.79***	.44***	.53***	.45***	1		
35. Burden of Proof	-.05	-.06	-.06	-.03	.02	.12	.07	.06	.06	.06	1	
36. Verdict	.10	.02	.06	.14*	.23***	-.07	-.01	-.01	-.04	-.14*	.00	1

Note: *$p < .05$; **$p < .01$, ***$p < .001$. Victim of crime (#) = Number of times been victim of crime; Exposure to CJS = Average of number of times been victim of crime and number of times had contact or experience with criminal justice system; Probability of Commission = Probability of Commission subscale of Juror Bias Scale; Reasonable Doubt = Reasonable Doubt subscale of Juror Bias Scale; Beliefs in legal system = Beliefs in legal system subscale of general attitudes toward the legal system scale; Cynical attitudes to CJS = Cynical attitudes toward criminal justice system subscale of general attitudes toward the legal system scale; RETE = Retrospective Expectations for Trial Evidence scale; KLEP = Knowledge of Legal Evidence & Procedure.

Six of the eight covariates used for analyses when verdict served as a dependent variable were also used when expectations was an outcome variable, including: Beliefs in the Legal System subscale and Cynical Attitudes of the Legal System subscale of the General Attitudes Toward the Legal System scale, Probability of Commission subscale and Reasonable Doubt subscale of the Juror Bias scale, Exposure to the Criminal Justice System (which includes experiences as a crime victim as well as experience/contact with the criminal justice system via familial occupations, jury duty service, etc), and number of times arrested. Each of these variables was correlated with at least one of the total expectations scales in either study 1 or study 2, so it made empirical sense to for them to serve as covariates. Additionally, participants in study 1 and study 2 were significantly different with regard to attitudes toward the legal system, the juror bias scale, and exposure to the criminal justice system, so these variables (and subscales associated with them) were used as covariates for all ANCOVAs conducted across both studies to control for differences between the study samples.

Realism in participants' three favorite crime dramas and need for cognition were not included as covariates in analyses of expectations, as neither variable was correlated with expectations in study 2. Although need for cognition was correlated with scientific expectations in study 1, there was not a strong theoretical justification to include it as a covariate in both studies.

Verdict

An ANCOVA was conducted to examine how light and heavy crime drama viewers differed on the verdicts they provided after watching a criminal trial. All eight covariates designated for analyses with verdict as a dependent variable were used. Surprisingly, light

crime drama viewers provided lighter verdicts (M = 2.33) than heavy crime drama viewers (M = 2.65), though this was not a significant difference, F(1, 100) = 3.41, p = .068.

General Expectations for Evidence.

By its definition, the CSI Effect makes the claim that viewing crime dramas increases jurors' expectations for scientific and forensic evidence to be presented in a trial. The next series of analyses were conducted to determine the existence of a CSI Effect. Specifically, a series of t-tests were performed to compare expectations between light and heavy crime drama viewers. In session one, expectations for seven different types of evidence across seven different types of crimes were collected. Because I only hypothesized that light and heavy crime drama viewers would differ on scientific expectations, I conducted t-tests comparing expectations for DNA evidence, fingerprint evidence, scientific evidence, and for evidence in every criminal case. The only significant difference between heavy viewers and light viewers was on expectations for DNA evidence, t(132) = 2.71, p < .01, d = .47, CI = .07, .47, such that heavy viewers have significantly higher expectations for DNA evidence than light viewers. Expectations for scientific evidence did approach significance, t(132) = 1.88, p = .062, with heavy viewers having higher expectations than light viewers. Means and standard deviations for all expectation items are included in Table 5.

Because expectations for scientific evidence approached significance using a t-test, an ANCOVA was conducted to provide a better examination of the true effect of crime drama viewing on expectations for scientific evidence, after controlling for the six covariates selected when using expectations as a dependent variable. After controlling for these variables, results showed that heavy crime drama viewers had significantly higher expectations for scientific evidence (M = .56) than did light crime drama viewers (M = .38),

Table 5. *Study 1 Means, Standard Deviations, T-values, and Effect Sizes of General Expectations for Evidence for Light and Heavy Crime Drama Viewers.*

	Light viewers $n = 94$		Heavy viewers $n = 40$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
General expectations total	.35	.36	.45	.38	1.57	.27
Expectation scientific evidence	.37	.48	.54	.47	1.88	.33
Expectation DNA evidence	.12	.52	.39	.55	2.71**	.47
Expectation fingerprint evidence	.31	.52	.49	.50	1.82	.32
Expectation ballistic evidence	.03	.49	.18	.52	1.60	.28
Expectation victim testimony	.56	.46	.56	.43	.04	.00
Expectation other witness testimony	.38	.56	.36	.58	.20	.03
Expectation circumstantial evidence	.65	.37	.65	.42	.26	.00

*$p < .05$, **p < .01, ***p<.001.

F(1, 121) = 4.21, p < .05, d = .37. To create a more comprehensive measure of expectations, a forensic expectation index was created by combining general expectations for scientific evidence, DNA evidence, ballistics, evidence and fingerprint evidence. Heavy viewers had significantly greater forensic expectations than did light viewers (M = .41 and M = .22, respectively), F(1, 121) = 6.13, p < .05, d = .45 (see Table 6).

I was also interested in looking at how specific viewing of the three CSI franchise shows affected expectations. Again, I conducted t-tests to compare heavy CSI viewers to light CSI viewers. Results showed that heavy CSI series viewers had significantly higher expectations for scientific evidence, t(141) = 2.78, p < .01, d = .47, CI = .11, .63, for DNA evidence, t(141) = 2.75, p < .01, d = .46, CI = .11, .69, for ballistics evidence, t(141) = 2.09, p < .05, d = .35, CI = .01, .55, and for overall expectations across all types of evidence across various types of criminal charges, t(141) = 2.84, p < .01, d = .48, CI = .09, 49 (see Table 7).

Table 6. *Study 1 Means, Standard Deviations, F-values, and Effect Sizes of General Expectations for Evidence for Light and Heavy Crime Drama Viewers.*

	Light viewers N = 90		Heavy viewers N = 39			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
General expectations total	.35	.34	.46	.38	2.23	.27
Expectation scientific evidence	.38	.46	.55	.47	4.21*	.37
Expectation DNA evidence	.12	.51	.41	.54	7.94**	.51
Expectation fingerprint evidence	.33	.50	.50	.50	3.16	.32
Expectation ballistic evidence	.03	.49	.19	.53	2.84	.31
Expectation victim testimony	.58	.46	.57	.44	.08	.05
Expectation other witness testimony	.40	.54	.36	.59	.44	.12
Expectation circumstantial evidence	.65	.37	.66	.42	.01	.01
Expectation forensic evidence	.21	.41	.41	.44	6.13*	.45

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 7. *Study 1 Means, standard deviations, t-values, and Effect Sizes of General Expectations for Evidence for Light and Heavy CSI Series Viewers.*

	Light viewers *n* = 129		Heavy viewers *n* = 14		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
General expectations total	.32	.37	.61	.32	2.84**	.48
Expectation scientific evidence	.37	.48	.74	.36	2.78**	.47
Expectation DNA evidence	.10	.53	.50	.47	2.75**	.46
Expectation fingerprint evidence	.28	.55	.54	.38	1.70	.29
Expectation ballistic evidence	.01	.48	.30	.49	2.09*	.35
Expectation victim testimony	.50	.49	.70	.38	1.51	.25
Expectation other witness testimony	.35	.60	.68	.37	2.08*	.35
Expectation circumstantial evidence	.65	.39	.82	.37	1.52	.26

*$p < .05$, **$p < .01$, ***$p < .001$.

Retrospective Expectations and Met Expectations

ANCOVAs were conducted to examine differences between heavy and light crime drama viewers on RETE scale and Met Expecations scale while controlling for the six standard covariates used for expectation analyses. No differences were found between heavy and light crime drama viewers on the Met Expectations scale. However, differences were found between light and heavy crime drama viewers on the RETE scale. Heavy crime drama viewers had significantly greater overall expectations for evidence ($M = 3.79$) than did light crime drama viewers ($M = 3.52$), $F(1, 111) = 3.99$, $p < .05$, $d = .38$. Although no significant differences were found between light and heavy viewers on any of the RETE subscales, the difference found between light and heavy viewers on total retrospective expectations includes expectations for eyewitness testimony, DNA evidence, ballistics evidence, fingerprint evidence, gunshot residue, blood spatter, toxicology, and crime reconstruction (see Table 8).

Additionally, differences between heavy and light CSI viewers on the RETE and Met Expectations scales were examined. Although no differences were found between heavy and light CSI viewers on Met Expectations, differences were found on the RETE scale. Heavy CSI viewers held significantly greater total expectations on the RETE than did light CSI viewers, $F(1, 130) = 4.53$, $p < .05$, $d = .37$ (see Table 9).

Knowledge of Legal Evidence and Procedure.

It was also hypothesized that heavy crime drama viewers would be significantly more knowledgeable than light viewers about matters of the criminal justice system – demonstrating learning from viewing television. To measure this, a series of t-tests were

Table 8. *Study 1 Means, Standard Deviations, F-values, and Effect Sizes of Retrospective Expectations for Trial Evidence for Light and Heavy Crime Drama Viewers.*

	Light viewers $n = 89$		Heavy viewers $n = 39$			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
RETE total	3.52	.64	3.82	.72	3.99*	.38
RETE – physical evidence	3.64	.77	3.96	.79	2.70	.31
RETE – DNA evidence	3.04	1.05	3.44	1.08	3.63	.36
RETE – Ballistics evidence	3.87	.88	4.37	.78	7.43**	.50
RETE – eyewitness evidence	3.82	.72	3.83	.71	.00	.00
Met Expectations total	2.95	1.13	2.70	1.07	1.08	.20
Met Expectations – Physical evidence	2.30	1.46	2.04	1.47	.68	.16
Met Expectations – DNA evidence	2.44	1.60	2.00	1.48	1.72	.25
Met Expectations – Ballistics	3.40	1.49	3.20	1.40	.25	.09
Met Expectations – Eyewitness	4.69	.98	4.67	1.21	.06	.05
Burden of Proof	.08	.41	.04	.38	.06	.05

*$p < .05$, **$p < .01$, ***$p < .001$.

conducted. Heavy viewers of crime dramas scored significantly higher than light viewers on knowledge of scientific and forensic evidence, t(134) = 3.63, p < .001, d = .63, CI = 1.55, 5.27; on knowledge of police procedure, t(134) = 2.09, p < .05, d = .36, CI = .05, 1.88; on knowledge of legal procedure, t(134) = 1.94, p = .05, d = .34, CI = -.01, 1.20; and on total knowledge of the criminal justice system, t(134) = 2.67, p < .01, d = .46, CI = 2.42, 16.29. Only knowledge of eyewitness identification and testimony resulted in a non-significant difference between heavy and light viewers (see Table 10).

Retrospective Expectations Predicting Met Expectations

A series of hierarchical regression analyses were conducted to determine the ability to predict Expectations Met from Retrospective Expectations for Trial Evidence. Regressions were conducted for the total scale scores as well as the comparable subscales, including for

Table 9. *Study 1 Means, Standard Deviations, F-values, and Effect Sizes for Retrospective Expectations for Trial Evidence for Light and Heavy CSI Series Viewers.*

	Light viewers $n = 124$		Heavy viewers $n = 14$			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
RETE total	3.58	.65	4.02	.54	4.53*	.37
RETE – physical evidence	3.66	.78	4.16	.61	3.11	.31
RETE – DNA evidence	3.20	1.05	3.64	1.10	2.21	.26
RETE – Ballistics evidence	3.97	.85	4.33	.87	1.95	.24
RETE – eyewitness evidence	3.82	.74	4.12	.46	2.58	.28
Met Expectations total	2.79	1.08	2.63	.92	.74	.15
Met Expectations – Physical evidence	2.12	1.35	1.76	1.17	1.51	.22
Met Expectations – DNA evidence	2.30	1.53	2.11	1.51	.41	.11
Met Expectations – Ballistics	3.19	1.43	3.26	1.43	.06	-.04
Met Expectations – Eyewitness	4.59	1.10	4.76	1.17	.07	.05
Burden of Proof	.07	.47	.12	.35	.45	.12

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 10. *Study 1 Means, Standard Deviations, T-values, and Effect Sizes for Knowledge of the Criminal Justice System for Light and Heavy Crime Drama Viewers.*

	Light viewers $n = 96$		Heavy viewers $n = 40$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
Total knowledge of criminal justice system	44.44	18.34	53.79	19.34	2.67**	.46
Knowledge of scientific and forensic evidence	13.42	5.02	16.83	4.90	3.63***	.63
Knowledge of legal procedure	2.10	1.62	2.70	1.67	1.94	.34
Knowledge of police procedure	4.39	2.45	5.35	2.47	2.09*	.36
Knowledge of eyewitness testimony	8.72	5.78	9.08	5.85	.33	.06

*$p < .05$, **$p < .01$, ***$p < .001$.

physical evidence, DNA evidence, and testimony evidence. For each of the regression analyses, the six standard covariates used for analyses of expectations were entered into step one. In step two the relevant retrospective expectations (sub) scale was entered.

The first regression analysis assessed the ability to predict total met expectations from total retrospective expectations for trial evidence. In step one, covariates accounted for 10.6% of the variance in total met expectations. The probability of commission subscale of the juror bias scale and total exposure to the criminal justice system were significantly related to total expectations met. In step two, total retrospective expectations for trial evidence was a significant predictor of total expectations met, $\Delta R^2 = .033$, $\beta = -.19$, $p < .05$.

Next, I regressed retrospective expectations for physical evidence on expectations met for physical evidence. In step one, covariates accounted for 9.6% of variance in expectations met for physical evidence, with The probability of commission subscale of the juror bias scale and total exposure to the criminal justice system being significant predictors of expectations met. In step two, retrospective expectations for physical evidence was significantly related to expectations met for physical evidence, $\Delta R^2 = .034$ $\beta = -.19$, $p = .01$.

Retrospective expectations for eyewitness testimony and circumstantial evidence were also significantly related to how well expectations were met for this subscale. In step one, covariates accounted for 3.7% of the variance in met expectations, though none of the individual covariates significantly predicted met expectations. Results for step two showed that retrospective expectations for eyewitness testimony and circumstantial evidence significantly predicted expectations met, $\Delta R^2 = .028$, $\beta = .17$, $p < .05$. Retrospective expectations for DNA evidence was not a significant predictor of how well DNA expectations were met. Complete results are provided in Table 11.

Table 11. *Study 1: Retrospective Expectations for Trial Evidence Predicting Met Expectations*

Correlate Set	Total Expectations Met				Physical Expectations Met				Eyewitness Expectations Met			
	B	SE B	ß	R^2	B	SE B	ß	R^2	B	SE B	ß	R^2
Covariates				.106				.096				.037
RETE Total Expectations	-.30	.12	-.19*	.138								
Physical Exp					-.33	.13	-.19*	.130				
Eyewitness Exp									.27	.12	.17	.064
DNA Exp												
Ballistics Exp												

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 11. (continued)

Correlate Set	DNA Expectations Met				Ballistics Expectations Met			
	B	SE B	ß	R^2	B	SE B	ß	R^2
Covariates				.072				.106
RETE Total Expectations								
DNA Exp	-.07	.11	-.05	.074				
Ballistics Exp					-.15	.12	-.09	.114

*p < .05, **p < .01, ***p <.001.

Burden of Proof.

The BOP measured the likelihood participants would select guilty or not guilty after being provided with a description of a charge brought against a hypothetical defendant and the witness that will be presented by prosecuting attorneys. ANCOVAs were conducted to examine the effect of crime drama viewing on BOP total scores, as well as the individual 13 items of the BOP. Because BOP should be theoretically related to verdict, the same eight covariates used for verdict analyses were also use for each of the current ANCOVAs. However, no significant differences were found between light and heavy crime drama viewers. I also conducted ANCOVAs in which low and high CDI scores (which measures attention and engrossment to crime dramas, not just viewing) were used as the IV. However, no significant differences were found between low and heavy CDI scorers on the BOP.

A final set of ANCOVAs were conducted examining differences between light and heavy CSI viewers. A significant difference between light and heavy CSI viewers was found on one item, "In a case charging the defendant with murder or attempted murder, the prosecutor presents testimony of an eyewitness and other witnesses but does not produce any scientific evidence," $F(1, 112) = 10.83$, $p = .001$. Heavy CSI viewers were more likely to find a defendant not guilty on this item than light CSI viewers (M = .94 and M = .03,

respectively), although it should be noted that the sample of heavy CSI viewers was extremely small (N = 10).

I anticipated a relation between expectations and verdict, but none was found, except for total expectations met. As BOP is not an actual behavior, but more intent to behave, it may be more likely to be related to expectations for evidence than verdict. To examine a possible relation between expectations and burden of proof, a series of hierarchical regression analyses were conducted. Independent hierarchical regressions were conducted for each of the following scales, general expectations, the RETE, and Met Expectations. Initially, the total scores for each scale were examined as predictors of the BOP, followed by independent regression analyses examining the relationship between each of the expectation scales' scientific evidence subscales and the BOP. However, none of the expectation scales were significant predictors of the BOP.

Crime Drama Inventory

Finally, I was interested in looking at differences between high and low scorers on the CDI on both expectations and knowledge. The CDI differed from crime drama genre viewing in that it presented a series of multiple choice questions specific to the most popular fictional crime dramas shown on television. While the CDI did indirectly measure crime drama viewing, it more directly measured the level of engrossment and amount of attention paid to crime dramas, beyond just viewing.

Results of ANCOVAs showed no differences between high and low scorers on the CDI in general expectations. However, a significant difference in total retrospective expectations was found between high and low scorers on the RETE, $F(1, 87) = 4.55$, $p < .05$, $d = .46$, with high CDI scorers holding significantly higher total retrospective expectations

(i.e., DNA, fingerprints, ballistics). Retrospective expectations for DNA evidence and for physical evidence both approached significance, $F(1, 87) = 3.80$, $p = .055$ and $F(1, 87) = 3.35$, $p = .071$, respectively. Additionally, ANCOVAs were also conducted to examine differences on the Met Expectations scale. Significant differences between high and low CDI scorers were found for total expectations met, $F(1, 87) = 7.48$, $p < .01$, $d = .59$, for expectations of physical evidence met, $F(1, 87) = 5.30$, $p < .05$, $d = .49$, for expectations of eyewitness and circumstantial evidence met, $F(1, 87) = 4.81$, $p < .05$, $d = .47$, and for expectations of DNA evidence met, $F(1, 87) = 3.79$, $p = .05$, $d = .42$. These results showed that high scorers on the CDI had their expectations met significantly less often than low scorers. Collectively, these results indicate that beyond just watching crime dramas, the attention paid to and level one is engrossed in crime dramas viewed leads to differences in expectations and expectations met for this case (see Table 12 for descriptive statistics).

To examine the effects of high and low engrossed crime drama viewers on knowledge of the criminal justice system, a series of t-tests were conducted. Highly engrossed crime drama viewers were significantly more knowledgeable than low engrossed viewers on knowledge of legal procedure, $t(102) = 3.92$, $p < .001$, $d = .78$, CI = .59, 1.80 on knowledge of eyewitness evidence, $t(102) = 2.18$, $p < .05$, $d = .43$, CI = .21, 4.36, on knowledge of scientific evidence, $t(102) = 5.48$, $p < .001$, $d = 1.09$, CI = 3.12, 6.66 and on total knowledge of the criminal justice system, $t(102) = 5.24$, $p < .001$, $d = 1.04$, CI = 10.37, 23.02. Results from these analyses show that the more engrossed and attentive one is to the crime dramas they view, the more knowledge of the criminal justice system they possess (see Table 13).

Table 12. *Study 1 Means, Standard Deviations, F-values, and Effect Sizes for Retrospective Expectations for Trial Evidence for Low and High Scorers on the Crime Drama Inventory.*

	Low scorers $n = 46$		High scorers $n = 49$			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
RETE total	3.49	.69	3.80	.62	4.55*	.46
RETE – physical evidence	3.63	.76	3.94	.74	3.34	.39
RETE – DNA evidence	3.01	1.12	3.47	1.06	3.73	.41
RETE – Ballistics evidence	3.87	.95	4.26	.71	4.06*	.43
RETE – eyewitness evidence	3.74	.89	3.86	.67	.64	.17
Met Expectations total	3.12	1.22	2.55	.98	7.48**	.59
Met Expectations – Physical evidence	2.55	1.60	1.93	1.30	5.30*	.49
Met Expectations – DNA evidence	2.58	1.68	1.95	1.30	3.79*	.42
Met Expectations – Ballistics	3.42	1.51	3.02	1.35	2.78	.36
Met Expectations – Eyewitness	4.88	1.24	4.34	1.22	4.81*	.47
Burden of Proof	.11	.47	.06	.42	.06	-.05

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 13. *Study 1 Means, Standard Deviations, T-values, and Effect Sizes for Knowledge of the Criminal Justice System for Low and High Scorers on the Crime Drama Inventory.*

	Low Scorers $n = 51$		High Scorers $n = 53$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
Total knowledge of criminal justice system	40.14	16.65	56.84	15.88	5.24***	1.04
Knowledge of scientific and forensic evidence	12.47	4.70	17.36	4.40	5.48***	1.09
Knowledge of legal procedure	1.78	1.45	2.98	1.66	3.92***	.78
Knowledge of police procedure	4.06	2.30	5.72	2.05	3.88***	.77
Knowledge of eyewitness testimony	7.55	5.59	9.83	5.06	2.18*	.43

*$p < .05$, **$p < .01$, ***$p < .001$.

Test of Traditional Cultivation Hypothesis v. Program Type Dominance as best predictor of Cultivation Effects

To test our hypothesis that program type dominance would serve as a better predictor of scientific expectations than cultivation hypothesis I conducted a hierarchical regression. The first step included our standard covariates used when expectations for scientific evidence serves as the outcome variable, with the addition of need for cognition. In the second step, I tested the ability of the cultivation hypothesis to predict scientific expectations by adding amount of television viewed per week to the analysis. In the third step, I included amount of crime drama viewing to the analysis in order to determine how well program type dominance could predict scientific expectations. Finally, as an exploratory fourth step, I included amount of CSI viewing to the analysis. The CSI Effect, as the name suggests, began due to the influence watching CSI had on expectations for evidence, so I wanted to assess the ability of CSI viewing to predict expectations for scientific evidence.

Regression analysis Step 1: Covariates. All covariates for the regression analysis were included in this step. The covariates collectively accounted for 7.3% of the variance in expectations for scientific evidence, with need for cognition serving as the only covariate with a significant relation to scientific expectations, $\beta = .20$, $p < .05$.

Regression analysis Step 2: Amount of television viewing per week. To test the cultivation hypothesis, television viewing per week was added to the analysis. Television viewing per week only measured the amount of television consumed, not specific content. Therefore, if the original cultivation hypothesis is correct, it should not matter what people watch, only how much they watch, and that viewing amount should predict a second-order effect such as expectations for scientific evidence. However, the original cultivation

hypothesis was not supported. Participants' amount of television viewing did not predict their expectations for scientific evidence, β = -.12, p = .10.

Regression analysis Step 3: Crime drama genre viewing. In the third step, I tested the program type dominance model. Contrary to the original general cultivation hypothesis, program type dominance states that how much of what people watch is the most important factor in accounting for first- and second-order effects. So what is most important here is the amount of a certain type of content or genre. The analysis provided support for a program type dominance cultivation effect. More specifically, expectations for scientific evidence were significantly predicted by crime drama viewing, β = .16, p < .05.

Regression analysis Step 4: CSI viewing. Finally, CSI viewing was entered into the analysis to see how an individual crime drama could predict expectations for scientific evidence. Results showed that CSI viewing was also a significant predictor of expectations for scientific evidence, β = .25, p < .05, providing further support for program type dominance.

Results from hierarchical regression analyses supported the hypothesis that program type dominance is a better predictor of expectations than cultivation theory. Across the three predictors, CSI viewing was the best predictor of expectations for scientific evidence (β = .25), followed by general crime drama viewing (β = .16), while amount of television viewing (β = -.12) did not predict expectations for scientific evidence. Regression coefficients for each of these steps can be found in Table 14.

Table 14. *Study 1: Assessing Ability of Amount of Television Viewing, General Crime Drama Viewing, and CSI Viewing to Predict General Expectations for Scientific Evidence*

Correlate Set	Expectations for Scientific Evidence			
	B	SE B	ß	R^2
Covariates				.073
Television viewing per week	-.003	.002	-.12	.086
Crime drama viewing	.04	.02	.16*	.109
CSI viewing	.08	.03	.25*	.136

*$p < .05$, **$p < .01$, ***$p < .001$.

CHAPTER 4. CORRELATIONAL STUDY SUMMARY AND DISCUSSION

The current research sought to improve upon past studies investigating the CSI Effect by providing a more thorough and precise measure of heavy and light viewers so that the presence (or absence) of a CSI Effect could be more objectively studied. Results from Study 1 did show the presence of a CSI Effect, supporting our main hypothesis. People who were classified as heavy crime drama viewers held significantly higher expectations for scientific and forensic evidence than did light crime drama viewers. Moreover, when expectations were examined as they specifically related to a viewed criminal trial, heavy crime drama viewers again held significantly greater total expectations than did light viewers and they also were less likely to have their expectations met by the evidence presented. These results were also consistent with people who were more likely to be heavily engrossed in and pay close attention to the crime dramas they watch.

Furthermore, the hypothesis that heavy crime drama viewers would also possess more knowledge of the criminal justice system was also supported. Specifically, heavy crime drama viewers possessed greater legal knowledge, knowledge of police procedure, scientific and forensic knowledge, and overall knowledge of the criminal justice system. Specifically, these results provide evidence that people learn about the criminal justice system from watching crime dramas, and more generally, these results suggest that semantic learning of knowledge and facts occurs from watching television.

Although crime drama viewing did affect expectations for scientific evidence and knowledge of the criminal justice system, it did not have an effect on verdicts provided following the viewing of a criminal murder trial. Although crime drama viewing did have an

effect on cognitive constructs such as knowledge and expectations, it appears from the results of this study that they did not have an effect on a behavioral act, such as verdict. One possibility is that the effects of crime drama viewing are not powerful enough to influence one's verdict. It is also likely that there are potentially multiple factors that play a role in deciding on a verdict beyond that of crime drama viewing.

Evidence was also found in support of the hypothesis that program type dominance would serve as a better predictor of cultivation effects (i.e., expectancies for scientific evidence) than the original cultivation hypothesis. According to the original cultivation hypothesis, total television viewing should predict expectations for scientific evidence; however, results from Study 1 did not show a significant relation between total television viewing and scientific expectations. Results also showed that both crime drama viewing and CSI viewing were significant predictors of expectations, providing support for the revised theory of program type dominance. CSI series viewing was actually the best predictor of expectations, not crime drama genre viewing. However, these two variables were highly correlated ($r = .71$), with both providing support for the ability of program type dominance to best predict cultivation effects. The results from these analyses provide strong evidence that the content one views on television (program type dominance) is more important than solely the total amount of television that one views (original cultivation hypothesis) when explaining cultivation effects.

Collectively, the results of Study 1 provide evidence for the existence of the CSI Effect; however, because so many previous studies examining the CSI Effect have found no evidence to support it, the results of the current study are in need of replication to provide stronger evidence to support the current findings that heavy crime drama viewers are more

knowledgeable about the criminal justice system and have greater expectations for scientific evidence than light crime drama viewers. Furthermore, the current study is limited because of its correlational nature. In order to better study the true nature of the CSI Effect, studies using experimental methodology are needed. The second study presented here attempts to respond to both of these limitations.

CHAPTER 5. EXPERIMENTAL STUDY METHODS AND PROCEDURE

Overview

The purpose of the second study was to study the CSI Effect using an experimental methodology, as well as to replicate the results from Study 1. Conceptual replication of Study 1 was expected to establish converging evidence of the existence of a CSI Effect.

In Study 2, the experimental methodology included manipulating the type of show participants viewed to understand if I could essentially create a CSI Effect among traditional light viewers of crime dramas. More specifically, participants watched four crime dramas (CSI), four non-crime dramas (House), or no show. Participants then viewed a criminal trial that includes evidence and testimony relevant to the show they just viewed to see if it has an effect on their subsequent verdict as well as their expectations regarding the presentation of scientific evidence in the trial.

Method

Participants

A total of 239 (122 males, 113 females, 4 unspecified) jury-eligible individuals enrolled in an undergraduate psychology course at Iowa State University participated in this study. Participants in the present study either attended a mass testing session in which they completed the CDVQ (see Appendix A; Tapscott, 2006) and were then invited to participant in the full study, or participants were also able to select to participate in the study by signing up via Iowa State University's web-based human subject pool management system.

Twenty-two participants were excluded from all analyses because they satisfied at least two of the following three conditions: 1) Administrative error (e.g., research staff did not follow study procedure); 2) Participant behaved in a manner that violated study protocol

(e.g., took significantly longer than one week to return for session three, was talking on phone during experiment); 3) Unrealistically fast responding to study questionnaires as determined by reaction times provided by MediaLab. The final sample was composed of 217 (N = 77 CSI condition, N = 77 House condition, N = 63 control condition) participants. The sample was 52.5% male and 89.4% Caucasian.

Two a priori analyses through G*Power 3.1.2, an online power calculator, were run to determine the sample size needed for the experiment. The first test was an F-test ANCOVA, focusing on fixed effects, main effects, and interactions. The input effect size was set at .25, alpha error probability at .05, power .95, numerator df 2, number of groups 3, and covariates 6. Results indicated the total sample size would need to be N = 251 to obtain sufficient power. The second test was an F-test ANCOVA, also focusing on fixed effects, main effects, and interactions. The input effect size was set at .25, alpha error probability at .05, power .95, numerator df 1, number of groups 2, and covariates 6. Results indicated the total sample size would need to be N = 210 to obtain sufficient power.

Design

A 2 (amount of crime drama viewing: light or heavy) x 3 (viewing condition: crime drama, CSI, medical drama, House, or no show viewed) experimental design was used in Study Two.

Materials

For purposes of replicating results from Study one, all measures used in Study One were also used in Study Two. To summarize, measures used primarily as predictor variables or covariates included the Crime Drama Viewing Questionnaire (used to classify light and heavy crime drama viewers), Crime Drama Inventory (a measure of level of engrossment and

attention paid to crime dramas viewed), General Attitudes toward the Legal System (measures beliefs in legal system as well as cynicism toward legal system), and the Juror Bias scale (measures pro-prosecution and pro-defense biases among potential jurors in a criminal trial). Measures used primarily as outcome variables included Knowledge of Legal Evidence and Procedure (a 156-item multiple choice test that assesses knowledge of various fields within the criminal justice system), General Expectations for Evidence (measures expectations for seven different types of evidence across seven different hypothetical scenarios), Retrospective Expectations for Trial Evidence (measures expectations across 18 different types of evidence that corresponds to trial participants viewed during study), Met Expectations Scale (assesses how well expectations were met across the 18 items of the RETE), Burden of Proof (measures degree of guilt or innocence of hypothetical defendant based on scenarios describing various charges and evidence presented by prosecution), and Verdict and Explanations of Judgment Response sheet (measures verdict and reasons for selecting particular verdict). Descriptive statistics for each of these scales are presented in Table 17. In addition to these materials, study two included a television show viewing condition in which participants were randomized to watch a crime drama (CSI), a medical drama (House), or into a control condition that did not watch a show.

Television shows. Participants were randomly selected to watch four episodes of CSI, House, or to not watch any show. CSI and House were selected because they have historically been the two most popular shows on television over the last five years (Gorman, 2010) and each represent a different type of investigative drama, with CSI a forensic crime drama, and House a medical drama. All episodes included in the study were selected from DVDs of the shows, so there were no commercials present, making each episode roughly 45

minutes long. Participants were given a disc containing all four shows that they could watch on their computer. The four episodes selected for viewing had a conflict that was identified and resolved in the same episode. Furthermore, the episodes of CSI selected were representative of an underlying construct(s) relevant to the CSI Effect (e.g., DNA evidence, ballistics, fingerprinting, eyewitness identification, etc.).

Retrospective Expectations for Trial Evidence questionnaire (RETE). The RETE was developed for the present studies, and its first use and factor analysis was in study 1. A second factor analysis was conducted using the study 2 sample to attempt to replicate the factor structure produced in study 1. Internal consistency for the original 18-items on this scale was high (alpha = .901; see Appendix H).

Data Screening. Eighteen values, due to a combination of administrative errors, univariate outliers, or general problem cases (see explanation of problem cases in participants section above), were recoded as missing data. A final sample size of 191 was used in the analysis, with over 10.5 cases per variable.

Factor Analysis. The factor structure of the 18 item RETE was examined. Several well-acknowledged criteria for factor analysis were used. First, all 18 items correlated at least .3 with at least one other item on the scale. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .882, well above the agreed cutoff of .6, and the Bartlett's test of sphericity was significant ($X2\ (153) = 1873.43$, $p < .001$. The diagonals of the anti-image correlation matrix were all over .5, supporting inclusion of each item in the factor analysis. Lastly, the communalities for all 18 items were greater than .3, with all but three items having communalities above .5, indicating shared variances among variables in the scale.

Factor (principal components) analysis procedures were completed on the Retrospective Expectations questionnaire for the purposes of identifying latent constructs and refining the various measures. First, an unconstrained solution was computed retaining all factors with Eigenvalues > 1, which resulted in four factors being retained. The first factor explained 39.17% of the variance, the second factor 11.51%, the third factor 8.87%, and the fourth factor 6.22% of the variance. Collectively, this factor solution accounted for 65.76% of the total variance. Two, three, and four factor solutions were examined, using oblimin rotations of the factor loading matrix. The three factor solution, which explained 59.55% of the variance, was preferred because of its practical and theoretical relevance, the results from parallel analysis suggesting a three factor solution, and the "leveling off" of eigenvalues on the scree plot after three factors.

During the PCA, a total of two items were eliminated because they either did not contribute to a simple factor structure due to their failure to meet a minimum criterion of having a primary factor loading of .5 or above, or because they did not make theoretical or practical sense to the overall scale. The item "Fingerprint evidence (in general)" had factor loadings between .4 and .5 on both Physical Evidence and DNA Evidence, so it was eliminated. A similarly worded item, "Ballistic evidence (in general)" was eliminated because it does not make practical sense to keep in the scale. Whereas almost all other items in the scale asked for expectations for specific types of evidence, the only general expectations for evidence solicited were for fingerprint and ballistic evidence. Additionally, the scale already included expectations for specific types of ballistic and fingerprint evidence, so asking for these types of evidence, in general, did not add anything to the scale. Finally, "polygraph evidence" was deleted from the scale because it also did not make

practical sense to retain it. Because polygraph evidence is inadmissible in a courtroom, it does not make sense to include it in a questionnaire designed to assess expectations for evidence presented in a trial. In the end, all three items were deleted from the scale, leaving 15 total items on the RETE.

A PCA of the remaining 15 items, using oblimin rotations was conducted, with the three factors explaining 63.92% of the variance. All items had primary loadings over .5 and no items had any cross loadings. This factor structure produced here successfully replicated the factor structure created in study 1. The factor loading matrix for this final solution is presented in Table 15.

Internal consistency for each of the scales was examined using Cronbach's alpha. The alphas ranged from moderate, .657 for Eyewitness Evidence (3 items), to high, .877 for Physical Evidence (8 items) and .915 for DNA Evidence (4 items). Internal consistency for the entire scale was .889. No significant increases in alpha for any of the scales could have been attained by removing more items.

Using the means of the items which had primary loadings on each factor, composite scores were created for each of the three factors. Higher scores indicated higher expectations for evidence. Participants had the highest retrospective expectations for Eyewitness Evidence, followed closely by Physical Evidence. DNA Evidence was expected somewhat less often. Descriptive statistics are presented in Table 17. Small to moderate correlations between each of the subscales existed: .32 between Eyewitness Evidence and Physical Evidence, .15 between Eyewitness Evidence and DNA Evidence, and .49 between Physical Evidence and DNA Evidence.

Table 15. *Study 2 Principal Component Analysis: Pattern Matrix Loadings for Retrospective Expectations for Trial Evidence.*

Correlate	1	2	3	4	5	6
Gunshot residue	.849					
Blood spatter	.843					
Fingerprints from gun	.813					
Ballistics from gun	.729					
Fingerprints from log	.718					
Toxicology	.693					
Fingerprints from knife	.642					
Crime reconstruction	.566					
DNA (general)		.927				
DNA from defendant		.925				
DNA from victim		.876				
DNA from all those present		.827				
Eyewitness testimony from at least one witness			.820			
Eyewitness testimony from multiple witnesses			.745			
Circumstantial evidence			.698			

Met-Expectations questionnaire. Similar to the RETE, the Met Expectations questionnaire was developed for the present studies. A second factor analysis for this scale was conducted to attempt to replicate the factor structure produced during factor analysis using the sample from study 1. Reliability for the original 18-items on this scale was high (alpha = .90; see Appendix I).

Data Screening. Eighteen values, due to a combination of administrative errors, univariate outliers, or general problem cases (see explanation of problem cases in participants section above), were recoded as missing data. A final sample size of 191 was used in the analysis, with over 10.5 cases per variable.

Factor Analysis. The factor structure of the 18 items of the MEQ was examined. Several well-acknowledged criteria for factor analysis were used. First, all 18 items correlated at least .3 with at least one other item on the scale. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .909, well above the agreed cutoff of .6, and the Bartlett's test of sphericity was significant ($X2$ (153) = 3057.63, $p < .001$. The diagonals of the anti-image correlation matrix were all over .5, supporting inclusion of each item in the factor analysis. Lastly, the communalities for all 18 items were greater than .4, with all but one item having communality above .5, indicating shared variances among variables in the scale.

Factor (principal components) analysis procedures were completed on the Met Expectations Questionnaire for the purposes of identifying latent constructs and refining the various measures. First, an unconstrained solution was computed retaining all factors with Eigenvalues > 1, which resulted in four factors being retained. The first factor explained 48.95% of the variance, the second factor 10.33%, the third factor 8.22%, and the fourth factor 7.00% of the variance. Collectively, this factor solution accounted for 74.50% of the total variance. Two, three, four, and five factor solutions were examined, using oblimin rotations of the factor loading matrix. The four factor solution, which explained 59.55% of the variance, was preferred because of its practical and theoretical relevance, the "leveling off" of eigenvalues on the scree plot after four factors, the number of EV > 1, and the results from parallel analysis which were right on the cusp of a four factor solution (within three tenths of yielding a four factor solution).

For practical reasons, the item "Lie detector test evidence" was deleted from the scale. The purpose of this questionnaire was to determine how well prosecution met jurors'

expectations for evidence presented at trial, and because lie detector test evidence is not admissible in a courtroom, this item was deleted from the final version of the questionnaire. Additionally, because the Met Expectations Questionnaire and the RETE assessed identical items and the item "Fingerprint evidence (in general)" item was deleted from the RETE scale, for practical purposes the item was also deleted here to maintain consistency between the two scales. Plus, while the item had a primary loading of just above .5 on the physical evidence subscale, it also had a factor loading of just below .5 on the DNA evidence subscale, providing more support for its deletion. "Ballistics evidence (in general)," which was deleted from the RETE, was retained on the final version of the Met Expectations questionnaire because it served as the requisite third item of the third factor identified on the scale. In the end, a total of 16 items were included in the scale.

A PCA of the remaining 16 items, using oblimin rotations was conducted, with the four factors explaining 75.58% of the variance. All items had primary loadings over .5, though one had cross-loadings greater than .4 on the DNA subscale (Fingerprints from the knife). This item was still retained on the final version of the scale for several reasons, including 1) its practical value as evidence in a trial, 2) and its theoretical relevance and value as one of the most reliable forms of evidence presented at a trial. Additionally, it was to be expected that items on this scale would be highly correlated with each other as nearly all items (with the exception of eyewitness evidence) on the scale represent a form of physical evidence. Furthermore, correlations between this item and the four items that comprise the DNA subscale were between .68 and .75, providing support for the highly correlated nature of the items. Two other items, "Fingerprint evidence from the gun" and "Eyewitness testimony from more than one witness," had cross loadings of greater than .3; however, each

of these items were retained because they had strong primary loadings of .69 and .79, respectively. The factor structure produced here successfully replicated the factor structure created in study 1, with the exception that the DNA subscale loaded as factor one and the physical evidence loaded as factor two, a reversal from the factor analysis from study 1. The factor loading matrix for the final solution is presented in Table 16.

Table 16. *Study 2 Principal Component Analysis: Pattern Matrix Loadings for the Met Expectations Questionnaire.*

Correlate	1	2	3	4	5	6
DNA from victim	.995					
DNA from defendant	.987					
DNA (general)	.974					
DNA from all present	.912					
Toxicology		.895				
Blood spatter		.869				
Fingerprints from log		.739				
Gunshot residue		.729				
Fingerprints from gun	.348	.667				
Fingerprints from knife	.485	.522				
Ballistics (general)			.830			
Ballistics from gun			.763			
Crime reconstruction			.702			
Circumstantial evidence				.803		
Eyewitness testimony from multiple witnesses		.336		.788		
Eyewitness testimony from at least one witness				.775		

Internal consistency for each of the scales was examined using Cronbach's alpha. The alphas ranged from moderate, .704 for Eyewitness Evidence (3 items) and .713 for Ballistics

Evidence (3 items), to high, .923 for Physical Evidence (6 items) and .964 for DNA Evidence (4 items). Internal consistency for the entire scale was .914. No significant increases in alpha for any of the scales could have been attained by removing more items.

Using the means of the items which had primary loadings on each factor, composite scores were created for each of the four factors. Higher scores indicated that expectations for evidence were satisfied more frequently. Participants had the highest expectations met for Eyewitness Evidence, while expectations for Ballistic Evidence, Physical Evidence, and DNA Evidence were satisfied noticeably less often. Descriptive statistics are presented in Table 17. Small correlations existed between Eyewitness Evidence and Ballistics Evidence (r = .22), Physical Evidence (r = .22), and DNA Evidence (r = .23). Moderate to large correlations existed between the other subscales: .51 between Ballistics Evidence and Physical Evidence, .38 between Ballistics Evidence and DNA Evidence, and .70 between Physical Evidence and DNA Evidence.

Procedure

Jury-eligible participants who completed a mass testing session or who self-selected to participate in the study via Iowa State University's web-based human subject management pool were invited to participate in the three-session study. Prior to arriving to the lab for session one, participants were randomly assigned to one of three television viewing conditions (crime drama: CSI, medical drama: House, or control: No show). When participants arrived to the lab, they first signed an informed consent document and then completed the following questionnaires on MediaLab (research software designed to allow for computerized presentation of experiments): CDVQ, Expectations of Evidence, KLEP,

Burden of Proof, General Attitudes toward the Legal System scale, CDI, Legal Attitudes of Prospective Jurors scale, Need for Cognition scale, and Sensation-Seeking scale.

After finishing the questionnaires, participants in the CSI and House conditions were given a disc containing four episodes of the television show to which they were randomly assigned. Before leaving the lab, participants were given instructions about how to access the material for Session two, the television episodes they were expected to watch. Following this, participants were given credit for their participation in Session one and asked to schedule an appointment for Session three of the study.

Session two: Participants were given one week from the time they completed session one of the study to watch all four episodes of the television show. All episodes for the two television show viewing conditions were saved to a disc and given to participants so they were able to watch them via computers. The only stipulation was that they watch all four episodes within one week of the time they completed session one of the study.

Session three: Participants viewed a 57-minute criminal trial and then provided their reactions, which included completing the Analysis of Trial and Verdict response sheet. Participants then completed the KLEP for the second time. Finally, participants were asked questions to explore any suspicions they may have had during the study. Participants were then debriefed and given credit for their participation.

CHAPTER 6. EXPERIMENTAL STUDY RESULTS

Descriptive Statistics and Bivariate Correlations

Descriptive statistics for each measure are presented in Table 17. Bivariate correlations were conducted and are presented in Table 18.The same covariates used for analyses of verdict, as well as for analyses of expectations in study 1 were also used in study 2 (see page 46 for a detailed description).

Twenty-six participants dropped out of the study following session one. Of these 26 participants, seven were light crime drama viewers, six were heavy crime drama viewers, and the remaining thirteen were moderate viewers. The seven light viewers actually held significantly lighter general expectations for total evidence, including forensic evidence, than did other light viewers who remained in the study. Although no significant differences were found between heavy viewers who completed the entire study and those who dropped out, those who dropped out did have higher burden of proof scores, higher general expectations for total evidence, including forensic evidence, and greater total scores on the KLEP.

Effects due to Randomization

Verdict.

The primary analysis for the second study was to examine if there was any effect due to experimental manipulation. Specifically, I was interested in understanding if participants who were randomly assigned to watch episodes of CSI would be more likely to provide a lighter verdict after viewing a trial than participants who viewed episodes of House or did not view any television show. An ANCOVA was conducted to compare the differences in verdicts provided by the three different television show viewing conditions: CSI (M= 2.07),

Table 17. *Study 2 Descriptive Statistics including Means, Standard Deviations, and T-Values for Light and Heavy Crime Drama Viewers.*

	Light CD viewers N = 73		Heavy CD viewers N = 57		Mean difference
Measure	Mean	SD	Mean	SD	t-value
Television watched per week	22.83	17.93	31.72	17.54	2.83**
Crime drama viewing	2.21	.62	5.78	1.04	24.47***
CSI viewing	2.00	.74	4.25	1.63	10.52***
Crime drama inventory	6.23	8.75	20.75	14.96	6.49***
Times arrested	1.12	.33	1.14	.52	.82
Times been victim of crime	.85	1.10	1.23	1.54	1.64
Experience with CJS	.74	.93	.79	.20	.30
Probability of commission (JBS)	3.09	.35	3.07	.29	-.22
Reasonable doubt (JBS)	2.97	.54	3.17	.52	2.14*
Beliefs in the legal system	4.00	.82	3.85	.70	-.95
Cynical attitudes of legal system	4.53	.79	4.53	.67	.02
Need for cognition	3.29	.70	3.36	.56	.70
Sensation seeking	1.50	.16	1.51	.15	.48
KLEP	51.03	19.02	64.71	17.64	4.17***
General expectations total	.29	.32	.38	.27	1.60
Expectations scientific evidence	.16	.55	.46	.48	3.22**
Expectations DNA evidence	-.04	.53	.13	.51	1.85
Expectation fingerprint evidence	.25	.54	.44	.51	2.08*
Expectation ballistic evidence	-.10	.45	-.10	.46	.03
Expectation victim testimony	.66	.42	.59	.45	1.00
Expectation other witness testimony	.45	.57	.42	.53	.37
Expectation circumstantial evidence	.65	.44	.70	.41	.63
RETE total	3.42	.72	3.52	.67	.78
RETE – physical evidence	3.47	.90	3.63	.78	1.59
RETE – DNA evidence	2.91	1.05	3.05	.97	1.21
RETE – Ballistics evidence	3.74	1.09	3.99	.99	1.28
RETE – eyewitness evidence	3.96	.73	3.83	.76	.23
Met Expectations total	2.81	1.16	2.96	1.07	.71
Met Expectations – Physical	2.24	1.42	2.30	1.34	.26
Met Expectations – DNA evidence	2.11	1.51	2.54	1.53	.76
Met Expectations – Ballistics	3.23	1.63	3.42	1.44	.64
Met Expectations – Eyewitness	4.64	1.29	4.56	1.15	-.32
Burden of Proof	.31	.63	.26	.39	-.56
Verdict	2.04	.90	2.12	.78	.45

Note: *$p < .05$, **$p < .01$, *** $p < .001$. JBS = Juror Bias Scale; KLEP = Knowledge of Legal Evidence & Procedure; RETE = Retrospective Expectations for Trial Evidence.

Table 18. *Study 2 Bivariate correlations.*

	1	2	3	4	5	6	7	8	9	10	11	12
1. Television viewing	1											
2. Crime Drama viewing	.17*	1										
3. CSI viewing	.17*	.64***	1									
4. Crime Drama Inventory	.05	.51***	.27***	1								
5. Number Times Arrested	.16*	.02	.06	-.08	1							
6. Victim of crime (#)	-.02	.14*	.13	-.04	.17*	1						
7. Exposure to CJS	-.05	.09	.07	-.10	.21**	.83***	1					
8. Probability of Commission	.08	-.03	.10	.03	-.04	-.09	-.1	1				
9. Reasonable Doubt	.05	.15*	.24***	.07	-.13	-.06	-.02	.38***	1			
10. Beliefs in legal system	-.09	-.02	.03	.02	-.14	-.18*	-.16*	.22**	.29***	1		
11. Cynical attitudes to CJS	.02	-.02	.07	-.11	-.1	-.01	.04	.31***	.37***	-.18*	1	
12. Need for Cognition	-.04	.08	-.03	.07	.06	.11	.07	-.17*	-.20**	-.11	-.13	1
13. Sensation Seeking	.11	-.03	.00	-.24***	.19**	.15*	.17*	-.11	-.21**	-.08	-.15	.05
14. Total Expectations	.03	.04	.12	-.04	-.07	-.05	-.03	.18**	-.02	.02	-.03	-.05
15. Expectations: Science	-.10	.19**	.15*	.20**	-.08	.06	.06	.04	-.05	.07	-.07	.07
16. Expectations: DNA	.04	.06	.15*	.00	-.13	-.06	-.01	.14*	.10	.03	.07	-.07
17. Expectations: Fingerprint	.12	.09	.15*	-.08	-.04	.00	.00	.17*	.01	.00	.02	-.11
18. Expectations: Ballistics	.07	-.07	.10	-.08	-.16*	.01	.00	.13	-.03	.03	.03	-.08
19. Expectations: victim test.	.02	-.10	-.03	-.19**	.07	-.13	-.13	.13	-.14*	-.03	-.07	-.01
20. Expectations:witness test.	.05	-.07	-.05	-.13	.00	-.12	-.07	.14*	-.07	-.02	-.14	.02
21. RETE total	-.04	.07	.15*	-.01	-.05	.02	-.01	.03	.08	-.03	.18*	.03
22. RETE: Physical evidence	-.01	.05	.16*	-.02	-.03	.04	.02	.03	.06	-.05	.18*	.08
23. RETE: DNA evidence	-.07	.09	.12	-.01	-.08	-.02	-.03	.01	.11	-.01	.11	-.14
24. RETE: Eyewitness evid.	-.09	-.07	-.08	-.05	-.01	.01	-.02	.00	-.01	-.01	.13	.1
25. Met Expectations Total	.05	.05	-.01	.09	.02	.02	-.05	.08	.11	.01	-.04	-.25***
26. Met Exp.: Physical evid.	.03	-.01	.01	.00	-.05	-.03	-.09	.08	.12	.07	-.01	-.23***
27. Met Exp.: DNA evidence	.11	.11	-.04	.06	.07	.03	-.02	.00	.05	-.07	-.03	-.20**
28. Met Exp: Ballistics evid.	.04	.07	.10	.11	.05	.01	-.02	.18*	.12	.07	.00	-.15*
29. Met Exp:Eyewitness evid	.02	-.02	-.04	.03	.05	-.04	-.09	.05	.10	-.06	.07	-.12
30. KLEP Total	.02	.33***	.13	.30***	.11	.03	.07	-.08	.02	-.12	.02	.22***

Table 18. (continued)

	1	2	3	4	5	6	7	8	9	10	11	12
31. KLEP: Scientific Evid.	.05	.31***	.22***	.25***	.07	.05	.07	-.01	.09	-.09	.07	.15*
32. KLEP: Legal procedure	-.11	.21***	.02	.24***	.03	.01	.02	-.12	-.01	.02	-.08	.15*
33. KLEP: Police procedure	.10	.31***	.18**	.11	.06	.06	.13	-.08	.16*	-.04	.01	.12
34. KLEP: Eyewitnesses	-.03	.12	-.04	.18*	.09	-.04	.00	-.12	-.02	-.18*	.06	.18**
35. Burden of Proof	-.04	-.01	-.01	-.04	.00	.04	.03	-.13	-.19**	-.09	-.05	.1
36. Verdict	.01	.03	-.03	.06	.06	-.13	-.06	.18*	.21**	.16	.11	-.13

Table 18. (continued)

	13	14	15	16	17	18	19	20	21	22	23	24
1. Television viewing												
2. Crime Drama viewing												
3. CSI viewing												
4. Crime Drama Inventory												
5. Number Times Arrested												
6. Victim of crime (#)												
7. Exposure to CJS												
8. Probability of Commission												
9. Reasonable Doubt												
10. Beliefs in legal system												
11. Cynical attitudes to CJS												
12. Need for Cognition												
13. Sensation Seeking	1											
14. Total Expectations	.00	1										
15. Expectations: Science	-.05	.58***	1									
16. Expectations: DNA	-.09	.78***	.46***	1								
17. Expectations: Fingerprint	.01	.77***	.26***	.69***	1							
18. Expectations: Ballistics	-.06	.73***	.33***	.63***	.59***	1						
19. Expectations: victim test.	.12	.63***	.19**	.31***	.40***	.28***	1					
20. Expectations:witness test.	.11	.71***	.21**	.38***	.46***	.44***	.63***	1				
21. RETE total	.11	.26***	.08	.24***	.23**	.18*	.09	.21**	1			

Table 18. (continued)

	13	14	15	16	17	18	19	20	21	22	23	24
22. RETE: Physical evidence	.13	.22**	.07	.18*	.19**	.15*	.10	.21**	.94***	1		
23. RETE: DNA evidence	.01	.22**	.04	.33***	.25***	.23**	-.07	.09	.73***	.49***	1	
24. RETE: Eyewitness evid.	.08	.08	.00	-.04	-.06	-.05	.21**	.15*	.46***	.32***	.15*	1
25. Met Expectations Total	-.08	.05	-.04	.07	.06	.07	-.06	.00	-.10	-.10	.01	-.06
26. Met Exp.: Physical evid.	-.07	.13	.02	.14	.11	.17*	-.02	.05	-.08	-.08	-.01	-.13
27. Met Exp.: DNA evidence	-.04	.03	.01	.04	.09	.05	-.08	-.07	-.08	-.10	.06	-.11
28. Met Exp: Ballistics evid.	.03	.11	-.01	.13	.09	.12	-.02	.12	-.01	.02	-.05	-.02
29. Met Exp:Eyewitness evid	-.03	-.02	-.13	-.05	-.07	-.07	.00	-.01	.14	.07	.10	.31***
30. KLEP Total	.14*	-.04	.09	-.07	-.03	-.23***	-.01	.04	.10	.07	.04	.08
31. KLEP: Scientific Evid.	.19**	.02	.14*	-.03	.02	-.19**	.02	.04	.10	.09	.02	.06
32. KLEP: Legal procedure	.04	.01	.07	.01	-.02	-.12	-.01	.09	.14	.09	.15*	.10
33. KLEP: Police procedure	.14*	-.06	-.02	-.08	.02	-.18**	-.08	-.02	.06	.03	.08	-.01
34. KLEP: Eyewitnesses	.04	-.06	.02	-.10	-.08	-.18**	.01	.07	.04	.03	.02	.06
35. Burden of Proof	.14	.05	.14	.10	.02	-.01	.05	.06	.17*	.14	.16*	.13
36. Verdict	-.12	.09	.03	.05	.12	.06	-.01	.00	-.06	-.08	.06	-.08

Table 18. (continued)

	25	26	27	28	29	30	31	32	33	34	35	36
1. Television viewing												
2. Crime Drama viewing												
3. CSI viewing												
4. Crime Drama Inventory												
5. Number Times Arrested												
6. Victim of crime (#)												
7. Exposure to CJS												
8. Probability of Commission												
9. Reasonable Doubt												
10. Beliefs in legal system												
11. Cynical attitudes to CJS												
12. Need for Cognition												

Table 18. (continued)

	25	26	27	28	29	30	31	32	33	34	35	36
13. Sensation Seeking												
14. Total Expectations												
15. Expectations: Science												
16. Expectations: DNA												
17. Expectations: Fingerprint												
18. Expectations: Ballistics												
19. Expectations: victim test.												
20. Expectations:witness test.												
21. RETE total												
22. RETE: Physical evidence												
23. RETE: DNA evidence												
24. RETE: Eyewitness evid.												
25. Met Expectations Total	1											
26. Met Exp.: Physical evid.	.92***	1										
27. Met Exp.: DNA evidence	.84***	.70***	1									
28. Met Exp: Ballistics evid.	.64***	.51***	.38***	1								
29. Met Exp:Eyewitness evid	.41***	.22**	.23**	.22**	1							
30. KLEP Total	-.11	-.18*	-.04	-.08	-.04	1						
31. KLEP: Scientific Evid.	-.06	-.10	-.03	-.02	-.02	.85***	1					
32. KLEP: Legal procedure	-.11	-.14	-.09	-.12	-.03	.66***	.44***	1				
33. KLEP: Police procedure	-.11	-.09	-.06	-.07	-.09	.70***	.58***	.37***	1			
34. KLEP: Eyewitnesses	-.07	-.16*	-.03	-.08	.03	.80***	.47***	.55***	.46***	1		
35. Burden of Proof	-.21**	-.22**	-.18*	-.16*	-.07	.07	-.01	.13	.06	.07	1	
36. Verdict	.20**	.14*	.15*	.09	.20**	.02	.03	.11	.00	.02	-.08	1

Note: *$p < .05$; **$p < .01$, ***$p < .001$. Victim of crime (#) = Number of times been victim of crime; Exposure to CJS = Average of number of times been victim of crime and number of times had contact or experience with criminal justice system; Probability of Commission = Probability of Commission subscale of Juror Bias Scale; Reasonable Doubt = Reasonable Doubt subscale of Juror Bias Scale; Beliefs in legal system = Beliefs in legal system subscale of general attitudes toward the legal system scale; Cynical attitudes to CJS = Cynical attitudes toward criminal justice system subscale of general attitudes toward the legal system scale; RETE = Retrospective Expectations for Trial Evidence scale; KLEP = Knowledge of Legal Evidence & Procedure.

House (M = 2.15), or no viewing (M = 2.25). Verdicts did not significantly differ across the three conditions, F(2,107) = .41, p = .67, ns[1].

I was also interested in understanding how frequency of long-term self-reported crime drama viewing (heavy v light viewers) interacted with our crime drama viewing manipulation (CSI v House v no show) on verdict. I originally predicted that light crime drama viewers assigned to the CSI condition would provide the least harsh verdicts compared to light viewers assigned to the other two conditions. To examine this effect a 3 (viewing condition: CSI v House v no show) x 2 (crime drama viewer type: light v heavy) ANCOVA was conducted.

No main effect due to television show viewing condition was found, $F(2,62) = .07$, $p = .93$, ns. This indicates that the type of television show participants were assigned to watch during the experiment had no effect on the verdicts they provided. No main effect due to type of crime drama viewer type was found, $F(1,62) = .78$, $p = .38$, indicating that there was no significant difference between light crime drama viewers and heavy crime drama viewers on verdict. Finally, there was no evidence of an interaction between type of crime drama viewers and the television show they watched during the experiment, $F(2,62) = 1.91$, $p = .16$.

Expectations & Knowledge.

Even though I did not find a treatment effect on verdict, I was still interested in looking at possible effects of television viewing condition on the KLEP, RETE, and Met Expectations scale. Results from a series of ANCOVAs showed that our experimental manipulation, type of television show viewed, had no significant effect on total scores or subscales of the KLEP, RETE, and Met Expectations scales.

Effects between light and heavy crime drama viewers

Verdict.

An ANCOVA was run to examine how light and heavy crime drama viewers differed on the verdicts they provided after watching a criminal trial. The eight standard covariates associated with verdict were used. No significant differences were found between light and heavy viewers on verdicts, $F(1, 66) = .50$, $p = .48$, suggesting that the amount of crime dramas that an individual watches did not affect their judgments of guilt or innocence when providing verdicts for this case.

As an exploratory analysis, another ANCOVA was conducted looking at differences in light and heavy crime drama viewers on verdict, but with additional covariates. In addition to the standard covariates of legal attitudes, exposure to the criminal justice system, need for cognition, realism depicted in three favorite crime dramas, and number of times arrested, I also included amount of television and movies watched per week, other media exposure to the criminal justice system including reading articles in magazines, newspapers, or on the internet as well as playing video games with legal content, previous knowledge of legal procedure, socioeconomic status of family growing up, and sex. After controlling for all these factors, there was a significant difference between light and heavy crime drama viewers on verdicts they provided, $F(1, 59) = 4.72$, $p < .05$, $d = .57$. After controlling for a number of relevant variables, results showed that light crime drama viewers provided significantly more severe verdicts than heavy crime drama viewers ($M = 2.31$ and $M = 1.85$, respectively).

General Expectations for Evidence.

The next series of analyses were conducted to determine the existence of a CSI Effect. Specifically, a series of t-tests were performed to compare expectations between light

and heavy crime drama viewers. In session one, expectations for seven different types of evidence across seven different types of crimes were collected. Because I hypothesized that light and heavy crime drama viewers would differ on scientific expectations, I again conducted t-tests comparing expectations for DNA evidence, fingerprint evidence, scientific evidence, and for evidence in every criminal case. Heavy viewers had significantly higher expectations than light viewers for scientific evidence, $t(128) = 3.22$, $p < .01$, $d = .57$, CI = .11, .48, for fingerprint evidence, $t(128) = 2.08$, $p < .05$, $d = .37$, CI = .01, .36, and DNA evidence approached significance, $t(128) = 1.851$, $p = .066$, ns. Additionally, heavy viewers had significantly greater expectations than light viewers for the item, "expectations for scientific evidence in every criminal case," $t(128) = 2.29$, $p < .05$, $d = .40$, CI = .03, .39. Means and standard deviations for all expectation items are included in Table 19.

I was also interested in looking at how specific viewing of the three CSI franchise shows affected expectations. Again, I conducted t-tests to compare heavy CSI viewers to light CSI viewers. Results showed that heavy CSI series viewers had significantly higher expectations for every criminal case, $t(135) = 2.60$, $p < .05$, $d = .45$, CI = .06, .52, and expectations for scientific evidence was marginally significant, $t(135) = 1.93$, $p = .056$, $d = .33$, CI = .05, .51 (see Table 20 for means and standard deviations). When looking at only heavy and light viewers of the original CSI show (set in Las Vegas), heavy viewers had significantly higher expectations for scientific evidence than light viewers, $t(135) = 2.45$, $p < .05$, $d = .42$, CI = .05, .51.

Retrospective Expectations for Trial Evidence & Met Expectations Scales.

Differences between heavy and light crime drama viewers on RETE scale and Met Expecations scale was also examined. Contrary to the results of session one general

Table 19. *Study 2 Means, Standard Deviations, T-values, and Effect Sizes of General Expectations for Evidence for Light and Heavy Crime Drama Viewers.*

	Light viewers $n = 94$		Heavy viewers $n = 40$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
General expectations total	.29	.32	.38	.27	1.60	.28
Expectation scientific evidence	.16	.55	.46	.48	3.22**	.57
Expectation DNA evidence	-.04	.53	.13	.51	1.85	.33
Expectation fingerprint evidence	.25	.54	.44	.51	2.08*	.37
Expectation ballistic evidence	-.10	.45	-.10	.46	.03	.01
Expectation victim testimony	.66	.42	.59	.45	1.00	.18
Expectation other witness testimony	.45	.57	.42	.53	.37	.07
Expectation circumstantial evidence	.65	.44	.70	.41	.63	.11
Expectation forensic evidence	.07	.39	.23	.35	2.51*	.44
Expectation every criminal case	.18	.50	.39	.54	2.29*	.40

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 20. *Study 2 Means, Standard Deviations, T-values, and Effect Sizes of General Expectations for Evidence for Light and Heavy CSI Series Viewers.*

	Light viewers $n = 111$		Heavy viewers $n = 26$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
General expectations total	.30	.36	.38	.25	1.08	.19
Expectation scientific evidence	.26	.53	.47	.45	1.93[a]	.33
Expectation DNA evidence	-.02	.56	.11	.51	1.09	.19
Expectation fingerprint evidence	.30	.56	.41	.52	.91	.16
Expectation ballistic evidence	-.09	.48	-.07	.47	.20	.03
Expectation victim testimony	.60	.47	.67	.43	.66	.11
Expectation other witness testimony	.42	.59	.45	.48	.22	.04
Expectation circumstantial evidence	.65	.49	.64	.49	-.13	.02
Expectation forensic evidence	.11	.43	.23	.36	1.59	.27
Expectation every criminal case	.21	.52	.50	.50	2.60*	.45

*$p < .05$, **$p < .01$, ***$p < .001$, [a]$p < .06$

expectations, there were no significant differences found between light and heavy crime drama viewers on the RETE and the Met Expectations scale (see Table 21 for descriptive statistics). When the RETE and Met Expectations scales were analyzed using other independent measures of crime drama viewing, including CSI viewing and the CDI, only one significant difference was found. Low scorers on the CDI actually had higher expectations for eyewitness evidence than high scorers, $F(1, 55) = 7.93$, $p < .01$, $d = .71$ (Means and standard deviations for these analyses are provided in Tables 22 & 23, respectively).

Table 21. *Study 2 Means, Standard Deviations, F-values, and Effect Sizes of Retrospective Expectations for Trial Evidence for Light and Heavy Crime Drama Viewers.*

	Light viewers $n = 50$		Heavy viewers $n = 39$			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
RETE total	3.44	.77	3.43	.66	.09	-.03
RETE – physical evidence	3.46	.96	3.57	.80	.08	.03
RETE – DNA evidence	2.95	1.08	2.90	.95	.21	-.05
RETE – Ballistics evidence	3.77	1.14	3.89	.98	.07	.06
RETE – eyewitness evidence	4.05	.69	3.74	.73	3.48	.20
Met Expectations total	2.76	1.15	2.99	1.01	.67	-.09
Met Expectations – Physical evidence	2.13	1.40	2.44	1.37	.78	-.10
Met Expectations – DNA evidence	2.09	1.55	2.56	1.42	2.23	-.16
Met Expectations – Ballistics	3.19	1.67	3.32	1.25	.002	-.00
Met Expectations – Eyewitness	4.69	1.31	4.55	1.10	.43	.07
Burden of Proof	.36	.68	.23	.38	.39	-.07

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 22. *Study 2 Means, Standard Deviations, F-values, and Effect Sizes of Retrospective Expectations for Trial Evidence for Light and Heavy CSI Series Viewers.*

	Light viewers $n = 69$		Heavy viewers $n = 19$			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
RETE total	3.40	.71	3.33	.92	.33	-.06
RETE – physical evidence	3.45	.90	3.46	1.06	.03	.02
RETE – DNA evidence	2.86	.98	2.68	1.24	.65	-.09
RETE – Ballistics evidence	3.90	1.04	3.68	1.26	.68	-.18
RETE – eyewitness evidence	4.00	.62	3.79	.67	1.47	.13
Met Expectations total	2.74	1.16	2.80	1.11	.08	-.03
Met Expectations – Physical evidence	2.13	1.41	2.44	1.52	.14	-.04
Met Expectations – DNA evidence	2.07	1.58	2.00	1.16	.17	.05
Met Expectations – Ballistics	3.18	1.56	3.21	1.42	.21	-.05
Met Expectations – Eyewitness	4.59	1.35	4.32	1.27	1.48	.13
Burden of Proof	.07	.47	.12	.35	.45	.07

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 23. *Study 2 Means, Standard Deviations, F-values, and Effect Sizes of Retrospective Expectations for Trial Evidence for Low and High Scorers on the Crime Drama Inventory.*

	Low scorers $n = 34$		High scorers $n = 37$			Effect size
Measure	Mean	SD	Mean	SD	*F*	*d*
RETE total	3.53	.76	3.23	.62	1.87	-.34
RETE – physical evidence	3.57	.97	3.33	.83	.75	-.22
RETE – DNA evidence	2.99	.91	2.70	.82	.52	-.18
RETE – Ballistics evidence	3.99	1.18	3.85	.87	.42	-.16
RETE – eyewitness evidence	4.14	.61	3.63	.72	7.93**	.71
Met Expectations total	2.64	1.03	3.17	1.16	3.51	-.47
Met Expectations – Physical evidence	1.84	1.10	2.50	1.57	3.46	.47
Met Expectations – DNA evidence	1.96	1.55	2.80	1.82	3.66	-.48
Met Expectations – Ballistics	3.13	1.72	3.69	1.17	2.44	-.39
Met Expectations – Eyewitness	4.90	1.32	4.68	1.02	.47	.17

*$p < .05$, **$p < .01$, ***$p < .001$.

Knowledge of Legal Evidence & Procedure.

It was also hypothesized that heavy crime drama viewers would be significantly more knowledgeable than light viewers about matters of the criminal justice system, demonstrating learning from viewing television. To measure this, a series of t-tests were conducted. Heavy viewers of crime dramas scored significantly higher than light viewers on scientific evidence/forensic knowledge, $t(126) = 4.60$, $p < .001$, $d = .82$, CI = 2.67, 6.71; on knowledge of police procedure, $t(126) = 4.00$, $p < .001$, $d = .71$, CI = .70, 2.09; on knowledge of legal procedure, $t(126) = 2.11$, $p < .05$, $d = .38$, CI = .04, 1.33; and on total knowledge of the criminal justice system, $t(126) = 4.17$, $p < .001$, $d = .74$, CI = 7.19, 20.18. Only knowledge of eyewitnesses identification and testimony resulted in a non-significant difference between heavy and light viewers, $t(126) = 1.76$, $p = .08$, ns (see Table 24).

Table 24. *Study 2 Means, Standard Deviations, T-values, and Effect Sizes of Knowledge of the Criminal Justice System for Light and Heavy Crime Drama Viewers at Time 1.*

	Light viewers $n = 72$		Heavy viewers $n = 56$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
Total knowledge of criminal justice system	51.03	19.02	64.71	17.64	4.17***	.74
Knowledge of scientific and forensic evidence	15.47	5.77	20.16	5.67	4.60***	.82
Knowledge of legal procedure	2.40	1.98	3.09	1.61	2.11*	.38
Knowledge of police procedure	4.44	2.12	5.84	1.73	3.99***	.71
Knowledge of eyewitness testimony	11.56	5.34	13.16	4.85	1.76	.31

*$p < .05$, **$p < .01$, ***$p < .001$.

As expected, knowledge of the criminal justice system in session one translated to knowledge in session three. Heavy viewers scored significantly higher than light viewers on

scientific evidence/forensic knowledge, t(115) = 3.06, p < .01, d = .57, CI = 1.31, 6.13; on knowledge of police procedure, t(115) = 3.09, p < .01, d = .58, CI = .48, 2.21; and on total knowledge of the criminal justice system, t(115) = 3.15, p < .01, d = .59, CI = 2.24, 9.83. Only knowledge of legal procedure did not remain consistent from session one to session three, t(115) = .66, p > .05, ns (see Table 25). A closer examination of mean scores for the knowledge of legal procedure subscale did not change for heavy viewers from session one to session three (M = 3.08 and M = 3.08, respectively). However, knowledge of legal procedure mean scores for light viewers increased from session one to session three (M = 2.40 and M = 2.85, respectively). This was a significant difference, t(65) = 1.96, p = .05.

Table 25. *Study 2 Means, Standard Deviations, T-values, and Effect Sizes of Knowledge of the Criminal Justice System for Light and Heavy Crime Drama Viewers at Time 2.*

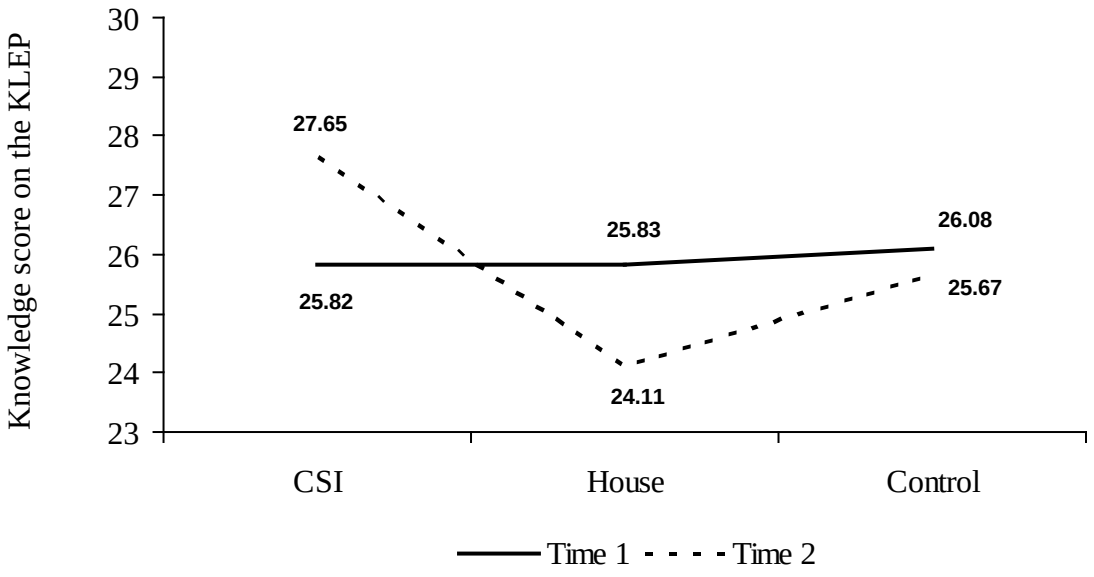
	Light viewers $n = 67$		Heavy viewers $n = 50$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
Total knowledge of criminal justice system	24.16	10.86	30.20	9.35	3.15**	.59
Knowledge of scientific and forensic evidence	15.18	6.62	18.90	6.36	3.06**	.57
Knowledge of legal procedure	2.85	1.96	3.08	1.68	.66	.12
Knowledge of police procedure	4.01	2.42	5.36	2.21	3.09**	.58

*$p < .05$, **$p < .01$, ***$p < .001$.

Because participants' completed the KLEP in session one and session three, I was interested in examining any differences in scores between session one and three. A repeated measures ANCOVA was conducted to test for this main effect, as well as to examine any potential interaction between difference scores and viewing condition. Crime drama viewing was added to the six standard covariates for the analysis so that results could be interpreted

without being unduly influenced by previous crime drama viewing of the participants. Results of the ANCOVA showed no differences in KLEP scores from session one to session three, $F(1, 127) = .00$, $p = .99$, ns. There was also no main effect due to condition, $F(2, 127) = .61$, $p = .54$, ns. However, a significant interaction between change in KLEP scores and viewing condition was found, $F(2, 127) = 4.60$, $p < .05$, partial eta = .07. Participants randomly assigned to view CSI demonstrated a slight increase in KLEP scores (M = 1.83) from session one to three, whereas participants in the House and control condition showed a decrease in scores from session one to session three (M = -1.72 and -.42, respectively; see Figure 3).

Figure 3. (N = 137). Average knowledge score on the KLEP (Knowledge of Legal Evidence and Procedure, 0-68), at Time 1 and Time 2 across the three conditions in Study 2.



Test of KLEP mediating crime drama viewing and scientific expectations.

I performed a series of three-step hierarchical regression analyses to examine if crime drama viewers' expectations for evidence were predicted by crime drama viewing and also to see if their knowledge of the criminal justice system acted as a mediator of this relationship. The first step included our standard set of six covariates for analyses of expectations for evidence. In the second step, participants' viewing of fiction-based crime drama sitcoms was added to the analysis. In the third step, the hypothesized mediator of knowledge of the criminal justice system was included in the analysis. Participants' knowledge of the criminal justice system should explain additional variance in their expectations for evidence as well as lead to a decrease in the coefficient associated with crime drama viewing. Results suggestive of mediation were subsequently examined through a follow-up analysis (Preacher & Hayes, 2008) that explicitly tested the significance of a specific indirect effect of crime drama viewing on expectations for evidence through the mediator, knowledge of the criminal justice system.

Regression analysis Step 1: Covariates. In the first step of the regression analysis, I accounted for covariates of expectations for evidence by entering six covariates normally used for analyses of expectations (i.e., probability of commission subscale, reasonable doubt subscale, beliefs in the legal system subscale, cynical attitudes toward the legal system subscale, exposure to the criminal justice system, and number of times arrested). The covariates collectively explained 2.3% of the variance in expectations for scientific evidence. None of the covariates had a significant relation with participants' expectations for scientific evidence.

Regression analysis Step 2: Crime drama viewing. Next, I tested for a media effect by adding participants' fictional-based crime drama viewing to the variables included in Step 1. The presence of a media effect was supported. Participants' crime drama viewing significantly predicted the outcome of their expectations of scientific evidence, $\beta = .23$, $p < .01$. Participants' crime drama viewing also significantly predicted the proposed mediating variable, scientific and forensic knowledge of the criminal justice system, $\beta = .31$, $p < .001$.

Regression analysis Step 3: Mediation. To provide a preliminary examination of mediation, scientific and forensic knowledge of the criminal justice system were added to the analysis. Results showed that participants' scientific and forensic knowledge of the criminal justice system was significantly related to their scientific expectations ($\beta = .23$, $p < .01$). Furthermore, the addition of participants' scientific and forensic knowledge of the criminal justice system resulted in a reduction in the regression coefficient corresponding to crime drama viewing, from $\beta = .20$, $p < .05$, to $\beta = .14$, ns.

Results of the hierarchical regression analysis were consistent with the idea that knowledge of the criminal justice system completely mediated the effects of participants' crime drama viewing on their expectations for scientific evidence. However, it is not known whether participants' scientific and forensic knowledge accounted for a statistically significant portion of the crime drama viewing effect. Results of the explicit test of mediation demonstrated that the indirect effect of crime drama viewing on the outcome of expectations for scientific evidence through participants' scientific and forensic knowledge of the criminal justice system was significant, $\beta = .05$, $p < .05$. Regression coefficients for mediation tests can be found in Table 26.

Table 26. *Relationship of the Background Predictors, Crime Drama Viewing, and Knowledge of the Criminal Justice System on the Outcome of Expectations for Scientific Evidence*

Variables	*β*
Step 1: Background Predictors	
Probability of Commission (JBS)	-.003
Reasonable Doubt (JBS)	-.09
Cynical beliefs that the legal system is too lenient	-.04
Beliefs that the legal system works	.10
Exposure to the criminal justice system	.04
Number of times arrested	-.09
Step 2: Television viewing	
Crime drama viewing	.20*
Step 3: Mediation	
Knowledge of the criminal justice system	.19*

Note. (N = 156). Values are the effect of each variable on the outcome of expectations for scientific evidence. Probability of Commission and Reasonable Doubt are subscales from Juror Bias Scale. Probability of Commission refers to likelihood that a defendant committed crime in question. Reasonable Doubt refers to degree of pro-defense or pro-prosecution bias. Cynical beliefs in the legal system measures cynical, pessimistic attitudes about the legal system. Beliefs that the legal system works refers to faith one places in ability of legal system. Both the Cynical beliefs that the legal system is too lenient and the Beliefs that the legal system works are subscales from the General Attitudes toward the Legal System scale. The indirect effect of crime drama viewing on expectations for scientific evidence through knowledge of the criminal justice system was .05 in terms of a standardized coefficient, $p < .05$.

* $p \leq .05$.

Retrospective Expectations for Trial Evidence Predicting Met Expectations

A series of hierarchical regression analyses were conducted to determine the ability to predict Expectations Met from Retrospective Expectations for Trial Evidence. Regressions were conducted for the total scale scores as well as the comparable subscales, including for physical evidence, DNA evidence, and testimony evidence. For each of the regression analyses, the six standard covariates for expectations were entered into step one. In step two the relevant retrospective expectations (sub) scale was entered. Retrospective expectations for DNA evidence was not a significant predictor of how well DNA expectations were met.

This was also the case for total retrospective expectations' ability to predict total expectations met. However, retrospective expectations for eyewitness testimony and circumstantial evidence were significantly related to how well expectations were met for this subscale. In step one, covariates accounted for 2.6% of the variance in met expectations, though none of the individual covariates significantly predicted met expectations. Results for step two showed that retrospective expectations for eyewitness testimony and circumstantial evidence significantly predicted expectations met, $\Delta R^2 = .069$, $\beta = .21$, $p < .05$.

Additionally, retrospective expectations for physical evidence were significantly related to met expectations for the presentation of physical evidence at trial. In this analysis, covariates collectively explained 3.1% of the variance in Expectations Met, though none of the covariates had significant individual relationships with Expectations Met for physical evidence. In step two, retrospective expectations for physical evidence subscale was entered. Results showed that retrospective expectations for physical evidence was significantly related to how well expectations were met for the presentation of physical evidence at trial, $\Delta R^2 = .035$, $\beta = -.19$, $p < .05$. See Table 27 for regression coefficients for these analyses.

Burden of Proof.

The BOP measured the likelihood participants would select guilty or not guilty after being provided with a description of a charge brought against a hypothetical defendant and the type of evidence to be presented by a prosecuting attorney. ANCOVAs were conducted to examine the effect of crime drama viewing on BOP total scores, as well as the individual 13 items of the BOP. Because BOP should be theoretically related to verdict, the eight standard covariates used for verdict analyses were also use for each of the current ANCOVAs. However, no significant differences were found between light and heavy crime

Table 27. *Study 2: Retrospective Expectations for Trial Evidence Predicting Met Expectations.*

Correlate Set	Total Expectations Met				Physical Expectations Met				Eyewitness Expectations Met			
	B	SE B	ß	R^2	B	SE B	ß	R^2	B	SE B	ß	R^2
Covariates				.030				.031				.026
RETE Total Expectations	-.21	.13	-.14	.049								
Physical Exp					-.27	.12	-.19*	.066				
Eyewitness Exp									.39	.16	.21*	.069
DNA Exp												
Ballistics Exp												

*$p < .05$, **$p < .01$, ***$p < .001$.

Table 27. (continued)

Correlate Set	DNA Expectations Met				Ballistics Expectations Met			
	B	SE B	ß	R^2	B	SE B	ß	R^2
Covariates				.017				.074
RETE Total Expectations								
DNA Exp	-.01	.14	-.01	.017				
Ballistics Exp					.04	.12	.03	.075

*p < .05, **p < .01, ***p <.001.

drama viewers. I also conducted ANCOVAs in which light and heavy CDI scores (which measures attention and engrossment to crime dramas, not just viewing) were used as the IV. I only found a significant effect between high and low CDI scorers on one item, "Any criminal case with testimony of the victim and no scientific evidence", F(1, 70) = 5.42, p < .05, d = .56. Paired comparisons showed that high CDI scorers were more likely to find a defendant not guilty on this item than low CDI scorers (M= .77 and M = .29, respectively). This suggests that participants who not only watch, but also pay close attention to crime dramas are more likely to find a defendant not guilty, than their low CDI counterparts, in a criminal case with victim testimony but no scientific evidence.

Two additional items on the BOP did approach significance. High CDI scorers were more likely than low CDI scorers (M = .64 and M = .24, respectively) to find a defendant not guilty when the prosecutor charges the defendant with murder or attempted murder, and presents the testimony of an eyewitness and other witnesses but does not present any scientific evidence, F(1, 70) = 3.17, p = .08. Additionally, high CDI scorers were more likely than low CDI scorers (M = .50 and M = .25) to find a defendant not guilty across all items 13 items of the BOP, F(1, 70) = 3.10, p = .08. Collectively, these results suggest that not only viewing television, but also paying close attention to the content being portrayed is an

important factor when determining guilt or innocence, or at least the intent to judge a defendant guilty or innocent.

I anticipated a relation between expectations and verdict, but none was found, except for total expectations met. As BOP is not an actual behavior, but more intent to behave, it may be more likely to be related to expectations for evidence than verdict. To examine this possibility, a series of hierarchical regression analyses were conducted the relationship between expectations and burden of proof was examined by conducting hierarchical regression analyses. Independent hierarchical regressions were conducted for each of the following scales, Expectations from session one, the RETE, and Met Expectations. Initially, the total scores for each scale were examined as predictors of the BOP, followed by independent regression analyses examining the relationship between each of the expectation scales' scientific evidence subscales and the BOP.

For each of the analyses, the same eight covariates used when verdict served as an outcome variable were used for the BOP. After controlling for the covariates, both the RETE and the Met Expectations scales were significant predictors of the BOP. Specifically, covariates accounted for 4.5% of the variance on the BOP. None of the covariates were significant predictors of the BOP. RETE was a significant predictor of the BOP above and beyond the covariates, $\Delta R^2 = .041$, $\beta = .21$, $p < .05$, such that participants' with higher retrospective expectations for trial evidence were less likely to render a defendant guilty on the BOP. The Met Expectations scale was also significantly related to the BOP after controlling for covariates, $\Delta R^2 = .038$, $\beta = -.20$, $p < .05$, suggesting that the greater participants' expectations were met by the murder trial they viewed, the more likely they were to provide a verdict of guilty on the BOP.

For the scientific evidence subscales, neither general scientific expectations (session one) nor met expectations for scientific evidence were significantly related to the BOP, but retrospective expectations for scientific evidence was significantly related to the BOP after controlling for covariates. Covariates accounted for 4.8% of the variance on the BOP, though none of the covariates were significant predictors of the BOP. The scientific evidence subscale of the RETE was a significant predictor of the BOP, $\Delta R^2 = .038$, $\beta = .20$, $p < .05$, indicating that individuals with higher retrospective expectations for scientific evidence were significantly less likely to find a defendant guilty on the BOP.

Crime Drama Inventory

Finally, I was interested in looking at differences between low and high scorers on the CDI. Although the full CDI measure is composed of 156 specific questions regarding popular crime dramas, participants had the option to respond to only questions about the crime dramas to which they were familiar. On average, heavy crime drama viewers responded to more questions on the CDI than light viewers (M = 74.67 and M = 39.86, respectively), $t(128) = 5.30$, $p < .001$, $d = .94$. Of the questions that each group responded to, heavy viewers answered significantly more questions on the CDI correct than light viewers (M = 28.93% and M = 12.97%, respectively), $t(116) = 5.93$, $p < .001$, $d = 1.10$.

Results of t-tests showed significantly higher expectations for high scorers than low scorers on expectations for scientific evidence, $t(109) = 3.33$, $p = .001$, $d = .64$, CI = .13, .53 (see Table 28 for means and standard deviations). Earlier, results showed that both crime drama genre viewing and viewing the CSI franchise of shows led to higher expectations for scientific evidence, providing evidence that watching crime dramas affects expectations for scientific. Results from the current analysis showing differences between high and low

Table 28. *Study 2 Means, Standard Deviations, T-values, and Effect Sizes of General Expectations for Evidence for Low and High Scorers on the Crime Drama Inventory.*

	Low scorers $n = 55$		High scorers $n = 56$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
General expectations total	.35	.33	.32	.32	-.43	.08
Expectation scientific evidence	.16	.54	.49	.50	3.33**	.64
Expectation DNA evidence	.00	.52	.07	.55	.73	.14
Expectation fingerprint evidence	.37	.54	.38	.49	.04	.01
Expectation ballistic evidence	-.04	.50	-.11	.51	-.74	.14
Expectation victim testimony	.72	.34	.49	.46	-2.99**	.57
Expectation other witness testimony	.55	.53	.26	.57	-2.84**	.54
Expectation circumstantial evidence	.66	.42	.67	.54	.04	.01
Expectation for every criminal case	.21	.51	.24	.54	.37	.07
Expectation forensic evidence index	.12	.43	.21	.39	1.09	.21

*$p < .05$, **$p < .01$, ***$p < .001$.

scorers on the CDI demonstrate that beyond just watching crime dramas, the attention and level one is engrossed in crime dramas leads to the largest differences in expectations, beyond the differences found for crime drama viewing in general, and CSI viewing, specifically.

To examine the effects of high and low engrossed crime drama viewers on knowledge of the criminal justice system, a series of t-tests were conducted. Highly engrossed crime drama viewers were significantly more knowledgeable than low engrossed viewers on knowledge of legal procedure, $t(107) = 3.51$, $p < .01$, $d = .68$, CI = .50, 1.81 on knowledge of eyewitness evidence, $t(107) = 2.47$, $p < .05$, $d = .48$, CI = .45, 4.13, on knowledge of scientific evidence, $t(107) = 4.47$, $p < .001$, $d = .86$, CI = 2.50, 6.48 and on total knowledge

of the criminal justice system, t(107) = 4.70, p < .001, d = .90, CI = 8.59, 21.15 (see Table 29). Results from these analyses show that the more engrossed and attentive one is to the crime dramas they view, the more knowledge of the criminal justice system they possess.

Table 29. *Study 2 Means, Standard Deviations, T-values, and Effect Sizes of Knowledge of the Criminal Justice System for Low and High Scorers on the Crime Drama Inventory.*

	Low Scorers $n = 54$		High Scorers $n = 55$		Mean difference	Effect size
Measure	Mean	SD	Mean	SD	*t*	*d*
Total knowledge of criminal justice system	49.15	18.19	64.01	14.72	4.70***	.91
Knowledge of scientific and forensic evidence	15.17	5.45	19.65	5.03	4.47***	.86
Knowledge of legal procedure	2.26	1.88	3.42	1.56	3.51**	.68
Knowledge of police procedure	4.70	2.45	5.35	1.62	1.62	.31
Knowledge of eyewitness testimony	10.89	4.80	13.18	4.88	2.47*	.48

*$p < .05$, **$p < .01$, ***$p < .001$.

Test of Traditional Cultivation Hypothesis v. Program Type Dominance as best predictor of Cultivation Effects

To test our hypothesis that program type dominance would serve as a better predictor of scientific expectations than cultivation hypothesis I conducted a hierarchical regression. The first step included our standard covariates used when expectations for scientific evidence serves as the outcome variable. In the second step, I tested the ability of the cultivation hypothesis to predict scientific expectations by adding amount of television viewed per week to the analysis. In the third step, I included amount of crime drama viewing to the analysis in order to determine how well program type dominance could predict scientific expectations. Finally, as an exploratory fourth step, I included amount of CSI viewing to the analysis. The

CSI Effect, as the name suggests, began due to the influence watching CSI had on expectations for evidence, so I wanted to assess the ability of CSI viewing to predict expectations for scientific evidence.

Regression analysis Step 1: Covariates. All covariates for the regression analysis were included in this step. The covariates collectively accounted for 2.7% of the variance in expectations for scientific evidence, and none of them uniquely predicted expectations.

Regression analysis Step 2: Amount of television viewing per week. To test the cultivation hypothesis, television viewing per week was added to the analysis. Television viewing per week only measured the amount of television consumed, not specific content. Therefore, if the original cultivation hypothesis is correct, it should not matter what people watch, only how much they watch, and that viewing amount should predict a second-order effect such as expectations for scientific evidence. However, the original cultivation hypothesis was not supported. Participants' amount of television viewing did not predict their expectations for scientific evidence, β = -.03, p = .71.

Regression analysis Step 3: Crime drama genre viewing. In the third step, I tested the program type dominance model. Contrary to the original general cultivation hypothesis, program type dominance states that how much of what people watch is the most important factor in accounting for first- and second-order effects. So what is most important here is the amount of a certain type of content or genre. The analysis provided support for a program type dominance cultivation effect. More specifically, expectations for scientific evidence were significantly predicted by crime drama viewing, β = .25, p = < .01.

Regression analysis Step 4: CSI viewing. Finally, CSI viewing was entered into the analysis to see how an individual crime drama could predict expectations for scientific

evidence. According to the results, CSI viewing did not significantly predict expectations, β = .07, p = .55 (see Table 30 for regression coefficients). However, there was a potential problem of collinearity between CSI viewing and crime drama viewing, r(158) = .65, p < .001. Additionally, the tolerance associated with CSI viewing was .55 and the VIF was 1.83, suggesting the possibility of collinearity. To better examine the potential for CSI viewing to predict expectations for scientific evidence, I conducted a second hierarchical regression in which steps three and four were interchanged and included as steps 5 and 6.

Regression analysis Step 5: CSI viewing. When CSI viewing was entered following amount of television, and prior to crime drama genre viewing, it significantly predicted expectations for scientific evidence, β = .19, p = < .05, providing further evidence for program type dominance.

Regression analysis Step 6: Crime drama genre viewing. I then added crime drama viewing into the analysis. Even with collinearity present with CSI viewing, crime drama viewing approached significance, β = .21, p = .06 (see Table 31 for regression coefficients). The results from the hierarchical regressions indicate that overall crime drama viewing (β = .25) is the best predictor, followed by CSI viewing (β = .19), while amount of television viewing (β = -.03) did not predict expectations for scientific evidence.

Table 30. *Study 2: Ability of Amount of Television Viewing, General Crime Drama Viewing, and CSI Viewing to Predict General Expectations for Scientific Evidence.*

Correlate Set	Expectations for Scientific Evidence			
	B	SE B	ß	R^2
Covariates				.027
Television viewing per week	-.001	.003	-.03	.028
Crime drama viewing	.09	.03	.25**	.082
CSI viewing	.02	.04	.07	.084

*p < .05, **p < .01, ***p <.001.

Table 31. *Study 2: Ability of Amount of Television Viewing, CSI Viewing, and General Crime Drama Viewing to Predict General Expectations for Scientific Evidence.*

Correlate Set	Expectations for Scientific Evidence			
	B	SE B	ß	R^2
Covariates				.027
Television viewing per week	-.001	.003	-.03	.028
CSI viewing	.07	.03	.19*	.061
Crime drama viewing	.07	.04	.21	.084

*p < .05, **p < .01, ***p <.001.

CHAPTER 7. EXPERIMENTAL STUDY SUMMARY AND DISCUSSION

Study 2 was designed as a conceptual replication and extension of Study 1. Similar to Study 1, Study 2 was designed to test for the existence of the CSI effect (replication). Unlike Study 1, Study 2 employed an experimental methodology to not only test for differences in expectations between long-term heavy and light crime drama viewers, but also test for differences in scientific expectations between groups that had been randomly assigned to watch a crime drama, a medical drama, or no show at all. However, no differences in scientific expectations were found between the three conditions, illustrating that our experimental manipulation was unsuccessful in creating a CSI effect. Furthermore, no differences in verdict were found between the three conditions. Although I was unable to create a change in expectations for scientific evidence via short-term crime drama viewing, it was still important to attempt to replicate the main finding from Study 1 showing that long-term, frequent crime drama viewing led to increased expectations for scientific evidence.

As hypothesized, heavy crime drama viewers had significantly higher expectations for scientific evidence than did light crime drama viewers. This finding not only replicates the findings from Study 1, but also provides further support for the existence of a CSI effect. Heavy crime drama viewers also had significantly greater expectations for DNA evidence and fingerprint evidence than did light crime drama viewers. Across all types of scientific evidence examined with the exception of ballistic evidence specifically, heavy crime drama viewers had greater expectations for evidence than light viewers.

To study the possibility of a literal “CSI effect,” differences in expectations between heavy and light CSI viewers were also assessed. Heavy viewers of the CSI franchise of shows had significantly greater expectations for scientific evidence than did light CSI

viewers. It was somewhat unexpected to find this difference based on viewing at the show level specifically, though CSI viewing was highly correlated with general crime drama viewing ($r = .65$), indicating that heavy CSI viewers were also heavy viewers of other crime dramas.

Besides differences in expectations, it was believed that heavy and light crime drama viewers would also differ in their knowledge of the criminal justice system. Results showed that heavy crime drama viewers were significantly more knowledgeable than light crime drama viewers regarding scientific and forensic information, police procedure, legal procedure, and total knowledge of the criminal justice system, thus supporting our hypothesis and replicating the results from Study 1. Moreover, a significant interaction between change in KLEP scores from session one to session three and viewing condition (controlling for previous crime drama viewing) was also found. Specifically, participants in the CSI condition increased in knowledge of the criminal justice system from session one to session three while those in the other two conditions showed a slight decrease in knowledge. Although no differences in expectations were found between conditions, this result shows that viewing condition did have an effect on knowledge of the criminal justice system.

Collectively, these results showed that crime drama viewing affected both expectations for scientific evidence and knowledge of scientific evidence. Because a short-term effect due to CSI viewing was found on differences in KLEP scores from session one to session three, but not for expectations, it is possible that the effects of crime drama viewing might first operate through a change in knowledge, which in turn, would affect the relation between crime drama viewing and expectations. Results from mediation analyses showed that scientific and forensic knowledge completely mediated the relation between crime drama

viewing and expectations for scientific evidence. More parsimoniously, crime drama viewing only influences expectations for scientific evidence due to scientific and forensic knowledge of the criminal justice system that one possesses.

Finally, the hypothesis that program type dominance was a better predictor of cultivation effects than traditional cultivation hypothesis was tested. The results supported the hypothesis and replicated the results from Study 1. Similar to results of Study 1, crime drama genre viewing in general, and CSI viewing specifically, were significant predictors of cultivation effects (increased expectations for scientific evidence), whereas amount of television viewing was not a significant predictor. Unlike Study 1, crime drama genre viewing was actually the best predictor of expectations, not CSI viewing. However, in both Study 1 and Study 2 these two variables were highly correlated ($r = .71$ and $r = .65$, respectively), with both demonstrating support for program type dominance over traditional cultivation hypothesis as the best predictor of cultivation effects.

CHAPTER 8. GENERAL DISCUSSION

Previous research on the CSI effect has yielded inconsistent results, though the most well-known of these studies have not found evidence for the existence of the CSI Effect (Schweitzer & Saks, 2007; Shelton et al., 2006). However, most of these studies have also utilized questionable methods for determining heavy and light crime drama viewers to compare outcomes such as expectations for scientific evidence, demand for scientific evidence, and even verdicts. Across both studies I attempted to improve the methodology used to identify heavy and light crime drama viewers. In Study 1, differences in scientific expectations and knowledge were examined between heavy and light crime drama viewers using a correlational study design (similar to previous studies on the CSI effect). Study 2 allowed for a replication of the results from Study 1, and is the first study to investigate the CSI effect using an experimental design.

Three hypotheses were shared in both studies: 1) heavy crime drama viewers would expect more scientific evidence than light crime drama viewers, 2) heavy crime drama viewers would possess more knowledge of the criminal justice system than light crime drama viewers, and 3) program type dominance (i.e., crime drama genre viewing) would be a superior predictor of cultivation effects (i.e., expectations for evidence) than traditional cultivation theory (i.e., amount of total television viewed).

Results from both Study 1 and Study 2 showed that heavy crime drama viewers expected more scientific and forensic evidence than light crime drama viewers, providing converging evidence of a CSI effect. Additionally, heavy crime drama viewers were more knowledgeable about the criminal justice system as a whole, as well as across many areas within the criminal justice system, including scientific and forensic information, police

procedure, and legal procedure. Finally, crime drama genre viewing was a better predictor of expectations for scientific evidence than total television viewing. This result provides support for program type dominance, not traditional cultivation theory, in accounting for traditional cultivation effects, represented in these studies by expectations for evidence.

However, interpretation of this cultivation effect is limited by the fact that total television viewing variance was not the same between groups. Participants for these studies were selected and analyzed based on their crime drama viewing habits, with specific interest in light and heavy viewers. Analyses were weighted with light and heavy crime drama viewers, potentially maximizing cultivation effects due to crime drama genre viewing, whereas this was not the case for total television viewing. It is possible that heavy crime drama viewers are also heavy television viewers in general, so the variance in television viewing may be systematically different between the groups, making comparing them on overall television viewing not be entirely fair as they were selected to be different.

Evidence for a CSI Effect

Both studies found evidence of a CSI effect, such that heavy crime drama viewers had significantly higher expectations for scientific evidence than light crime drama viewers. This differs from much of the past research that has not found results supporting the presence of a CSI effect (Schweitzer & Saks, 2007; Shelton et al., 2006). Although all of this research has been correlational, including Study 1 of the present research, there are some major differences in how each study assessed heavy and light crime drama viewers. Because the CSI effect is technically considered a first-order cultivation effect (see Hawkins & Pingree, 1990), the standard method for studying such an effect is by calculating heavy and light viewers from total viewers and then comparing them. Therefore, one of the most important

factors to consider when studying the CSI effect is how heavy and light crime drama viewers are defined. Unfortunately, previous studies investigating the CSI effect have used methods that have made it difficult to accurately discern heavy from light crime drama viewers, even though they were classified as such. For instance, Schweitzer and Saks (2007) compared non-viewers (anyone who 'never watched CSI') and CSI viewers (anyone who watched 'one or more shows per month'), but this is not a true comparison of light and heavy viewers necessary to study cultivation effects. By their classification, it is possible that CSI viewers were made up of people who only watched one show per month on the low end and twenty or more shows per month on the high end. The potential differences in knowledge and expectations between those on the low end and those on the high end could be great. Including them in the same group for analysis could nullify the effects of true heavy and light viewers.

Shelton et al. (2006) suffered from a similar issue of comparing non-viewers to viewers of CSI. In this study, the authors likely captured both light and heavy viewers, but they probably did so for both of the groups being compared, non-viewers and viewers. Shelton et al. categorized CSI viewers as those who watch CSI 'on occasion, often, or regularly' and non-viewers as those who 'never or almost never watch the program.' By using such subjective terms as 'on occasion' and almost never' to define viewership, the chances of having people who watch exactly the same amount of CSI end up in different groups for analysis is high. Across both of these studies several issues stand out: 1) inexact, subjective methods of identifying viewers and non-viewers; 2) violation of standard paradigm for studying first-order cultivation effects that specifies comparing heavy and light

viewers, not merely viewers to non-viewers (Hawkins & Pingree, 1990); and 3) only looking at CSI viewing and not more general crime drama viewing.

The present research used a more precise and exact tool to define light and heavy crime drama viewers. Crime drama viewers were classified as light and heavy based on their self-reported responses to a crime drama viewing questionnaire (see Appendix A) in which an index of crime drama viewing was created based on mean scores to frequency of viewing different crime drama sub-genres (i.e., forensic crime dramas, general fiction crime dramas) using a Likert-type scale ranging from 1 (I never watch this show) to 8 (I watch this show every day). More specifically, participants were characterized as heavy viewers if they responded with a 6 (I watch this show at least 2-3 times a week) or higher on one of the subgenres included in the index. Participants were characterized as light viewers if they averaged less than 3 (I watch this show about once a month) on all of the subgenres included in the index. By utilizing a strict method of assessing light and heavy viewers it was assured that all light crime drama viewers were watching only about one crime drama a month, whereas heavy crime drama viewers were watching at least eight crime dramas a month at minimum.

Contrary to previous study methodologies, the current method of defining light and heavy viewers permits an accurate estimate of the number of crime dramas each group views per month to be made than. This is superior to relying only on abstract terms such as “on occasion” and “almost never” to differentiate between light and heavy viewers. In fact, across the present two studies, light crime drama viewers averaged 1.99 on the crime drama viewing index, and our heavy viewers averaged 5.91. Although this method of classifying light and heavy viewers is stricter than previous studies, and may result in a slightly smaller

sample for analyses, it provides clear differentiation between light and heavy viewers which yields the ability to maximize the potential of finding differences between the groups. In fact, two of the most robust differences found across the two studies were that heavy crime drama viewers had more knowledge of the criminal justice system and greater expectations for scientific evidence than light viewers. Therefore, the relation between crime drama viewing, knowledge of the criminal justice system, and scientific expectations deserve further examination.

Knowledge as a mediator of crime drama viewing and expectations

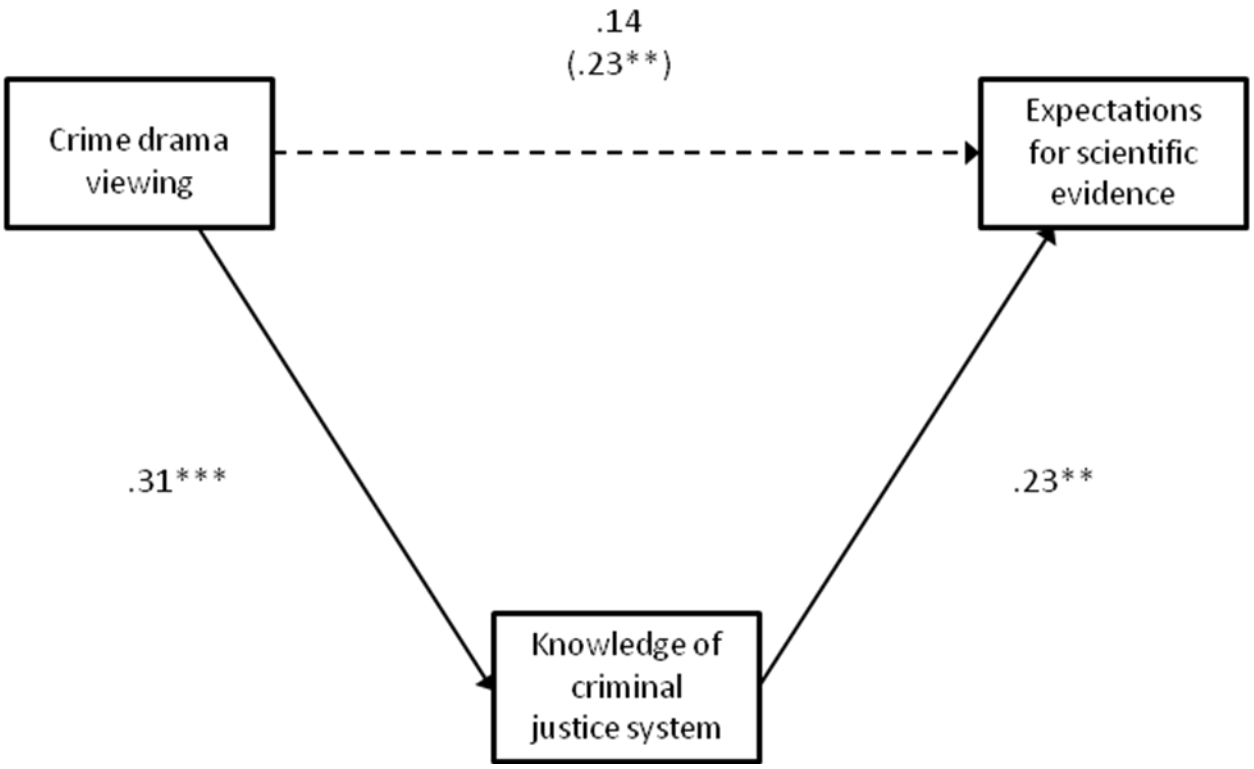
Mediation tests were conducted to examine the relations between the three variables. It was expected that knowledge might act as a mediator between the effects of crime drama viewing on expectations. According to the General Learning Model, as well as traditional Cultivation theory, expectations develop (or are cultivated) over a long period of time and through a series of short-term learning "processes" that over time, accumulate and create expectancies (Gentile et al., 2009; Gerbner, 1969; Swing, Gentile, & Anderson, 2008). Results from the current studies suggest that one potential reason for the development of scientific expectations is through knowledge acquired on that subject. Because results demonstrated that crime drama viewing increases knowledge of the criminal justice system, including scientific and forensic evidence, it is possible that over time, continually viewing crime dramas would lead to the development of expectations for the prosecution to present scientific evidence during a trial.

Mediation tests supported this hypothesis. Knowledge of the criminal justice system acted as a complete mediator between crime drama viewing and expectations for scientific evidence (see Figure 4). This suggests that the primary reason that crime drama viewing

affects expectations for scientific evidence is because of the knowledge of the criminal justice system one possesses. If not for knowledge of the criminal justice system, there would

Figure 4. Standardized regression coefficients for the relationship between crime drama viewing and expectations for scientific evidence as mediated by knowledge in the criminal justice system. The standardized regression coefficient for the direct effect between crime drama viewing and expectations for scientific evidence is in parentheses.

$^{**}p < .01$, $^{***}p < .001$



not be a relation between crime drama viewing and expectations. Although this is an important finding, and one that begins to provide a deeper understanding of the composition of the CSI effect, it is merely a first step. Further study is needed to identify other possible constructs that could be involved in the CSI effect, beyond the three mentioned here. Moreover, it is still unclear the amount and frequency of crime drama viewing required to create increase knowledge of the criminal justice system, thereby increasing expectations for scientific evidence, leading to the presence of a CSI effect.

Cultivating a CSI Effect

One of the main goals of study 2 was to attempt to create a CSI effect. Specifically, it was hypothesized that light crime drama viewers who were randomly assigned to view episodes of CSI would develop greater expectations for scientific evidence than other light crime drama viewers who were either randomly assigned to view episodes of the television show House, or who did not view any show. Unfortunately, this hypothesis was not supported. There were no significant differences in expectations due to television show viewing condition.

Although I was unable to cultivate a CSI effect among light crime drama viewers, there was evidence that the randomization did have some effect on participants' knowledge of the criminal justice system. Specifically, light crime drama viewers who viewed four episodes of CSI showed an increase in knowledge of the criminal justice system scores from session one to session three, but their light crime drama viewing counterparts who viewed four episodes of House or did not view a show actually showed a decrease in knowledge scores from session one to session three (see Figure 3). Based on our mediation model, it would be expected that crime drama viewing would first affect knowledge before affecting

expectations. In this case, knowledge scores for light viewers who viewed CSI increased an average of 1.83 from session one to session three. So, even though there was an increase in KLEP scores, showing some effect due to viewing CSI, the increase from session one to session three was small. Therefore, it is possible that the ability to create a CSI effect was hindered by the amount of CSI episodes viewed during the experiment (i.e., a dosage effect). Participants only watched four episodes of CSI during the experiment and that simply may not have been enough to create the requisite increase in knowledge and subsequent increase in expectations to foster a CSI effect.

Nonetheless, across both studies heavy crime drama viewers did show evidence of a CSI effect. What is still unknown is how many episodes of various crime dramas heavy viewers had to watch before showing increased expectations for scientific evidence. According to the General Learning Model, it probably should not have been expected to see an increase in expectations over only four exposures to crime dramas. Because expectations are acquired through a long-term learning process that requires multiple learning exposures, it should be little surprise that light crime drama viewers did not show any evidence of a CSI effect after viewing only four episodes of CSI (Gentile et al., 2009).

Other results from these studies support the idea of a dosage effect explanation. For instance, there were also no differences found due to television show viewing condition on other outcome measures including on General Expectations for Evidence, the RETE, and the Met Expectations Questionnaire. It is not until light and heavy crime drama viewers are compared that differences on these scales were found, showing that differences are much more likely over the long-term, not over four exposures to crime drama content. However, the one measure that seems to be inconsistently affected by long-term exposure is verdict.

Effects of crime drama viewing on Verdict

Although no hypotheses were made regarding verdict, it would make sense to speculate that 1) because heavy crime drama viewers have higher expectations for scientific evidence than light viewers, then 2) those expectations would be more difficult to satisfy, thus 3) leading heavy viewers to provide softer verdicts than light viewers. However, across the two studies, this notion was not supported. In fact, there were no significant differences found between heavy and light viewers on verdicts provided, except for in study 2 when an exploratory analysis included a thorough battery of 12 covariates, instead of the standard six covariates. When all 12 covariates were included in the ANCOVA, heavy viewers provided significant lighter verdicts than light viewers. This finding suggests that just watching crime dramas, over an extended period of time, can cause people to provide lighter verdicts than if they do not watch crime dramas, after controlling for a number of demographic and individual difference variables (i.e., sex, legal attitudes, need for cognition).

In a courtroom, the same demographic and individual difference variables cannot be controlled for, so this finding may have limited external validity. A juror in a trial cannot control for the effects of factors outside of crime drama viewing. It is not that one variable or factor works in isolation from the rest in this, and other real world situations. All of these variables interact, and they interact differently among different people, and that is one potential explanation for the inconsistent results found regarding verdict across the two studies. In fact, results from past research have shown inconsistent ability to predict verdicts (Hans, 1992; Penrod, 1990). For instance, when allowing demographic variables, attitudes, knowledge, and expectations, to covary, the effects of crime drama viewing may fail in comparison to the effects of these other variables. It could be simply the fact that crime

drama viewing is not the key variable, but only one of a number of factors that influence one's decision making.

Another possible explanation is due to the characteristics of the murder trial used in this research. The murder trial of Colorado v. Sandoval was a self-defense case, not a whodunit case. Nearly every murder case that appears on crime dramas is of a whodunit nature, especially those on CSI. Therefore, it is possible that having participants view a trial that did not correspond to the types of cases they have viewed on television affected the verdict they provided in this case. Colorado v. Sandoval was not a case of 'Is the right person on trial for the crime', but a case of 'Is Sandoval justified in his act of stabbing and killing the victim?' Consequently, the question of whether or not he committed the act itself was never an issue in this case, which it is in almost all televised murders. Although still considered a murder trial, the same mental scripts may not have been activated in a self-defense case such as this compared to whodunit case.

Finally, a floor effect for verdict may have occurred because of the nature of the trial. Because this was a self-defense case, it may have been very difficult for individuals to find the defendant not guilty after admitting to stabbing the victim. On the other end, because there was such little physical evidence presented and most of the prosecution's case hinged on eyewitness testimony, even light viewers who were less susceptible to the CSI effect, may have realized the dearth of evidence, and so they settled on a medium verdict of manslaughter. In fact, 45% of the total sample selected manslaughter. Furthermore, almost half of all light viewers and half of all heavy viewers selected manslaughter as a verdict. It is possible that a trial such as Sandoval v. Colorado did not provide much latitude for the influence of the CSI effect on verdicts and was therefore an insensitive measure.

Another possible interpretation is that participants were simply correct in their judgments of manslaughter. Manslaughter is characterized as an act of killing that does not include premeditation or malice aforethought. The killing, whether voluntary or not, is an impulsive act that generally occurs in the heat of the moment. In the Sandoval trial, it was revealed that the defendant Robert Sandoval felt "boxed" in by individuals at the party, including one person who was holding a log and brandishing it toward him. Sandoval claimed that he feared for his own safety and feeling trapped in the house, he picked up a knife and stabbed the victim so that he could escape. This testimony, provided by Sandoval during the trial, probably describes an act of manslaughter more so than it does an act of self-defense, second degree murder, or first degree murder. Therefore, perhaps participants who viewed the trial in these two studies followed the letter of the law, outside of influences due to crime drama viewing and other factors, and convicted Sandoval of manslaughter because it was the appropriate verdict.

Differences between Study 1 and Study 2

As mentioned previously, study 2 successfully replicated the findings from study 1 that heavy crime drama viewers possessed more knowledge of the criminal justice system and held greater expectations for scientific evidence than light crime drama viewers. Additionally, both studies provided evidence in support of the theory of program type dominance as the best predictor of traditional cultivation effects. However, there were some differences found between the two studies that deserve some discussion.

Although factor analysis of the two scales created for the present studies, the Retrospective Expectations for Trial Evidence (RETE) and the Met Expectations Questionnaire, yielded similar factor structures, differences did emerge on these scales across

the two studies. In study 1, heavy crime drama viewers had significantly higher total expectations on the RETE, whereas in study 2 this was not found. Furthermore, the results of the BOP were inconsistent from study 1 to study 2. When hierarchical regressions were conducted in study 1, none of the three expectations scales were significant predictors of the BOP. When the same analyses were conducted in study 2, both the RETE and Met Expectations scales were significant predictors of the BOP, as was the physical evidence subscale of the RETE. Additionally, no significant differences between light and heavy were found for the RETE and Met Expectations scales in study 2, but differences were found in study 1.

One possible explanation for this is due to the attrition that occurred from session one to session three in study 2 (seven light viewers and six heavy viewers did not complete session three). The seven light viewers that dropped out of the study held significantly lower expectations for evidence on the general expectations measure (completed in session one) than did other light viewers that remained in the study. The six heavy viewers who dropped out of the study had higher general expectations for total evidence and forensic evidence, higher BOP scores, and greater KLEP scores than did heavy viewers that remained in the study (though these were not significant differences). Taken together, these findings suggest that had these 13 participants completed session three, differences on the RETE and Met Expectations scales may have been found, assuming expectations for general expectations translates into expectations on the RETE and Met Expectations scales.

The RETE is a new measure, specifically constructed for this study, as a measure of retrospective expectations for evidence individuals expected to be presented during the course of the trial they viewed. The RETE is not a general measure of current expectations.

Because participants completed the RETE after already viewing the trial, they had already been exposed to all the evidence before ever providing expectations regarding it. Therefore, it is realistic that responses on the RETE were influenced by having already viewed the trial before ever providing expectations for the kinds of evidence participants expected to be presented during said trial. Future research should consider modifying the language used in the RETE so that it becomes a measure of current expectations for evidence presented at a trial, not retrospective expectations.

Because study 2 was designed as a replication of study 1, it was important to verify that the samples used in both studies did not differ due to demographic and individual difference variables that could impact results obtained. Although no differences were found on demographics (i.e., sex, race), differences were found on several individual difference variables that included experiences with the criminal justice system and attitudes toward the criminal justice system.

Specifically, participants in Study 2 had greater contact and experience with the criminal justice system and this was due to them being victims of crime more often than participants in Study 1. Being a victim of a crime was significantly related to greater media exposure to the criminal justice system, including watching more reality crime dramas and documentaries, as well as having increased knowledge of the criminal justice system.

Regarding attitudes, participants in Study 1 were significantly more likely to have a pro-prosecution bias on the reasonable doubt subscale of the juror bias scale than participants in Study 2. This pro-prosecution bias was significantly correlated with verdict in study 1. Upon further examination, there was a significant difference between light crime drama viewers in study 1 and light crime drama viewers in study 2 on the reasonable doubt

subscale. Light crime drama viewers in study 1 held a significantly greater pro-prosecution bias which could help account for the verdicts provided by this group in study 1, which were .32 greater than that of heavy crime drama viewers. Additionally, participants in Study 1 were more cynical of the criminal justice system on the general attitudes toward the legal system scale than participants in Study 2.

Overall, participants generally viewed more crime dramas, more CSI, and more television in study 2 than study 1. There were also slightly fewer heavy crime drama viewers in study 1 than study 2 (n = 47 and n = 57, respectively), and more light crime drama viewers in study 1 than study 2 (n = 107 and n = 73, respectively), even though the same criteria were used to define heavy and light viewers in both studies. This could affect the power in the analyses conducted and be responsible for some of the slight inconsistencies found across results.

Beyond the differences found between the study samples, another possible explanation for discrepancies between study 1 and study 2 could be the different study methodologies employed. Although participants across both studies completed nearly all the same materials, they did so in different settings. All participants in the studies viewed the trial, provided a verdict, completed the RETE, and the Met Expectations questionnaire in a lab setting. However, participants in study 1 did so immediately when first coming to the lab, whereas participants in study 2 did so after a week delay from first coming to the lab so they had time to view episodes of the television show they had been randomly assigned to watch. Participants in study 1 also completed the CDVQ after completing all questions related to the trial. While it is hoped that participants answered honestly and thoughtfully, after 75 minutes

of working on other tasks it is possible that answers on the CDVQ were somewhat affected by its temporal location in the study.

Furthermore, in study 2, all materials were completed in a lab setting. This was not the case for study 1. In study 1, after viewing the trial, completing post-trial questions and the CDVQ, participants completed the remaining questions via an online web site. Because of this, no reaction times for the various measures could be obtained. Conversely, reaction times were obtained for participants in study 2 as they completed all materials via MediaLab. Having participants' reaction times, scatterplots to help identify outliers, and standard deviations of responses to the scales, allowed for more accuracy in determining who should be excluded from analyses. Taken together, slight differences in study samples as well as differences in methodology could help explain some of the discrepancies between the two studies.

Limitations and Implications for future research

Some of the limitations of the current research have already been mentioned, including slight differences in methodology as well as differences in study samples on a few variables (though this is an odd finding and one difficult to control for a priori). It is not known exactly how different responses are in the lab versus online, but it seems plausible that some differences could exist between the two settings.

Another limitation of the current research, also mentioned previously, is the type of trial viewed. The murder trial viewed in the current research presented a self-defense case, not a whodunit case. Although the CSI effect may not be a powerful enough force to influence verdict decision making, as there are a number of other cognitive, personality, and interpersonal variables that could affect verdict, the ability to do so may have been even more

difficult in this case because of the type of trial viewed. Future studies should consider having light and heavy crime drama viewers watch a whodunit trial. By the very nature of a whodunit trial the main issue is whether the police have arrested the correct suspect and whether the prosecution is prosecuting the correct defendant. Compared to a situation in which the defendant has already admitted to the crime at hand, not knowing if the correct defendant is on trial, can create a completely different mindset for jurors and may more readily activate expectations for evidence which could relate to verdicts selected, based on how well those expectations are met.

One limitation that few laboratory jury studies are exempt from is a potential lack of external validity and generalizability of results. The studies presented here are no different. In these studies mock juries, which provide some semblance of real-world juries through the use of group deliberation, were not used. Verdicts were provided solely by individuals. Because of this, there was no deliberation phase as it is commonly thought of with jurors discussing key elements of a trial. However, several open-ended questions were posed to jurors prior to providing verdicts in the hopes of getting them to deliberate over the evidence presented during the trial. It is not known how well this tactic compares with actual group deliberation, but having one person provide a verdict is undoubtedly very different from having a group of 6 or 12 discuss details of a trial in detail. Moreover, it is difficult to predict how verdicts would change if the studies had used group deliberation and followed a mock jury format. Future studies should consider utilizing mock jury studies made up of purely light crime drama viewers, purely heavy crime drama viewers, and a combination of the two to monitor differences in deliberations and resulting verdicts.

A third limitation of the current studies is that it is very difficult to control television viewing and to precisely account for past television viewing. Although participants were randomly assigned to watch four episodes of CSI, House, or no show in study 2, it is difficult to know how many other shows and the types of those shows that participants were watching over the same period. Additionally, light and heavy viewers in these studies were defined by self-report responses of viewing habits that occurred over some past period of time. I do not know exactly how many shows and for how long participants in our heavy crime drama viewing group had been watching crime dramas. For instance, is there a difference between a person who has watched multiple crime dramas on a daily basis for the last 15 years and a person who got hooked on CSI within the last month and now watches the show 2-3 times per week? Technically, both would be classified as heavy crime drama viewers, but it is possible that only the former case would have enough learning exposures (i.e., watched enough crime dramas over time) to significantly affect his knowledge of the criminal expectations and his expectations for scientific evidence. Examining these subtle differences within heavy crime drama viewers, as well as the amount of crime drama viewing it takes to turn a light crime drama viewer into a heavy crime drama viewer are areas that deserve future study.

Conclusion

In spite of these limitations, the two studies presented here provide strong support for the existence of a CSI effect. Across both studies, heavy crime drama viewers showed greater knowledge of the criminal justice system and greater expectations for scientific evidence than light crime drama viewers. The present studies used superior methods to define and classify light and heavy crime drama viewers over those used in past studies, making a very clear

distinction between light and heavy viewers (something past studies have been lacking). Results from mediation tests have also began to shed light on the structure of the CSI effect, specifically showing that knowledge of the criminal justice system completely mediates the relationship between crime drama viewing and expectations. This is merely a first step in understanding the more complex nature of the CSI effect.

It is still unknown just how the CSI effect interacts with other cognitive, interpersonal, and personality factors at play during a trial and subsequent jury deliberation. In the end, it is hoped that the findings presented here will move discussion of the existence of the CSI effect away from purely anecdotal speculation and toward greater empirical study, because one thing is for certain – as long as crime dramas continue to dominate television's airwaves, people will continue to watch them, and the CSI effect will continue to permeate the walls of our criminal justice system. It is time for us to begin to better understand the role that the CSI effect truly plays within the criminal justice system.

ENDNOTES

1. A significant interaction was found for crime drama viewing condition (CSI or House) x analysis of trial (yes or no), $F(1, 141) = 6.06$, $p < .05$. This indicates that participants who viewed CSI and did not complete an analysis of trial before selecting a verdict provided significantly harsher verdicts than participants who viewed House and did not complete an analysis of trial. When participants in both the CSI and House condition completed an analysis of trial before rendering a verdict, there were no significant differences in degree of verdict provided. Jurors in real-life trials typically go through some process of deliberation prior to selecting a verdict, so to enhance ecological validity in the present study, all participants that did not complete an analysis of trial ($N = 33$) were not included in any analyses that used verdict as a dependent variable.

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APPENDIX A. CRIME DRAMA VIEWING QUESTIONNAIRE (CDVQ)

For the following questions (1-16), please answer using the following scale:

A. 0 hours
B. ½ hour
C. 1 hour
D. 1 ½ hours
E. 2 hours
F. 2 ½ hours
G. 3 hours
H. 3 ½ hours
I. Between 4 - 4 ½ 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:

On a typical week day (Monday through Friday), for how many hours do you **watch movies (e.g., VHS, DVDs)** during each of the following times?

9. Between **6 am and Noon** on a **week day**, I usually watch movies for about:
10. Between **Noon and 6 pm** on a **week day**, I usually watch movies for about:
11. Between **6 pm and Midnight** on a **week day**, I usually watch movies for about:
12. Between **Midnight and 6 am,** on a **week day**, I usually watch movies for about:

On a typical weekend day (Saturday or Sunday), for how many hours do you **watch movies (e.g., VHS, DVDs)** during each of the following times?

13. Between **6 am and Noon** on a **weekend**, I usually watch movies for about:
14. Between **Noon and 6 pm** on a **weekend**, I usually watch movies for about:
15. Between **6 pm and Midnight** on a **weekend**, I usually watch movies for about:
16. Between **Midnight and 6 am,** on a **weekend**, I usually watch movies for about:

For the following items (17-97), 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 type
H. I never watch this type

17. How often do you watch General News Magazines (e.g., 60 Minutes, Dateline NBC)?
18. How often do you watch Crime News Shows (e.g., Catherine Crier, Nancy Grace)?
19. How often do you watch Forensic Crime Dramas [e.g., CSI (Las Vegas, Miami, New York), Bones, Crossing Jordan, NCIS]?
20. How often do you watch Forensic Crime Documentaries (e.g., Forensic Files, Crime 360, L.A. Forensics, etc.)?
21. How often do you watch General Crime Documentaries (e.g., The New Detectives, FBI Files, the First 48, 48 Hours Mystery, America's Most Wanted, The Investigators)?
22. How often do you watch General Crime or Courtroom Dramas (e.g., Law & Order, Law & Order: SVU, Boston Legal, The Closer, Cold Case, NYPD Blue, The Shield, Southland, Without a Trace)?
23. How often do you watch Profiling type Crime Dramas (e.g., Criminal Minds, Lie to Me, the Mentalist, Medium, Monk, Numb3rs)?
24. Overall, how often do you watch any type of crime, courtroom, police, or legal show (reality or fiction)?
25. How often do you watch at least one FICTION-based crime, courtroom, police, or legal show?
26. How often do you watch at least one REALITY-based crime, courtroom, police, or legal shows?
27. How often do you watch *24*?
28. How often do you watch *48 Hours*?
29. How often do you watch *48 Hours Mystery*?
30. How often do you watch *American Justice*?
31. How often do you watch *America's Most Wanted*?
32. How often do you watch *The Beast*?
33. How often do you watch *Body of Evidence*?
34. How often do you watch *Boston Legal*?
35. How often do you watch *Burn Notice*?
36. How often do you watch *Castle*?
37. How often do you watch *Crime 360*?
38. How often do you watch *CSI*?
39. How often do you watch *CSI: New York*?
40. How often do you watch *CSI: Miami*?
41. How often do you watch *The Closer*?
42. How often do you watch *Cold Case (on CBS)*?
43. How often do you watch *Cold Case Files (on A&E)*?

44. How often do you watch *COPS*?
45. How often do you watch *Criminal Minds*?
46. How often do you watch *Crossing Jordan*?
47. How often do you watch *Dark Blue?*
48. How often do you watch *DaVinci's Inquest*?
49. How often do you watch *DEA*?
50. How often do you watch *Damages*?
51. How often do you watch *The District*?
52. How often do you watch *Dog the Bounty Hunter*?
53. How often do you watch *Dominic Dunne*?
54. How often do you watch *Eleventh Hour*?
55. How often do you watch *The FBI Files*?
56. How often do you watch *The First 48*?
57. How often do you watch *Forensic Files*?
58. How often do you watch *The Good Wife?*
59. How often do you watch *Haunting Evidence*?
60. How often do you watch *In Plain Sight*?
61. How often do you watch *The Investigators*?
62. How often do you watch *JAG*?
63. How often do you watch *LA Forensics*?
64. How often do you watch *Las Vegas*?
65. How often do you watch *Law and Order*?
66. How often do you watch *Law and Order: SVU*?
67. How often do you watch Law and Order: CI?
68. How often do you watch *Leverage?*
69. How often do you watch *Lie to Me*?
70. How often do you watch *Manhunters: Fugitive Task Force*?
71. How often do you watch *Master Minds*?
72. How often do you watch *Medium*?
73. How often do you watch *The Mentalist*?
74. How often do you watch *Monk*?
75. How often do you watch *Murder, She Wrote*?
76. How often do you watch *NCIS*?
77. How often do you watch *NCIS: Los Angeles?*

78. How often do you watch *NYPD Blue*?
79. How often do you watch Nancy Grace?
80. How often do you watch *Nash Bridges*?
81. How often do you watch *The New Detectives*?
82. How often do you watch *Numb3rs*?
83. How often do you watch *The Practice*?
84. How often do you watch *Prison Break*?
85. How often do you watch *Psych*?
86. How often do you watch *Raising the Bar*?
87. How often do you watch *Saving Grace*?
88. How often do you watch *The Shield*?
89. How often do you watch *The Sopranos*?
90. How often do you watch *Southland*?
91. How often do you watch *SWAT USA*?
92. How often do you watch *Third Watch*?
93. How often do you watch *Til Death Do Us Part*?
94. How often do you watch *Walker, Texas Ranger*?
95. How often do you watch *Without a Trace*?
96. How often do you watch *Judge shows (e.g., Joe Brown, Judge Mathis)?*
97. How often do you watch *live trials on Court (now Tru) TV*?

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

a. Title #1:_____

How often do you watch this show? **Rarely:** 1 2 3 4 5 6 7 **:Often**

How much do you like this show? **Not at all**: 1 2 3 4 5 6 7 **:Extremely**

How realistic do you think this show is? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5 6 7 **:Extremely**

How believable is this show? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

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

Not at all: 1 2 3 4 5 6 7 **:Extremely**

b. Title #2:_____

How often do you watch this show? **Rarely:** 1 2 3 4 5 6 7 **:Often**

How much do you like this show? **Not at all**: 1 2 3 4 5 6 7 **:Extremely**

How realistic do you think this show is? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5 6 7 **:Extremely**

How believable is this show? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

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

Not at all: 1 2 3 4 5 6 7 **:Extremely**

c. Title #3:_____

How often do you watch this show? **Rarely:** 1 2 3 4 5 6 7 **:Often**

How much do you like this show? **Not at all**: 1 2 3 4 5 6 7 **:Extremely**

How realistic do you think this show is? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5 6 7 **:Extremely**

How believable is this show? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

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

Not at all: 1 2 3 4 5 6 7 **:Extremely**

d. Title #4:_____

How often do you watch this show? **Rarely:** 1 2 3 4 5 6 7 **:Often**

How much do you like this show? **Not at all**: 1 2 3 4 5 6 7 **:Extremely**

How realistic do you think this show is? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5 6 7 **:Extremely**

How believable is this show? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

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

Not at all: 1 2 3 4 5 6 7 **:Extremely**

e. Title #5:_____

How often do you watch this show? **Rarely:** 1 2 3 4 5 6 7 **:Often**

How much do you like this show? **Not at all**: 1 2 3 4 5 6 7 **:Extremely**

How realistic do you think this show is? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

How closely does the show depict the criminal justice system?

Not at all: 1 2 3 4 5 6 7 **:Extremely**

How believable is this show? **Not at all:** 1 2 3 4 5 6 7 **:Extremely**

How much do you learn about the criminal justice system from this show?
Not at all: 1 2 3 4 5 6 7 **:Extremely**

2. 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 times 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

3. 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 times 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

4. 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 times 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

5. 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

6. What is your major? _____

7. What is your minor? _____

8. If not a criminal justice major, have you ever taken a criminal justice class?

   ❑ Yes ➔ If yes, what class and when? _____
   ❑ No

9. Have you ever served on a jury? ❑ Yes ❑ No
10. Have you ever had any direct contact with the criminal justice system? ❑ Yes ❑ No
11. Do either of your parents work in law enforcement? ❑ Yes ❑ No
12. Do any of your relatives work in law enforcement? ❑ Yes ❑ No
13. Do either or your parents work in the criminal justice system? ❑ Yes ❑ No
14. Do any of your relatives work in the criminal justice system? ❑ Yes ❑ No
15. Have you ever been victim of a theft? ❑ Yes ❑ No
16. Have you ever been the victim of an auto theft? ❑ Yes ❑ No
17. Have you ever been the victim of a robbery? ❑ Yes ❑ No
18. Have you ever been the victim of assault? ❑ Yes ❑ No
19. Have you ever been the victim of forgery or fraud? ❑ Yes ❑ No
20. Have you ever been the victim of racial profiling by the police? ❑ Yes ❑ No
21. Have you ever been the victim of stalking? ❑ Yes ❑ No
22. Have you ever been the victim of harassment? ❑ Yes ❑ No
23. Have you ever been the victim of ethnic harassment (e.g., been called racial slurs)?

    ❑ Yes ❑ No

24. How many times have you been arrested?

    ❑ Zero ❑ Two ❑ Four
    ❑ One ❑ Three ❑ Five or more

25. What is your **average** school grade? (*If you are a freshman, please answer for your senior year of high school; Please mark only ONE)*

    ❑ A+ (average scores of 97 or higher)
    ❑ A (93 - 96)
    ❑ A- (90 - 92)
    ❑ B+ (87 - 89)
    ❑ B (83 - 86)
    ❑ B- (80 - 82)
    ❑ C+ (77 - 79)
    ❑ C (73 - 76)
    ❑ C- (70 - 72)
    ❑ D+ (67 - 69)
    ❑ D (63 - 66)
    ❑ D- (60 - 62)
    ❑ F (Under 60)
    ❑ Don't know

26. What is your GPA (Grade Point Average)? (*If you are a freshman, please answer for your senior year of high school*.) _____

27. Are you: ❑ Male ❑ Female

28. Do you consider yourself to be a religious person?

❑ Yes
❑ No
❑ Don't know
❑ Decline to answer

29. How would you classify yourself?

❑ Protestant (e.g., Baptist, Methodist, etc.)
❑ Roman Catholic
❑ Evangelical Christian
❑ Other Christian
❑ Jewish
❑ Muslim
❑ Hindu
❑ Buddhist
❑ Agnostic
❑ Atheist
❑ Don't know/NA
❑ Other _____

30. What best describes your political views?

❑ Very liberal ❑ Moderate ❑ Very Conservative
❑ LIberal ❑ Conservative ❑ Don't know

31. Which political party do you most identify with?

❑ Democrat ❑ Republican ❑ Other
❑ Independent ❑ Don't know (Specify: _____)

32. What best describes your religious affiliation?

❑ Protestant Christian ❑ Roman Catholic ❑ Muslim
❑ Evangelical Christian ❑ Jewish (Specify: _____)

33. What is the highest level of education your mother (or stepmother) finished?

❑ Some high school ❑ Some college ❑ Graduate or professional school
❑ High school ❑ College ❑ Don't know

34. What is the highest level of education your father (or stepfather) finished?

❑ Some high school ❑ Some college ❑ Graduate or professional school
❑ High school ❑ College ❑ Don't know

35. When you were growing up, what do you feel was your family's income class?

❑ Low-income ❑ Middle-income ❑ High-income

36. Compared to other families, did you feel your family was _____ financially?

❑ Better off ❑ Worse off ❑ About the same

37. Compared to other families, did you feel your family was _____ financially?

❑ Better off ❑ Worse off ❑ About the same

APPENDIX B. KNOWLEDGE OF LEGAL EVIDENCE & PROCEDURE (KLEP)

Eyewitness Identification

1. When witnesses are questioned, the wording of questions:
    A. Can influence their answers in major ways
    B. Can influence their answers in minor ways
    C. Generally cannot influence their answers
    D. Both A & B
    E. Don't know

2. During an identification procedure the police instructions to the eyewitness:
    A. Cannot influence the eyewitness' choice
    B. Can influence the eyewitness' choice
    C. Don't know

3. When a person repeatedly thinks about the details of an event (i.e., goes over it again and again in his/her mind), his/her confidence in the memory of that event is:
    A. Likely to increase over time
    B. Likely to decrease over time
    C. Likely to remain the same over time
    D. Don't know

4. In an attempt to locate a criminal, police officers sometimes show a witness a collection of mugshot photos. If the witness does not identify anyone as the person who committed the crime, the police may construct a photographic lineup at a later date that includes one of the mugshots the witness has already seen. When asked to identify the person who committed the crime in the photographic lineup, the witness is:
    A. More likely to pick the mugshot he/she has seen before
    B. No more or less likely to pick the mugshot he/she has seen before
    C. Less likely to pick the mugshot he/she has seen before
    D. Don't know

5. When eyewitnesses are asked to report about an event they saw, their report generally:
    A. Includes not only what they actually saw, but also relevant information learned after the event
    B. Includes only what they actually saw
    C. Includes only relevant information learned after the event
    D. Don't know

6. Sometimes interviewers (e.g., police, psychologists, etc.) suggest things to the person being interviewed that are not true. Compared to adults, young children (ages 4-9) are:
   A. Less influenced by interviewer suggestions
   B. Equally influenced by interviewer suggestions
   C. More influenced by interviewer suggestions
   D. Don't know

7. An eyewitness's interpretation and memory of an event can be:
   A. Affected by his/her attitudes and expectations in a significant way
   B. Affected by his/her attitudes and expectations, but only in a minor way
   C. Unaffected by his/her attitudes and expectations
   D. Don't know

8. Interviewers might use hypnosis to question an individual about his/her memory for a specific event. The technique of hypnosis generally:
   A. Increases the likelihood that an eyewitness will accept suggestive/leading questions asked by the interviewer
   B. Does not influence the likelihood that an eyewitness will accept suggestive/leading questions asked by the interviewer
   C. Decreases the likelihood that an eyewitness will accept suggestive/leading questions asked by the interviewer
   D. Don't know

9. Sometimes witnesses experience events under the influence of alcohol. Alcohol intoxication:
   A. Improves an eyewitness's ability to later recall person/events
   B. Has no influence on an eyewitness's ability to later recall person/events
   C. Reduces an eyewitness's ability to later recall person/events
   D. Don't know

10. There are certain situations where eyewitnesses have to identify members of their own race (e.g., a White person identifying another White person), and other situations where they must identify members of other races (e.g., an Asian person identifying a White person). Eyewitnesses are:
   A. More accurate when identifying members of other races than members of their own race
   B. Equally accurate in identifying members of both their own race and other races
   C. Less accurate when identifying members of other races than members of their own race
   D. Don't know

11. The presence of a weapon held by the criminal at the scene:
   A. Makes it easier for an eyewitness to identify the criminal's face accurately

B. Does not influence an eyewitness's ability to identify the criminal's face accurately
C. Makes it more difficult for an eyewitness to identify the criminal's face accurately
D. Don't know

12. Which of the following objects could cause weapon focus on the part of an eyewitness?
A. Gun
B. Baseball bat
C. Syringe
D. All of the above
E. Don't know

13. Eyewitnesses are asked to indicate their level of confidence when they identify the person they think committed the crime. To your knowledge:
A. The level of an eyewitness's confidence does not tell us anything about the accuracy of his/her identification
B. The more confident an eyewitness is, the more likely he/she is to be correct
C. The more confident an eyewitness is, the less likely he/she is to be correct
D. Don't know

14. The amount of time an eyewitness has to observe an event or person varies depending on the situation. To your knowledge:
A. The more time an eyewitness has to observe an event or person, the more he/she will remember
B. The length of time an eyewitness has to observe an event or person is not related to how much he/she will remember
C. The more time an eyewitness has to observe an event or person, the less he/she will remember
D. Don't know

15. Police investigators often ask eyewitnesses to identify the person they saw commit the crime. Eyewitnesses can:
A. Make mistakes in their identification for various reasons, but do not usually identify someone they have seen somewhere else as the person who committed the crime
B. Sometimes mistakenly identify someone they have seen somewhere else, but only if he/she resembles the person who committed the crime
C. Sometimes mistakenly identify someone they have seen somewhere else, regardless of whether or not he/she resembles the person who committed the crime
D. Don't know

16. The best way to reduce mistaken identifications when the suspect is not present in the photospread is to:

A. Provide photographs of a number of different people, but present them to the eyewitness all at the same time
B. Provide photographs of a number of different people, but present them to the eyewitness one at a time
C. Provide the eyewitness with one photograph that is of the suspect
D. Don't know

17. If a witness provides a verbal description of the person he/she believes committed the crime, members of the lineup should:
A. Match the specific features of that description
B. Match the general features of that description
C. Match general and specific features of that description
D. Don't know

18. When recalling memories of past events, young children (ages 4-9) are:
A. Less accurate than adults
B. About as accurate as adults
C. More accurate than adults
D. Don't know

19. Sometimes police ask an eyewitness to identify the person who committed the crime from among a group of photographs. To reduce mistaken identification, police officers should:
A. Make sure that none of the people in the photographs have similar physical characteristics to the suspect
B. Make sure that only some of the people in the photographs have similar physical characteristics to the suspect
C. Make sure that all of the people in the photographs have similar physical characteristics to the suspect
D. Don't know

20. Some people claim to have memories of childhood events that were repressed and then later recovered. The reports of these events are:
A. Likely to be inaccurate
B. Likely to be accurate
C. Likely to contain both accurate and inaccurate information
D. Don't know

21. Eyewitnesses to an event may experience different levels of stress during and after the event. To your knowledge:
A. High levels of stress reduce the accuracy of an eyewitness's memory for an event
B. The level of stress an eyewitness experiences does not tell us anything about the accuracy of his/her memory
C. High levels of stress increase the accuracy of an eyewitness's memory for an event

D. Don't know

22. Compared to younger adults, elderly eyewitnesses are:
    A. More accurate in their recollection of events
    B. Equally accurate in their recollection of events
    C. Less accurate in their recollection of events
    D. Don't know

23. Interviewers might use hypnosis to obtain information from eyewitnesses about a specific event. The technique of hypnosis generally:
    A. Increases the total amount of information (both accurate and inaccurate) an eyewitness reports about a past event
    B. Increases the amount of accurate information an eyewitness reports about a past event
    C. Increases the amount of inaccurate information an eyewitness reports about a past event
    D. Don't know

24. Sometimes eyewitnesses are asked to identify the person who committed the crime from a group of individuals presented to them in the form of a live or photographic lineup. To your knowledge:
    A. The speed of an identification does not tell us anything about the accuracy of that identification
    B. The longer it takes an eyewitness to identify someone in a lineup, the more accurate that identification is likely to be
    C. The longer it takes an eyewitness to identify someone in a lineup, the less accurate that identification is likely to be
    D. Don't know

25. Police officers often witness various events and have to report their memories of them. Police officers are:
    A. More accurate as eyewitnesses than the average person
    B. About as accurate as eyewitness as the average person
    C. Less accurate as eyewitnesses than the average person
    D. Don't know

26. When someone is victimized in a physically violent manner, the victim's memory for the attacker's appearance generally is:
    A. More accurate as the degree of violence increases
    B. Less accurate as the degree of violence increases
    C. Not influenced by the degree of violence
    D. Don't know

27. There is evidence that some people can create false memories about events they have never experienced. To your knowledge, people:
    A. Cannot tell the difference between true and false memories

B. Can tell the difference between true and false memories
C. Don't know

28. People may experience traumatic events in their lives. Memories of these experiences:
    A. Cannot be repressed
    B. Can be repressed and then recovered again
    C. Can be repressed, but are unlikely to be recovered again
    D. Don't know

29. Almost half of all wrongful convictions are due to misidentifications of individuals by eyewitnesses.
    A. True
    B. False
    C. Don't know

Interrogations & Confessions

30. All suspects that are arrested must be informed of their Miranda rights. Which of the following is not one of the Miranda rights?
    A. Right to remain silent
    B. Any statement they make may be used against them at trial
    C. Right to confront their accuser
    D. Court will appoint an attorney if they cannot afford one
    E. All of the above are Miranda rights
    F. Don't know

31. The police can only question suspects if the suspects knowingly and voluntarily waive their rights.
    A. True
    B. False
    C. Don't know

32. Police are trained to use certain techniques and manipulate various factors while interrogating suspects. Which of the following is not a technique or factor acceptable to consider during an interrogation?
    A. Importance of interrogation room
    B. Personality of interrogator
    C. Semantic distortion
    D. De-humanizing of suspects
    E. Don't know

33. One technique used by interrogators is to intimidate a suspect into confessing by falsely claiming they have incriminating evidence or by exaggerating the seriousness of the crime. This is called:
    A. Minimization
    B. Maximization

C. Degradation
D. Validation
E. Don't know

34. One common method of interrogation occurs when one police interrogator acts cruel and relentless, while the other interrogator acts like a kind-hearted, caring person and empathizes with the suspect. This technique is called:
A. Angry cop: Happy cop
B. Bad cop: Good cop
C. Lying cop: Truthful cop
D. Mad cop: Glad cop
E. Don't know

35. Innocent suspects provide false confessions for a variety of reasons. Which of the following is not a reason commonly cited as to why suspects provide false confessions?
A. They do so voluntarily
B. to avoid a very negative situation or to get a promised reward
C. Because they come to believe they are in fact truly guilty
D. Both B & C
E. All of the above are reasons why innocent suspect falsely confess
F. Don't know

36. Which of the following is/are not considered allowable behavior for police officers while conducting an interrogation?
A. Misrepresentation of the facts of the case
B. Using physical force to induce a confession
C. Using techniques that take unfair advantage of emotions or beliefs of suspect
D. Failure to inform suspect of an important fact that might make suspect less likely confess
E. All are considered allowable behavior for police officers
F. Don't know

37. A confession of guilt can be used as evidence against an accused person:
A. In every case
B. If the prosecution proves beyond a reasonable doubt that it was not obtained under coercion
C. If the confession was obtained after the arrest and before the trial
D. None of the above
E. Don't know

38. What do people often do when lying to the police?
A. Shake their head and tap their feet
B. Cross their arms and look up at the ceiling
C. Fiddle with their hands, watch, or sleeve cuffs
D. Don't know

Police

39. Police often rely on 'probable cause' when making an arrest. What constitutes 'probable cause'?
    A. Commission of a crime
    B. Police term that allows them to search any individual they wish
    C. Suspect was most likely individual to have committed the crime
    D. Both A & C
    E. All of the above
    F. Don't know

40. Police can conduct warrantless searches for all of the following reasons, EXCEPT:
    A. If stolen property is in plain view
    B. If exigent circumstances are present (e.g., if police believe a suspect just committed a crime and is about to destroy evidence)
    C. If a suspect cannot account for there whereabouts during the commission of a crime
    D. When a suspect does not have a reasonable expectation of privacy (e.g., passengers in an automobile)
    E. Don't know

41. An illegal search that produces evidence that leads to other evidence (even though the evidence obtained may prove the guilt of a suspect) causes all evidence obtained to be inadmissible in criminal proceedings.
    A. True
    B. False
    C. Don't know

42. For police officers to obtain search warrants, they must:
    A. Provide proof beyond a reasonable doubt of a suspect's guilt
    B. Establish suspicion that criminal activity occurred
    C. Provide reliable information showing probable cause to believe a crime has or will be committed
    D. All of the above
    E. Don't know

43. Which of the following is true of evidence seized without proof of probable cause from a person's home?
    A. the evidence can be used at trial
    B. the evidence was seized without a warrant
    C. the evidence cannot be used at trial
    D. both (b) and (c)
    E. Don't know

44. What is the number one priority for officers who have just arrived at a crime scene?
    A. Arrest any suspicious personnel immediately
    B. Save and preserve the life of any victims while remaining safe themselves
    C. Secure and preserve the crime scene
    D. Don't know

45. Why are witnesses detained at the police station?
    A. to stop them from escaping
    B. to stop them from contaminating the crime scene
    C. to prevent them from discussing what they saw with other witnesses
    D. Don't know

46. Why is it so important for investigators to secure a crime scene?
    A. to stop police from entering the crime scene
    B. to stop unauthorized personnel from entering the crime scene and destroying evidence
    C. to keep evidence from escaping
    D. Don't know

47. What type of specialists are called to a crime scene once the situation has been stabilized?
    A. Anthropologists, serologists, and odontologists
    B. Homicide, arson, suicide, or the relevant detective(s)
    C. Fire, ambulance, and police departments
    D. Don't know

48. What happens to evidence once it has been found?
    A. it is sealed in a bag or airtight container, labeled, recorded, and sent to a laboratory
    B. it is destroyed and thrown away
    C. it is taken straight to a laboratory
    D. Don't know

49. When can a crime scene become unsealed?
    A. when the crime is solved and the criminal has been captured
    B. after all suspects have been arrested and taken to jail
    C. as soon as all the evidence has been collected and witnesses have been detained
    D. Don't know

50. Psychological profiling refers to:
    A. the use of para-psychology and psychic knowledge to establish the likely behavior and personality traits of a suspect from information about his/her star sign and crystal collection
    B. the use of psychiatry and psychology to establish the likely behavior and personality traits of a suspect from information about how a crime was committed
    C. taking detailed photographs of a suspect's face in profile and using these for psychological analysis
    D. the writing of a brief outline of a fictitious character for a crime show, based on forensic psychologists' records of real cases
    E. Don't know

Pre-Trial

51. When does a defendant have a right to post bail?
    A. if the court concludes the defendant can be trusted to return for court
    B. appearances
    C. if the court concludes the defendant will not endanger the public
    D. both (a) and (b)
    E. the defendant always has a right to post bail
    F. Don't know

52. What is the purpose of a suppression hearing?
    A. to determine the charges against the defendant
    B. to challenge the prosecutor's evidence
    C. to determine the defendant's innocence or guilt
    D. none of the above
    E. Don't know

Trial

53. On average, about what percent of felonies (e.g., murder, rape, kidnapping, robbery, assault) go to trial?
    A. 10%
    B. 35%
    C. 60%
    D. 85%
    E. Don't know

54. The defendant in a criminal trial is not required to prove he or she did not commit the crime because:
    A. this would violate the 5th amendment
    B. this would violate the 14th amendment
    C. the defendant is innocent until proven guilty
    D. all of the above
    E. Don't know

55. Which of the following is not necessary before a criminal trial takes place?
    A. an investigation
    B. an indictment
    C. proof of the defendant's guilt
    D. appointment of counsel to represent the defendant
    E. Don’t know

56. In a trial, the credibility of the testimonial evidence is determined by:
    A. the judge
    B. the jury
    C. the lawyers
    D. none of the above
    E. Don’t know

57. What is involuntary manslaughter?
    A. killing someone on purpose
    B. killing someone without meaning to
    C. killing someone because you’re jealous
    D. killing someone because you’re forced to by another party
    E. Don’t know

58. Due process of the law:
    A. guarantees the accused will not be jailed without a trial
    B. protects people from having overbearing burdens placed on them by the
    C. government
    D. assures fairness in the criminal justice system
    E. all of the above
    F. Don’t know

59. Circumstantial evidence is:
    A. Physical evidence (such as a weapon) involved in the crime
    B. Evidence not based on witness testimony, but are usually visual materials that demonstrate information relevant to crime (e.g., X-rays, photographs)
    C. Eyewitness accounts of the crime
    D. Evidence that may or may not be from a witness which requires reasoning to prove a fact
    E. Don’t know

60. During a criminal trial, which of the following is not true according to the due process of the law?
    A. the defendant has a right to be informed of the charges against him or her
    B. the defendant has a right not to wear identifiable prison clothing during the
    C. trial
    D. the defendant has a right to protect his or her reputation
    E. all of the above are not true of due process

F. Don't know

61. Who decides if a case will be tried by a judge or jury?
    A. the defense
    B. the prosecution
    C. the judge
    D. All of them collectively
    E. Don't know

62. Who holds the burden of proof in a criminal trial?
    A. the defense
    B. the prosecution
    C. the judge
    D. the defendant
    E. Don't know

63. Which of the following is true about civil and criminal law?
    A. a defendant cannot be tried in both a criminal and civil trial for the same
    B. offense
    C. in civil law, a private party files the lawsuit and becomes the plaintiff, while in criminal law, the lawsuit is always filed by the government
    D. the defendant can be punished by jail time after both a civil and criminal trial
    E. there is no difference between civil and criminal law
    F. Don't know

64. Who can call witnesses to testify and/or present evidence during a criminal or civil trial?
    A. the judge
    B. the jury
    C. the defense and prosecution
    D. all of the above
    E. Don't know

65. When can the prosecution appeal the ruling after an acquittal in a criminal trial and request a retrial?
    A. any time they wish
    B. never
    C. only if errors were made during court proceedings
    D. only a judge can request a retrial
    E. Don't know

66. All of the following are types of circumstantial evidence, EXCEPT:
    A. Accused suspect being seen in the neighborhood of the crime around the time the crime took place occurred
    B. Fingerprints found at the scene of the crime
    C. An eyewitness account that they saw the suspect commit the crime

D. Ownership of the murder weapon
E. Don't know

67. Successful criminal prosecutions cannot rely largely on circumstantial evidence.
A. True
B. False
C. Don't know

Experts

68. In order for an expert witness to testify during a criminal or civil trial a judge has to rule that:
A. the expert has the proper credentials making them competent to testify about a particular subject
B. the testimony is relevant to the main issues in the case and will assist the jury
C. whether the impact of the testimony will be more helpful than harmful
D. all of the above
E. Don't know

69. Experts are often important witnesses in criminal and civil trials. At trial, experts are persons who have specialized knowledge beyond the average person. Which of the following is true of expert testimony?
A. it is intended to replace the jury's decision-making role
B. it is intended to assist the jury in understanding certain disputed facts
C. it is intended to consist only of facts, not opinions
D. all of the above
E. Don't know

70. Expert testimony provided during a criminal trial must be based on which of the following?
A. A valid and reliable technique
B. An expert witness with specialized knowledge
C. The scientific method
D. All of the above
E. Don't know

Competence

71. In order to be deemed competent to stand trial, the defendant must be able to do which of the following:
A. understand the charges and proceedings against him or her
B. behave in an acceptable manner in the courtroom
C. recount his or her behavior and whereabouts at the time of the alleged
D. offense
E. all of the above
F. Don't know

Insanity

72. Of the defendants who plead not guilty by reason of insanity, how many receive acquittals (let go free)?
    A. 100%
    B. 50%
    C. 25%
    D. 10%
    E. Don't know

73. A person who commits a crime while under the influence of a drug can be found to be insane and not responsible for their actions only if:
    A. the drug is a hallucinogen
    B. the drug is legal
    C. the drug was involuntarily administered
    D. all of the above
    E. Don't know

74. A person is considered insane and not responsible for criminal conduct if which of the following criteria are met?
    A. he or she was unable to appreciate the nature or wrongfulness of their acts
    B. the defense of insanity is proved by clear and convincing evidence
    C. he or she was mentally ill or incompetent
    D. all of the above
    E. Don't know

75. In order for a defendant to plead not guilty by reason of temporary insanity during a criminal trial, which of the following is true?
    A. the defendant must be mentally stable at the time of the trial
    B. the defendant must have been incapable of knowing the nature of their
    C. criminal act at the time
    D. the defendant must have perpetrated a crime of passion
    E. none of the above
    F. Don't know

Sexual Assault

76. In order to convict a defendant of rape, which of the following must the prosecution prove?
    A. intercourse between the victim and defendant occurred
    B. the victim did not consent to the intercourse
    C. both (a) and (b)
    D. none of the above
    E. Don't know

77. In which of the following cases could sexual assault be charged against the accused even if the victim consented?
    A. the accused threatened to use force against the victim

B. the victim was a minor (under 14 years of age)
C. the accused obtained consent by fraud
D. all of above
E. Don't know

Sentencing

78. After a defendant is found guilty in a criminal trial, he or she is sentenced. During the sentencing trial, which of the following acts of the defendant can be considered?
A. all acts in which the defendant has been criminally charged between the
B. time of his/her arrest and sentencing
C. all acts with which the defendant has been criminally charged in his or her lifetime
D. only acts with which the defendant has been criminally charged in this trial
E. none of the above
F. Don't know

Scientific Evidence

79. Which one of these is NOT a class characteristic of a fingerprint?
A. bifurcation
B. loop
C. whorl
D. tented arch
E. Don't know

80. Fingerprint evidence is infallible.
A. True
B. False
C. Don't know

81. A fingerprint examiner using friction ridge analysis to match two prints will follow this order:
A. Comparison, analysis, verification, evaluation
B. Analysis, evaluation, comparison, verification
C. Analysis, comparison, verification, evaluation
D. Analysis, comparison, evaluation, verification
E. Don't know

82. What does a polygraph test measure?
A. Measures the body's response to stress
B. Measures the body's response to crime scene photos
C. Measures the body's response to interview questions
D. Don't know

83. Even if a suspect fails a lie detector test, the results of that test cannot be used against him/her during trial.

A. True
B. False
C. Don't know

84. DNA evidence can identify suspects through acts such as:
A. sweating
B. licking a stamp
C. vomiting
D. all of the above
E. Don't know

85. Polygraph testing is an infallible source of evidence.
A. True
B. False
C. Don't know

86. What is the name given to the study of fingerprints?
A. entomology
B. dactyloscopy
C. palynology
D. trichology
E. Don't know

87. What causes fingerprints to be left behind when we touch things?
A. the natural oils in the skin
B. the moisture in the atmosphere
C. the salt produced by our sweat glands
D. the dust on the things we touch
E. Don't know

88. Which of the following is NOT one of the three basic types of fingerprint patterns?
A. loops
B. whorls
C. arches
D. spirals
E. Don't know

89. Which of the following statements about fingerprints is NOT true?
A. Even identical twins do not have identical fingerprints
B. Fingerprints are unique for every human being
C. Fingerprints do not change with growth or age
D. All of these statements are true
E. Don't know

90. Why is it usually impossible to obtain fingerprints from textiles such as fabric,

clothing, and carpet?
A. because textiles are very absorbent
B. because textile fibers are resistant to the powders used to dust for prints
C. because textiles almost always contain synthetic materials
D. because most modern fibers are treated with fluorocarbons to repel moisture
E. Don't know

91. What is the minimum number of matching points required to identify an unknown latent fingerprint?
A. 12
B. 16
C. 32
D. There is no established minimum
E. Don't know

92. Which of the following substances is often used to develop latent fingerprints?
A. Super-glue
B. Nail polish remover
C. Alcohol
D. Blu-Tack
E. Don't know

93. In forensics, criminologists use AFIS to search an online database for fingerprint matches. What does AFIS stand for?
A. Automated Foot & Fingerprint Identification System
B. Actual Fingerprint Identification System
C. Automated Fingerprint Identification System
D. Auto Fingerprint Intelligence System
E. Don't know

94. The AFIS system can provide fingerprint examiners with a positive match between a latent print and a print stored on file.
A. True
B. False
C. Don't know

Forensics

95. The time of death can be calculated by various means. One is rigor mortis, Latin for 'the stiffness of death'. Another indication is livor mortis or lividity. What does this term refer to?
A. Relaxation of muscles subsequent to rigor mortis
B. Cloudiness in the eyes
C. Gravitational pooling of blood
D. Degree of digestion of stomach contents
E. Don't know

96. If you know what to look for, you can tell a male from a female skull. Which of the following statements is FALSE?
    A. The male skull has a more prominent brow ridge
    B. The male skull is usually larger
    C. The male has a more rounded, pointed chin
    D. The male skull has a heavier jaw
    E. Don't know

97. What does the term 'forensic' mean?
    A. pertaining to medicine
    B. pertaining to crime
    C. pertaining to death
    D. pertaining to law
    E. Don't know

98. Forensic anthropology involves the retrieval and identification of human remains. A skeleton provides a lot of information about the deceased. Which of the following is not able to be deduced from a modern human skeleton?
    A. state of health
    B. ethnic background
    C. intelligence
    D. occupation
    E. Don't know

99. Forensic odontology involves the study of teeth. When old skeletons are found, the teeth are an important source of information. In such cases, which of the following statements are true?
    A. Forensic scientists can usually tell the victim's age by their teeth.
    B. Teeth can indicate a person's occupation and ethnic background.
    C. Teeth are a good source of DNA for forensic analysis
    D. All three statements are true
    E. Don't know

100. When identifying victims of disasters, such as plane and train crashes, approximately 93 percent of identifications are made on the basis of which characteristic?
    A. skeletal characteristics
    B. personal effects (e.g., driver's license)
    C. DNA analysis
    D. Dental records
    E. Don't know

101. If there is a case of arson, the easiest way to find and identify an accelerant is to use what?
    A. A Sniffer

B. Latex gloves
C. Tweezers
D. Your nose
E. Don't know

102. A forensic odontologist uses a victim's teeth to try to identify the body.
A. True
B. False
C. Don't know

103. There are two types of wounds people can get when they are shot. What are they?
A. valid wound, invalid wound
B. entry wound, exit wound
C. primary wound, secondary wound
D. intentional wound, unintentional wound
E. Don't know

104. Blood splatter patterns can reveal all of the following, EXCEPT:
A. Type of weapon used
B. Direction of the attack
C. Positions of both victim and attacker
D. Height of the attacker
E. Don't know

105. This chemical can be used to detect blood, even if it has been wiped from a surface.
A. cyanide
B. ninhydrin
C. luminol
D. CO2
E. Don't know

106. What is the name of the light source commonly used in forensic investigation?
A. LaserLumination
B. LaserLight
C. PoliLight
D. PoliLuminescence
E. Don't know

107. Which one of these cannot be used as an indicator for time of death in a homicide investigation?
A. body temperature
B. stomach contents
C. teeth
D. insect infestation (e.g., maggots)

E. Don't know

108. Why is adequate lighting important when photographing evidence?
   A. to ensure the fingerprints are clearly captured
   B. to uncover latent fingerprints
   C. to get a good close-up shot of the evidence
   D. Don't know

109. What type of search is most effective in large open areas, such as fields and parks?
   A. A simple search involving three to five people who look around the area to try to find evidence
   B. A search in which several groups each cover a section of the area
   C. A line and grid search
   D. Don't know

110. What important aspects about a person can a shoe print reveal?
   A. the person's age and personality
   B. the type of weapon they carried
   C. the person's height, gait, and the direction they entered and exited the crime scene
   D. Don't know

111. An autopsy is performed to find out:
   A. what the victim's personality was like
   B. how a victim died
   C. whether the victim was responsible for the crime
   D. Any clues relevant to track down a suspect
   E. Don't know

112. What are two ways of determining if a person died of hypothermia?
   A. Burn marks on the skin and signs of burst blood vessels in the eyes
   B. The hyoid bone in the neck is broken and there is bruising present around the mouth
   C. The core temperature of the body is 35 degrees or below and the skin is blue in color
   D. Don't know

113. At what rate does the core body temperature drop per hour after death?
   A. 0.2 degrees C
   B. 0.8 degrees C
   C. 3 degrees C
   D. Don't know

114. What is the one rule that applies to all forensic laboratories?
   A. an item entering a lab can never come into contact with anything that may contaminate it
   B. an item entering a lab must be examined by every person in the laboratory
   C. an item entering a lab must be disinfected before examination takes place

D. Don't know

115. What type of evidence does the 'trace evidence unit' search for?
   A. hair, fabric, dust, fiber, and skeletal remains
   B. encrypted data and computer hard drives
   C. Blood, DNA, and fingerprints
   D. Don't know

116. Blunt trauma refers to:
   A. injuries caused by sharp objects
   B. drowning and asphyxiation
   C. Fractures, broken bones, and external bruising
   D. Don't know

117. Single blade knives leave wounds that have:
   A. two sharp edges
   B. a boat like shape
   C. a rough appearance around the edge
   D. Don't know

118. What residues are most likely to be found on the hands after handling a gun?
   A. soil, dust, and gunpowder
   B. oil, metal, and gunpowder
   C. soil, fabric, and metal particles
   D. Don't know

119. How do investigators trace the path of a bullet from a barrel of a gun to its final resting place?
   A. using a formula to establish the speed of the bullet
   B. using computer programs
   C. using string, rods, and lasers
   D. Don't know

120. Can DNA be taken from fingerprints?
   A. Yes
   B. No
   C. Don't Know

121. There is an inkless form of fingerprinting?
   A. Yes
   B. No
   C. Don't Know

122. A victim's hands are "bagged" in plastic?
   A. Yes
   B. No
   C. Don't Know

123. GSR stands for “gun shot residue”.
    A. Yes
    B. No
    C. Don’t Know

124. Latent prints are visible.
    A. Yes
    B. No
    C. Don’t Know

125. Fingerprints can be taken off of skin.
    A. Yes
    B. No
    C. Don’t Know

126. DNA can be found in: red blood cells.
    A. True
    B. False
    C. Don’t Know

127. DNA can be found in: the hair shaft.
    A. True
    B. False
    C. Don’t Know

128. DNA can be found in: the outer layer of skin.
    A. True
    B. False
    C. Don’t Know

129. How long is homicide case evidence kept on file?
    A. It is destroyed after a verdict in a case is established.
    B. It is destroyed after presentation and documentation in court.
    C. It is kept on file for 10 years after any appeals verdicts.
    D. It is kept on file forever.
    E. Don’t Know

130. What is the average time it takes to complete a DNA analysis?
    A. < 1 hour
    B. 12-24 hours
    C. 5-10 days
    D. 3-7 months
    E. 1-2 years
    F. Don’t Know

131. What type of container is best to use when collecting “wet evidence” (blood, semen, and saliva)?
   A. Plastic
   B. Paper
   C. Ceramic
   D. Glass
   E. Don’t Know

132. A cop arrests you and brings you to the station without reading you your Miranda rights. Which of these scenarios is most likely to happen as a result?
   A. Your case is immediately null and thrown out. You’re free to go.
   B. Doesn’t matter. The police have 24 hours to read you your rights. They can ask you anything they want until the 24 hours are up.
   C. Anything you say to the police before they read you your rights can be deemed inadmissible in your trial.
   D. Miranda rights are overrated. Police rarely need to read a person their rights anymore.
   E. Don’t Know

133. Who is NOT found at most crime scenes?
   A. Photographer
   B. Evidence recorder
   C. Detective
   D. Medical examiner
   E. Don’t Know

134. At homicide crime scenes, what do investigative teams call the room that contains the victim’s body?
   A. Death Room
   B. Primary Room
   C. Main Room
   D. There isn’t a standard name for this room.
   E. Don’t Know

135. Roughly, what percent of murders are solved?
   A. 20%
   B. 50%
   C. 80%
   D. 100%
   E. Don’t Know

136. What type of evidence can be found at most crime scenes?
   A. Physical
   B. Testimonial
   C. Demonstrative
   D. All of the Above

E. Don't Know

137. What is a detective's first step when first arriving at a crime scene?
A. Let reporters pass under the yellow tape.
B. Interview the first-responding officer.
C. Walk through the crime scene.
D. Collect evidence from the crime scene.
E. Don't Know

138. Which of these are NOT found on a Crime Scene Unit's checklist of victim analysis procedures?
A. Fingernail scrapings
B. Close-up photos of victim's wounds
C. Weapons
D. Drug search
E. Don't Know

139. Roughly, what percent of burglaries are solved?
A. 20%
B. 50%
C. 80%
D. 100%
E. Don't Know

140. On average, how many years would a New York City police officer have to work before firing their weapon?
A. 2 years
B. 15 years
C. 30 years
D. 60 years
E. Don't Know

141. This is an attempt to dissect and examine the psychological state of a person prior to his or her death:
A. Accidental death analysis
B. Psychological autopsy
C. Probable cause
D. Mental cause of death
E. Don't know

142. This refers to the criminal's state of mind *at the time the crime was committed:*
A. Competency
B. Proficiency
C. Rationality
D. Insanity

E. Don't know

143. For someone to be sentenced to death in the United States, they must have committed what?
A. Manslaughter
B. Aggravated murder
C. Burglary or theft plus a violent crime such as rape or murder
D. Treason
E. Don't know

144. A mitigating factor is one that:
A. Argues for the death sentence
B. Argues against the death sentence
C. Is only presented during preliminary hearings
D. Is only presented during arbitration
E. Don't know

145. An aggravating factor is one that:
A. Argues for the death sentence
B. Argues against the death sentence
C. Is only presented during preliminary hearings
D. Is only presented during arbitration
E. Don't know

146. Fair lineup instructions are used to:
A. Inform the eyewitness that the perpetrator may not be in the photospread
B. Conduct mock witness experiments
C. Protect the rights of the witness
D. Protect the rights of the police officer
E. Don't know

147. Expert witnesses are used in trial to:
A. Decide which parties' testimony is admissible
B. Educate the court and present research findings
C. Assist the judge in validating testimonies
D. Offer opinions on evidence presented during the trial
E. Don't know

148. Which of the following types of possible evidence can be used to distinguish between identical twins?
A. Saliva
B. DNA
C. Fingerprints
D. Blood Type
E. Don't know

149. Why should questioned documents be photographed and examined under a microscope before using ninhydrin?
   A. Using ninhydrin can cause documents to become flammable
   B. Ninhydrin can cause documents to become too fragile to use
   C. Ninhydrin can dissolve the ink on documents
   D. This is not necessary. It is perfectly fine to follow this procedure
   E. Don't know

150. Heat affects rigor mortis (the gradual stiffening of a body after death) in which way?
   A. Slows it down
   B. Speeds it up
   C. Has no noticeable effects
   D. Enhances its effects
   E. Don't know

151. What should be used to collect dried bloodstains at a crime scene?
   A. A damp cloth
   B. Wax paper
   C. Linen strips and water
   D. White paper and rubbing alcohol
   E. Don't know

152. During an autopsy, which method of internal examination is most often used to determine cause of death?
   A. A Y-shaped incision that runs from shoulder to shoulder, meeting at the sternum and continuing down to the groin
   B. A T-shaped incision that starts at tips of shoulders, meeting in middle of sternum and continuing down to the groin
   C. A vertical incision that runs from the middle of the neck down to the groin
   D. An inverted V-shaped incision that begins at the middle of the neck and continues down to each side of the groin
   E. Don't know

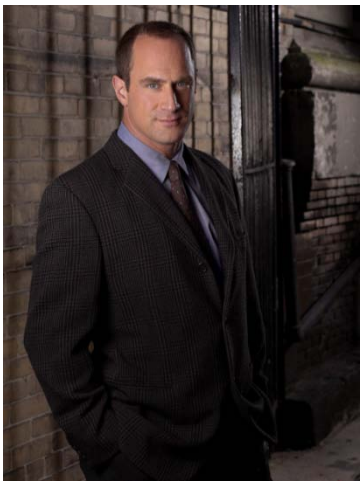
153. Where should liquid bloodstains be stored?
   A. In any type of sealed container
   B. In the trunk of a car
   C. In a cooler
   D. In a non-thermal container
   E. Don't know

154. In which of the following climates would a body decompose the fastest?
   A. A warm, moist climate
   B. A cold, moist climate
   C. A hot, dry climate
   D. A cool, dry climate
   E. Don't know

155. In terms of rate of body decomposition, which of the following factors has the greatest impact?
   A. Climate
   B. Exposure to insects
   C. Cause of death
   D. Body size and weight
   E. Don't know

APPENDIX C. CRIME DRAMA INVENTORY (CDI)

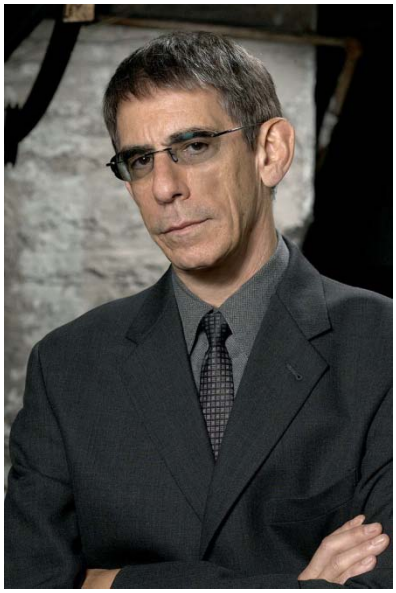
LAW & ORDER: SVU



1. In Law and Order SVU, this character is a/an?
    A. Lawyer
    B. Detective
    C. Judge
    D. Lab Technician
    E. Don't know

2. What is the name of this character who stars on Law and Order SVU?
    A. Alexandra Cabot
    B. Elizabeth Rogers
    C. Melinda Warner
    D. Olivia Benson
    E. Don't Know

3. What position does this character hold on Law and Order SVU?
    A. Assistant District Attorney
    B. Detective
    C. Captain
    D. Investigator
    E. Don't know



4. About what is John Munch paranoid?
    a. The Government
    b. Terrorism
    c. Criminals
    d. Germs
    e. Don't know

5. In what precinct do the SVU detectives work?
    a. 19th
    b. 39th
    c. 17th
    d. 27th
    e. Don't know

6. Who is Detective Benson's partner?
    a. Donald Cragen
    b. John Munch
    c. Sam Elliot
    d. Elliot Stabler
    e. Don't know

7. This character was a child of a rape victim:
    a. Elliot Stabler
    b. Olivia Benson
    c. Don Cragen
    d. John Munch
    e. Don't know

8. Which SVU character was beaten with a softball bat?
    a. Melinda Warner
    b. Olivia Benson
    c. Casey Novak
    d. Dani Beck
    e. Don't know

9. Which character is the medical examiner on "Law and Order: Special Victims Unit"?
    a. Melinda Warner
    b. Olivia Benson
    c. Alexandra Cabot
    d. Casey Novak
    e. Don't know

10. Who was John Munch's first partner on "SVU"?
    a. Elliot Stabler
    b. Don Cragen
    c. Brian Cassidy
    d. Casey Novak
    e. Don't know

11. In the episode “wrong is right” in season two, Stabler’s daughter, Maureen, witnesses what?
    a. A man being stabbed
    b. A woman being raped
    c. A child being beaten to death
    d. A man set on fire
    e. Don’t know

12. In the episode “night” who gets attacked in his/her office?
    a. Melinda Warner
    b. Casey Novak
    c. Elliot Stabler
    d. Brian Cassidy
    e. Don’t know

13. What is the name of Detective Stabler’s estranged wife?
    a. Kathy
    b. Diane
    c. Cynthia
    d. Ann
    e. Don’t Know

14. Detective Benson lived in what state when she went to work undercover for the FBI?
    a. Montana
    b. Alaska
    c. California
    d. Oregon
    e. Don’t Know

15. Why did Detective Beck leave the Special Victims Unit?
    a. She was fired for assaulting a suspect.
    b. She couldn’t handle the nature of the crimes she was investigating.
    c. She was fired for getting personally involved with another detective.
    d. She personally didn’t believe she could replace Detective Benson.
    e. Don’t Know

LAW & ORDER: CRIMINAL INTENT

16. The name of this investigator/ criminal profiler is:
    a. Mike Logan
    b. Zac Nichols
    c. James Deakins
    d. Robert Goren
    e. Don't Know

17. The name of Robert Goren's partner is?
    a. Megan Wheeler
    b. Alexandra Eames
    c. Elizabeth Rogers
    d. Carolyn Barek
    e. Don't Know

18. What position does Mike Logan hold on Law and Order CI?
    a. Lawyer
    b. Doctor
    c. Criminal Investigator
    d. Detective
    e. Don't know

19. What is the name of Mike Logan's partner?
    a. Megan Wheeler
    b. Alexandra Eames
    c. Carolyn Barek
    d. Alexandra Cabot
    e. Don't Know

20. What position does this character hold on Law and Order CI?
    a. Detective
    b. Doctor
    c. Investigator
    d. Captain
    e. Don't Know

21. What is the name of the main detective on Law and Order Criminal Intent?
    a. Dick Wolf
    b. Philip Fish
    c. Mac Duffy
    d. Robert Goren
    e. Don't know

22. In which city is Law and Order Criminal Intent set, and also filmed?
    a. Los Angeles
    b. New York City
    c. Detroit
    d. Miami
    e. Don't know

23. What division of the Police Department are the detectives assigned in Law and Order Criminal Intent?
    a. Vice
    b. Robbery
    c. Major Case Squad
    d. Homicide
    e. Don't know

24. What illness runs in Detective Goren's family?
    a. Depression
    b. Bipolar Disorder

c. Obsessive Compulsive Disorder
d. Schizophrenia
e. Don't know

25. In the episode "Yesterday" what was Maureen forced to admit to Goren and Eames?
    a. She was drugged
    b. She was raped
    c. She had an affair
    d. She altered the crime scene
    e. Don't know

26. While in the army, where was Detective Robert Goren stationed?
    a. Ghana
    b. Korea
    c. Mexico
    d. New Zealand
    e. Don't know

27. Detective Wheeler's mother worked as a _____ in order to raise her daughter.
    a. Waitress
    b. Factory worker
    c. Toy maker
    d. Law clerk
    e. Don't know

28. Detective Eames gave the ultimate gift. What did she do?
    a. Gave a winning lottery ticket to a homeless man.
    b. Ran a marathon for charity.
    c. Was the surrogate mother for her sister's baby.
    d. Donated her kidney to her niece.
    e. Don't know

29. Detective Mike Logan's mother suffered from which of the following?
    a. Night-blindness
    b. Cancer
    c. Alcoholism
    d. Depression
    e. Don't know

30. Detective Goren's father had a gambling problem. Where did he lose all his money?
    a. Slot machines
    b. Poker table
    c. Horse track

d. College football
e. Don't know

31. What route did Detective Logan take to get to Manhattan after he was "exiled" for hitting a congressman at city hall?
    a. Queensborough Bridge
    b. Staten Island Ferry
    c. Brooklyn Bridge
    d. Henry Hudson Parkway (Bronx)
    e. Don't know

32. Before joining Major Case Squad, Detective Goren worked in what division?
    a. Internal Affairs
    b. Homicide
    c. Highway Patrol
    d. Narcotics
    e. Don't know

33. When growing up, Detective Logan wanted to be a ….?
    a. Professional athlete
    b. Fire fighter
    c. Computer programmer
    d. Fighter pilot
    e. Don't know

34. Detective Eames' father carried/used one of these at work:
    a. Hammer
    b. Pistol
    c. Microscope
    d. Bar towel
    e. Don't know

35. Detective Goren's mother suffered from what illness?
    a. Multiple Sclerosis
    b. Blindness
    c. Schizophrenia
    d. Migraine headaches
    e. Don't know

36. Which of the following useless talents can Detective Eames brag about?
    a. She can insert her entire hand into her mouth.
    b. She can juggle four balls at once.
    c. She can name all 62 New York state counties in alphabetical order.
    d. She can eat a bag of popcorn in under two minutes.
    e. Don't know

37. Detective Goren's mother worked as a …?
    a. Court magistrate
    b. Librarian
    c. Car lot attendant
    d. Teacher
    e. Don't know

38. When Detective Logan's mother was dying, she would give him five dollars to do what?
    a. Light a candle in the church.
    b. Go to the theater.
    c. Get her medicine.
    d. Buy her books to read.
    e. Don't know

39. What happened to Detective Wheeler's father when she was ten?
    a. He died in a plane crash
    b. He disappeared
    c. He was sent away to prison
    d. He was in a serious car accident
    e. Don't know

40. Detective Logan's favorite partner when he was with the Homicide Department was:
    a. Detective Lennie Briscoe
    b. Detective Rey Curtis
    c. Detective Ed Green
    d. Detective Morris LaMotte
    e. Don't know

41. Detective Goren's mentor in criminal profiling was?
    a. Carl Centers
    b. Declan Gage
    c. Donovan Holbrook
    d. Danny Ross
    e. Don't know

42. In the episode "Probability", a down and out dad is killed after he tries to make right with his family. What weapon was used to kill him?
    a. Fishing knife
    b. 2x4
    c. Poison
    d. Baseball bat
    e. Don't know

43. In the episode "Poison", a nurse who is aspiring to open her own baby clothing store, sits idly as which member of her family stands trial for murdering many people with tainted medicine.
    a. Father
    b. Brother
    c. Mother
    d. Sister
    e. Don't know

44. A girl's adoptive parents are gunned down while under the Witness Protection Program ("The Good Child"). Her biological parents are found responsible for the murders partly because the mother is a kleptomaniac who was connected to the crime scene because she stole which item?
    a. Egg cup
    b. Antique spoon
    c. Wine glass
    d. Commemorative salt and paper shakers
    e. Don't know

45. In the episode "Eosphoros," Goren's playing with dead peoples' hands. What does he find on the dead kidnapper's hand?
    a. Gun shot residue
    b. Eczema
    c. 2nd degree burns
    d. Cocaine
    e. Don't know

46. A bridesmaid is bludgeoned to death in a dirty motel after she and another bridesmaid are snowed in. What was the bridesmaid's gift at the wedding?
    a. Crystal mug
    b. Box of chocolate
    c. Picture frame
    d. Gift certificate
    e. Don't know

47. In the episode, "Endgame," Goren and Eames find a serial killer's scrapbook that suggests he may have killed more women than previously thought. What is written at the beginning of the book?
    a. Mark Ford Brady
    b. My Vice
    c. Beauties
    d. The 80's
    e. Don't know

48. Logan picks a fight with an entire fire station at the beginning of "Maltese Cross." What was the New York Ledger's headline the next day?

a. NYPD vs. FDNY Smackdown!
b. Finest vs. Bravest
c. Cops Brawl at Fire Station
d. Can't We All Just Get Along?
e. Don't know

LAW & ORDER

49. What is the name of this executive assistant district attorney that stars on Law and Order?
    a. Jack McCoy
    b. Nick Falco
    c. Donald Cragen
    d. Max Greevey
    e. Don't Know

50. What is the name of this character who stars on Law and Order?
    a. Jack McCoy
    b. Bobby Simone
    c. Ben Stone
    d. Paul Robinette
    e. Don't know

51. This man works under Ben Stone as a defense attorney. What is his name?
    a. Nick Falco
    b. Jack McCoy
    c. Adam Schiff
    d. Paul Robinette
    e. Don't Know

52. What position does this man hold on the TV show he stars in?
    a. District Attorney
    b. Judge
    c. Detective
    d. Captain
    e. Don't know

53. Which of the following do not work at the office of the District Attorney?
    a. Claire Kincaid
    b. Nora Lewin
    c. Serena Southerlyn
    d. Anita Van Buren
    e. Don't know

54. Which of the following has not been paired with Jack McCoy?
    a. Anita Van Buren

b. Serena Southerlyn
c. Abbie Carmichael
d. Alexandra Eames
e. Don’t know

55. Which of the following are not partners?
a. Goren and Eames
b. Lewin and Cragen
c. Briscoe and Green
d. Munch and Tutoala
e. Don’t know

56. Which Assistant DA is divorced and has a child?
a. Abbie Carmichael
b. Jamie Ross
c. Paul Robinette
d. Connie Rubirosa
e. Don’t know

57. Which characters are recovering alcoholics?
a. Lewin and Robinette
b. Cerreta and Greevey
c. Briscoe and Cragen
d. Stone and McCoy
e. Don’t know

58. Which character is described as a "hang 'em all" Texan?
a. Ben Stone
b. Jamie Ross
c. Abbie Carmichael
d. Adam Schiff
e. Don’t know

59. "I can live with that." Which Assistant DA frequently uses this phrase when discussing sentence recommendations for the accused?
a. Jack McCoy
b. Ben Stone
c. Abbie Carmichael
d. Mike Logan
e. Don’t know

60. Which character had a daughter that died at the hands of a drug dealer?
a. Paul Cerreta
b. Lennie Briscoe
c. Nora Lewin
d. Ben Stone

e. Don't know

61. The detectives find out that Patrick Dunne had an additional connection to the incident. What is it?
    a. He had made threats to a doctor at the clinic
    b. He made a disguise for Mary to wear at the clinic
    c. His fingerprints were on a fake ID card Mary had with her
    d. He called the nurse and pretended Mary needed an appointment
    e. Don't know

62. Which defense attorney does Ben Stone(above) most often go up against in court?
    a. Shambala Green
    b. Arthur Gold
    c. Danielle Mellnick
    d. Arthur Branch
    e. Don't know

63. Why does Phil Cerreta leave the 27th precinct?
    a. He is demoted for attacking a defendant outside the courthouse.
    b. He moves from New York.
    c. He is shot.
    d. He retires; he is sick of crime.
    e. Don't know

64. Which of the following does **not** describe Claire Kincaid?
    a. She is a runner.
    b. She approves of the death penalty.
    c. She loves Chinese food.
    d. She clerked for a judge.

e. Don't know

65. Who was Detective Logan's first partner?
    a. Lennie Briscoe
    b. Max Greevy
    c. Rey Curtis
    d. Donald Cragen
    e. Don't know

66. How did ADA Claire Kinkaid die?
    a. She had terminal cancer
    b. She was shot in a robbery attempt
    c. She was hit and killed by a drunk driver
    d. She died in a plane crash
    e. Don't know

67. Why did Abby Carmichael leave her job?
    a. She decided to travel the world
    b. She accepted a job with the US Attorney's office
    c. She got married and moved to Philadelphia
    d. She decided to go to medical school
    e. Don't know

68. Why did Mike Logan get transferred?
    a. He wanted a change from New York
    b. He accepted a promotion
    c. He punched a politician
    d. He didn't get along with his partner
    e. Don't know

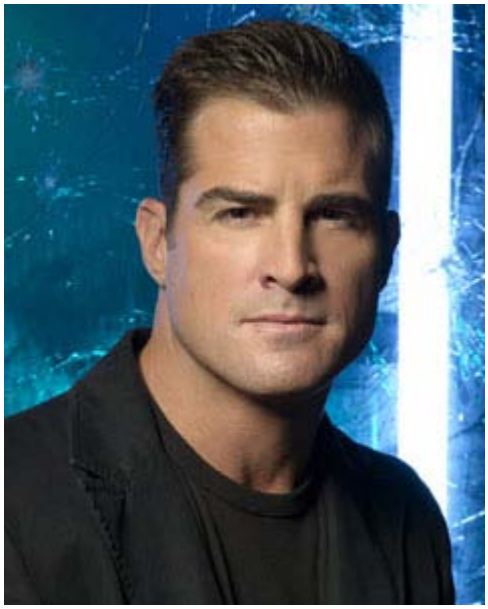
CSI

69. William Peterson plays which of the following characters on CSI?
    a. Nick Stokes
    b. Gil Grissom
    c. Warrick Brown
    d. David Hodges
    e. Don't know

70. Wendy Simms is a/an:
    a. Crime scene investigator
    b. DNA technician
    c. Supervisor
    d. Secretary
    e. Don't know

71. This character acts as the night shift supervisor. Her name on the show is:
    a. Sofia Curtis
    b. Sara Sidle
    c. Catherine Willows
    d. Holly Gribbs
    e. Don't know

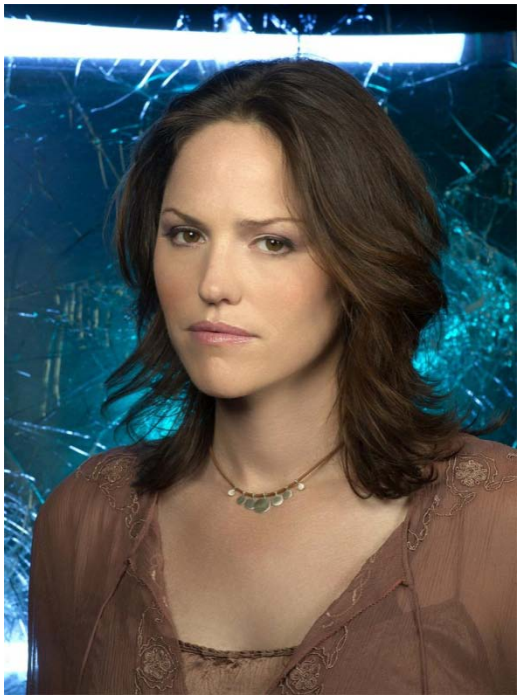
72. CSI follows which police department?
    a. Las Vegas Police Department
    b. Los Angeles Police Department
    c. Kansas City Police Department
    d. Salt Lake City Police Department
    e. Don't know



73. What position does this character hold on the TV show, CSI?
    a. DNA Technician
    b. Doctor
    c. Supervisor
    d. Crime Scene Investigator
    e. Don’t know

74. Two CSI’s are notorious for trying to impress Grissom, and have been called on it by him. Who are they?
    a. Warrick and Catherine
    b. Greg and Sara
    c. Greg and Nick
    d. Sara and Nick
    e. Don’t know

75. What is Grissom's full name?
    a. Jack Grissom Straight
    b. Gil (Gilbert) Grissom
    c. Grissom Gilbert
    d. Brandon Grissom
    e. Don’t know



76. What is this character's name?
    - **a. Sara Sidle**
    - b. Sofia Curtis
    - c. Catherine Willows
    - d. Riley Adams
    - e. Don't know

77. Which character was kidnapped and buried alive?
    - a. Sara Sidle
    - **b. Nick Stokes**
    - c. Gil Grissom
    - d. Warrick Brown
    - e. Don't know

78. Who had an addiction to gambling?
    - a. Danny
    - **b. Warrick**
    - c. Mac
    - d. Flack
    - e. Don't know

79. Which season nine player was known as "The Miniature Killer"?
    - a. John Grisham
    - **b. Natalie Davis**

c. Tom Clancy
d. Scott Turow
e. Don’t know

80. Gil Grissom is not just a forensic scientist, he is also a:
a. Poet
b. Lawyer
c. Entemologist
d. Doctor
e. Don’t know

81. Who got shot at the end of season 8?
a. Sara Sidle
b. Warrick brown
c. Nick Stokes
d. Jim Brass
e. Don’t know

82. In the episode 'Pledging Mr. Johnson' what was the pledge who later died forced to swallow?
a. Raw liver
b. Liquid paper
c. A live goldfish
d. A bottle of vodka
e. Don’t know

83. In the episode 'The Finger', Catherine is caught up in a $1 million kidnap plot. What is very distinctive about the kidnapper's appearance?
a. Rabbit mask
b. One eye
c. Acid burns
d. He was wearing nothing
e. Don’t know

84. There are a few episodes that include this one serial killer that murders men who were born on the 17th August. What is the name of this man?
a. Hank Peddigrew
b. Brad Johnson
c. Sid Goggle
d. Paul Millander
e. Don’t know

CSI: NEW YORK

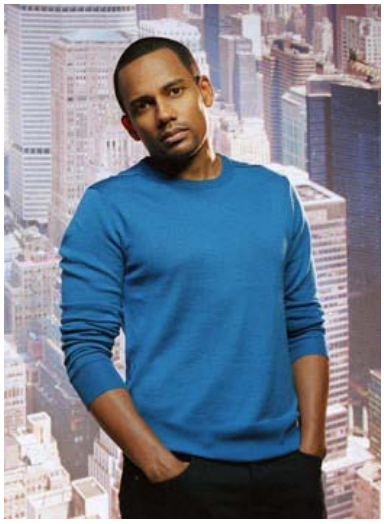
85. What is the name of this detective?
    a. Don Flack
    b. Mac Taylor
    c. Adam Ross
    d. Danny Messer
    e. Don't know

86. What is the name of this character on CSI?
    a. Ana Belknap
    b. Aiden Burn
    c. Lindsay Monroe
    d. Stella Bonasera
    e. Don't know

87. Who does Stella Bonasera works along side of?
    a. Danny Messner
    b. Adam Ross
    c. Mac Taylor
    d. Sheldon Hawkes
    e. Don't know

88. What position does Donald Flack hold on CSI New York?

a. Cop
b. Detective
c. CSI
d. Lab Tech
e. Don't know



89. What position does this man hold in CSI NY?

a. Doctor
b. Detective
c. Lab Technician
d. Police Officer
e. Don't know

90. What position does this man hold in CSI NY?

a. Doctor
b. Detective

c. Lab Technician
d. Police Officer
e. Don’t know

91. What is the name of this character on CSI New York?

a. Donald Flack
b. Mac Taylor
c. Adam Ross
d. Danny Messner
e. Don’t know

92. What is Don Flack Allergic to?

a. Spiders
b. Dogs
c. Cats
d. Snakes
e. Don’t know

93. What was Mac's wife's name?

a. Claire
b. Regina
c. Lindsay
d. Aiden
e. Don’t know

94. On CSI: NY, the character “Lindsay” is from which state?

a. Florida
b. Mississippi
c. Montana
d. New York

e. Don’t know

95. In the episode What You See is What You Get, where do Mac and Stella find the shooter from the coffee shop?
    a. In a trailer
    b. In the library
    c. In the sewers
    d. At the bank
    e. Don’t know

96. In the episode What You See is What You Get, what is found inside Mrs. Collin's mouth when she is found dead?
    a. Polyester
    b. A pastry
    c. Soap
    d. Paper
    e. Don’t know

97. In the episode Blink, How did LeAnn Goodman die?
    a. Shot
    b. Strangulation
    c. Stroke
    d. Starvation
    e. Don’t know

98. Why was Aiden Burn fired?
    a. She assaulted a criminal
    b. She had a falling out with Mac
    c. She released confidential information
    d. She tampered with evidence
    e. Don’t know

CSI: MIAMI

99. This man is head of the CSI Miami crime lab. What is his name?
    a. Frank Tripp
    b. Eric Delko
    c. Ryan Wolfe
    d. Horatio Caine
    e. Don't know

100. This women is also known as "bullet girl". What is her name?
    a. Natalia Boa Vista
    b. Tara Price
    c. Calleigh Duquesne
    d. Alexx Woods
    e. Don't know

101. What position does this character, Eric Delko, hold on CSI Miami?
   a. Doctor
   b. Fingerprint/Drug Identification
   c. Detective
   d. Ballistics Specialist
   e. Don't know

102. This woman is a DNA analyst. What is her name?
   a. Natalia Boa Vista
   b. Tara Price
   c. Calleigh Duquesne
   d. Alexx Woods
   e. Don't know

103. Which CSI investigator was planted by the FBI as a mole to gather evidence on the team?
   a. Horatio Caine
   b. Natalie Boa Vista
   c. Calleigh Duquense
   d. Eric Delko

e. Don’t know

104. Which character was killed in the line of duty?
a. Frank Tripp
b. Tim Speedle
c. Marisol Delko
d. Natalie Boa Vista
e. Don’t know

105. Whose wife gets shot and killed on their wedding day?
a. Horatio Caine
b. Eric Delko
c. Ryan Wolfe
d. Frank Tripp
e. Don’t know

106. Which CSI investigator is shot in the head, but recovers?
a. Ryan Wolfe
b. Calleigh Duquense
c. Frank Tripp
d. Eric Delko
e. Don’t know

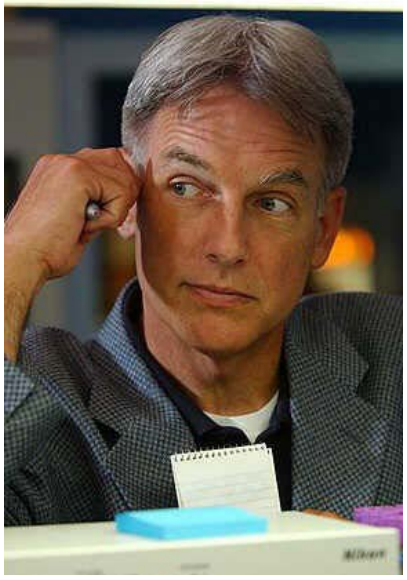
107. What is CSI's Calleigh Duquense's primary area of expertise?
a. Chemical Analysis
b. Fingerprinting
c. Pathology
d. Ballistics/Firearms
e. Don’t know

108. Which character is kidnapped by a serial killer who escapes from prison by switching id tags with another inmate?
a. Calleigh Duquense
b. Alex Woods
c. Marisol Delko
d. Horatio Caine
e. Don’t know

109. What is horatio’s nickname?
a. Redhead
b. H

c. C
d. Boss
e. Don't know

NCIS



110. This man, Jethro Gibbs, holds what position on NCIS?
a. Medical Examiner
b. Director
c. Special Agent
d. Officer
e. Don't know

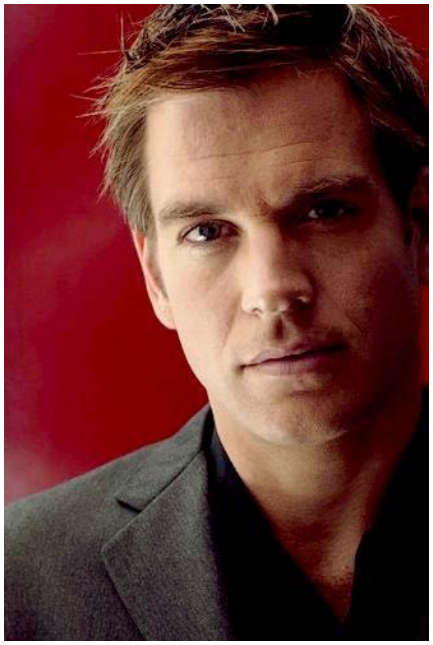
111. What is the name of this medical examiner and forensic expert?
a. Timothy McGee

b. Donald Mallard
c. Jethro Gibbs
d. Leon Vance
e. Don't know

112. What position does Ziva David hold on NCIS?
a. Laison Officer
b. Medical Examiner
c. Forensic Specialist
d. Special Agent
e. Don't know

113. What is the name of this character on the TV show, NCIS?
a. Anthony DiNozzo
b. Leon Vance

c. Timothy McGee
d. Jimmy Palmer
e. Don’t know



114. What is the name of this special agent who stars on the TV show, NCIS?
a. Jethro Gibbs
b. Anthony DiNozzo
c. Timothy McGee
d. Donald Mallard
e. Don’t know

115. How did Agent Todd leave NCIS?
a. She got shot
b. She quit

c. She was fired
d. She retired
e. Don’t know

116. What is Agent Dinozzo’s (pictured above) nickname for Agent McGee?
a. Rookie
b. Freshie
c. Newbie
d. Probie
e. Don’t know

117. Whom does Agent McGee (pictured above) date for a while during the first season?
a. Abby Sciuto
b. Jeralyn Summer
c. Kate Todd
d. Gina Lombach

e. Don’t know

118. Who acts as the team leader on NCIS?

a. Jethro Bibbs
b. Anthony Dinozzo
c. Timothy McGee
d. Donald Mallard
e. Don’t know

119. What is Dr. Mallard’s nickname?

a. Buddy
b. Doc
c. Ducky
d. Bones
e. Don’t know

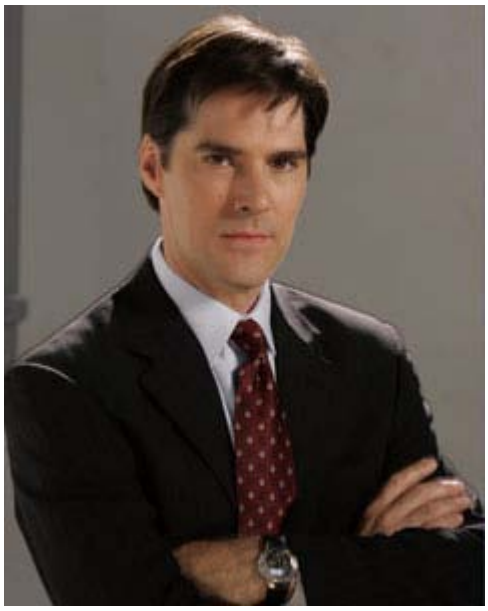
120. Who is Dr. Mallards assistant?

a. Thomas Morrow
b. Gerald Jackson
c. Trent Kort
d. Jimmy Palmer
e. Don’t know

121. During season four, who was Agent Lee secretly dating?

a. Jimmy Palmer
b. Tony Dinozzo
c. Gerald Jackson
d. Dr. Mallard
e. Don’t know

CRIMINAL MINDS



122. What is the name of this supervisory special agent and unit chief?
    a. Derek Morgan
    b. David Rossi
    c. Spencer Reid
    d. Aaron Hotchner
    e. Don't know

123. This man acts as a doctor on the show, Criminal Minds. What is his name?
    a. Derek Morgan
    b. David Rossi
    c. Spencer Reid

d. Aaron Hotchner
e. Don’t know

124. Penelope Garcia holds what position on Criminal Minds?
a. Special Agent
b. Computer Technician
c. Doctor
d. Criminal Profiler
e. Don’t know

125. What is the name of this agent?
a. Aaron Hotchner
b. Derek Morgan
c. Spencer Reid
d. David Rossi
e. Don’t know

126. This woman acts as the team's liaison with the media and local police agencies. What is her name?

a. Jennifer Jareau
b. Emily Prentiss
c. Penelope Garcia
d. Haley Hotchner
e. Don’t know

127. What is the name of this supervisory special agent?

a. David Rossi
b. Derek Morgan
c. Spencer Reid
d. Jason Gideon
e. Don’t know

128. In season 3, Agent David Rossi was deeply involved in a case regarding what?
   a. 3 children who watched their parents get murdered
   b. A terrorist attack that involved a few victims who were his relatives
   c. A serial killer who killed 9 people and was still on the loose
   d. The murder of several high school classmates
   e. Don't know

129. In the season 2 episode 'Empty Planet', which city does the sci-fi obsessed bomber attack?
   a. Vancouver
   b. San Francisco
   c. Seattle
   d. Washington D.C.
   e. Don't know

130. Which martial art does Special Agent Derek Morgan hold a black belt in?
   a. Taekwondo
   b. Karate
   c. Judo
   d. Tai Chi
   e. Don't know

131. Who is the father of JJ's baby?
   a. Detective William LaMontagne Jr.
   b. Special Agent Dr. Spencer Reid
   c. Special Agent David Rossi
   d. Special Agent/Unit Chief Aaron Hotchner
   e. Don't know

132. In season 4, Reid and Prentiss go undercover to a cult as child services employees. What ends up happening?
   a. They get shot
   b. They discover a series of murders that occurred
   c. They get held captive
   d. They arrest the cult leader and give him a life sentence
   e. Don't know

133. How was Hotch's hearing damaged?
   a. By a car explosion
   b. He had mumps as a child
   c. He suffered a head injury
   d. It is due to a medical illness
   e. Don't know

134. By what word are suspects referred to on the show?

a. Unknowns
b. Unspects
c. Unsubs
d. Underdogs
e. Don't know

135. What pet name does Technical Analyst Penelope Garcia use when talking to Special Agent Derek Morgan?
a. Sweet Cheeks
b. Tiger Feet
c. Honey Bunny
d. Sugar Buns
e. Don't know

WITHOUT A TRACE

136. What is the name of this character that stars on Without a Trace?
   a. Elena Delgado
   b. Vivian Johnson
   c. Samantha Spade
   d. Clare Bryson
   e. Don't know

137. What is the name of this character that stars on Without a Trace?
   a. Danny Taylor
   b. Martin Fitzgerald
   c. Jack Malone
   d. Steven Weber
   e. Don't know

138. What is the name of this character on the TV show, Without a Trace?
   a. Danny Taylor
   b. Martin Fitzgerald
   c. Jack Malone
   d. Steven Weber
   e. Don't know

139. What is the name of this character on the TV show, Without a Trace?
   a. Danny Taylor
   b. Martin Fitzgerald
   c. Jack Malone
   d. Steven Weber
   e. Don't know

140. Who is the special agent in charge on the TV show, Without a Trace?
   a. Danny Taylor
   b. Martin Fitzgerald
   c. Jack Malone
   d. Steven Weber
   e. Don't know

141. What is the show, Without a Trace, about?
   a. Missing persons
   b. Murder investigations
   c. Drug busts
   d. President's security
   e. Don't know

142. Which of the following characters is the Special Agent in charge on the TV show,Without a Trace?
   a. Danny Taylor
   b. Elena Delgado
   c. Martin Fitzgerald
   d. Jack Malone
   e. Don't know

143. In season 2, who gets promoted when Jack Malone moves to Chicago?
   a. Martin Fitzgerald
   b. Vivian Johnson
   c. Danny Taylor

d. Samantha Spade
e. Don’t know

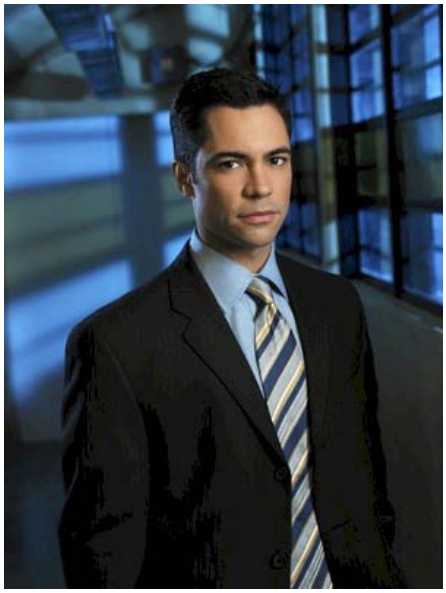
144. In season 5, what happened to Jack?
a. He got married
b. He had a major accident and lost his memory
c. He got demoted
d. He was abducted and tortured
e. Don’t know

145. This woman has a daughter named Sofia, and dates Special Agent Danny Taylor. Who is she?
a. Elena Delgado
b. Vivian Johnson
c. Samantha Spade
d. Clare Bryson
e. Don’t know

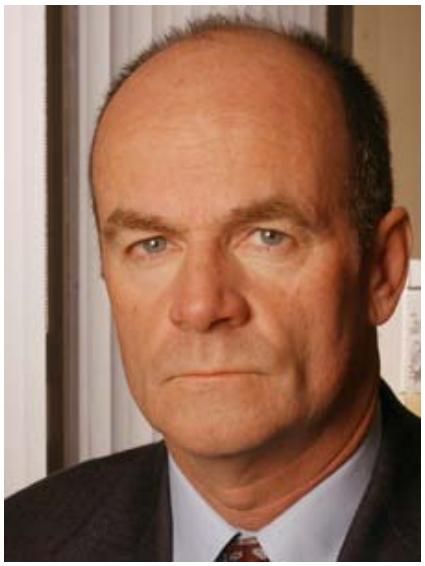
COLD CASE

146. Which woman is the only female detective on the TV show, Cold Case?
   a. Kat Miller
   b. Lilly Rush
   c. Fannie Ching
   d. Christina Rush
   e. Don't know

147. What is the name of this detective who stars on Cold Case?
   a. Will Jeffries
   b. Nick Vera
   c. John Stillman
   d. Scotty Valens
   e. Don't know



148. This man is Lilly Rush's partner. What is his name?
   a. Nick Vera
   b. John Stillman
   c. Will Jeffries
   d. Scotty Valens
   e. Don't know



149. What position does this man hold on the show, Cold Case?
   a. Lieutenant
   b. Detective
   c. Special Agent
   d. Medical Examiner
   e. Don't know

150. What is the name of this detective who stars on the TV show, Cold Case?
   a. Will Jeffries
   b. Nick Vera
   c. John Stillman
   d. Scotty Valens
   e. Don't know

151. What is the name of this detective on the TV show, Cold Case?
   a. Lilly Rush
   b. Josie Sutton
   c. Kat Miller
   d. Alexandra Thomas
   e. Don't know

152. Which detective is Lilly Rush's partner?
   a. Nick Vera
   b. Scotty Valens
   c. John Stillman
   d. Will Jeffries
   e. Don't know

153. Why is detective Jeffries obsessed with road safety?
   a. His wife died after being hit by a truck
   b. He was hit by a car as a child

c. He witnessed his former partner get killed in a car crash
d. He has obsessive compulsive disorder
e. Don't know

154. Which character is a heavy smoker and is always trying to quit?
a. Scotty Valens
b. Kat Miller
c. Will Jeffries
d. Lilly Rush
e. Don't know

THE MENTALIST

155. In the show The Mentalist what was this characters profession before Joining the California Bureau of Investigation
    a. Private Investigator
    b. Psychic
    c. Lawyer
    d. Los Angeles Police officer
    e. Don't Know

156. On the Mentalist who killed Patrick Jane's family?
    a. Black Ron
    b. Blue Jake
    c. Red Jake
    d. Red John
    e. Don't Know

157. What is the name of this character that stars on The Mentalist?

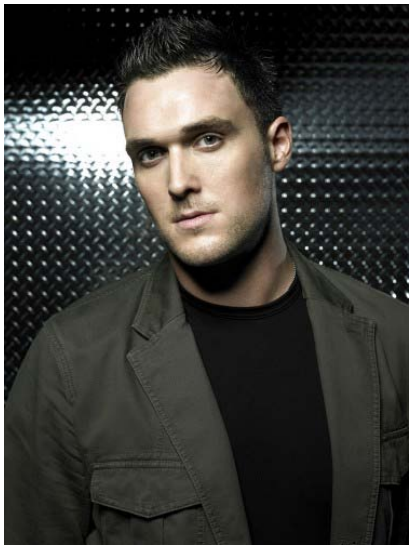
a. Kimball Cho
b. Tim Kang
c. Enlai King
d. Peter Chang
e. Don't Know

158. At a young age Teresa Lisbon had to take over her mother's role and care for her family. Why did she have to do this?

a. Her mother ran off with a lover
b. Her mother was always very sick and was forced to stay in bed
c. Her mother was killed by a drunk driver
d. Her mother was a heroin addict and couldn't care for the family herself
e. Don't know

159. In episode #9 of the Mentalist Patrick Jane asks Teresa Lisbon to imagine a shape within a shape. What does she imagine?

a. A circle within a square
b. A square within a triangle
c. A triangle within a circle
d. A triangle within a square
e. Don't Know



160. On the show The Mentalist what type of specialist is this character?
   a. Arson
   b. Blood splatter
   c. Ballistics
   d. Homicide
   e. Don't Know

161. Wayne Rigsby's emotions toward which other character on The Mentalist causes him to be overprotective of them?
   a. Grace Van Pelt
   b. Patrick Jane.
   c. Virgil Minelli
   d. Teresa Lisbon
   e. Don't know

162. Not including The Mentalist's first episode titled "Pilot" the other first 13 episodes all have one word in common in their titles. What is the word?
   a. Mental
   b. Flame
   c. Red
   d. California
   e. Don't know

163. In episode #12 of the mentalist Patrick Jane sits on a boy's bike. What color was the bike?
   a. Blue
   b. Orange
   c. Pink
   d. Red
   e. Don't know

164. Which Character on The mentalist is the Administrator of the California Bureau of Investigation?
   a. Patrick Jane
   b. Virgil Minelli
   c. Corey Green
   d. Grace Van Pelt
   e. Don't know

165. Where is Grace van Pelt from?
   a. New York
   b. Nevada
   c. Missouri
   d. Iowa
   e. Don't know

166. The main antagonist on The Mentalist is a serial killer. What does the killer do at all of his crime scenes?
   a. Removes his victims fingers
   b. Draws a smiley face with his victims blood
   c. Leaves a doll next to his victims' bodies.
   d. Carves his name into the wall
   e. Don't know

167. At the beginning of the second episode of The Mentalist where does the California Bureau of Investigation investigate the body of a murder victim?
   a. On the side of the freeway
   b. On the roof of the victim's house
   c. In a vineyard

d. At an amusement park
e. Don’t know

168. In episode 8 of the Mentalist, what is the name of the little girl who is given to her grandparents who are told that they are all she has in the world?

a. Chelsea
b. Anna
c. Gina
d. Kaylee
e. Don’t know

169. In episode 3 of The Mentalist, what activity is Patrick doing when he draws a crowd?

a. Building a sandcastle
b. playing a piano
c. starting a fire
d. chasing a suspect
e. Don’t know

APPENDIX D. JUROR BIAS SCALE

Scale Items and Directions: This is a questionnaire to determine people's attitudes and beliefs on a variety of general legal issues. Please answer each statement by giving as true a picture of your own position as possible. Please complete the survey by circling the number of the answer you select.

1= Strongly Agree, 2= Somewhat Agree, 3= Neutral
4= Somewhat Disagree, 5=Strongly Disagree

1. Appointed judges are more competent than elected judges.
2. A suspect who runs from the police most probably committed the crime.
3. A defendant should be found guilty if only 11 out of 12 jurors vote guilty.
4. Most politicians are really as honest as humanly possible.
5. Too often jurors hesitate to convict someone who is guilty out of pure sympathy.
6. In most cases where the accused presents a strong defense, it is only because of a good lawyer.
7. In general, children should be excused for their misbehavior.
8. The death penalty is cruel and inhumane.
9. Out of every 100 people brought to trial at least 75 are guilty of the crime with which they are charged.
10. For serious crimes like murder, a defendant should be found guilty if there is a 90% chance that he committed the crime.
11. Defense lawyers don't really care about guilt or innocence, they are just in business to make money.
12. Generally, the police make an arrest only when they are sure about who committed the crime.
13. Circumstantial evidence is too weak to use in court.
14. Many accident claims filed against insurance companies are phony.
15. The defendant is often a victim of his own bad reputation.
16. If the grand jury recommends that a person be brought to trial, then he probably committed the crime.

17. Extenuating circumstances should not be considered- if a person commits a crime, then that person should be punished.

18. Hypocrisy is on the increase in society.

19. Too many innocent people are wrongfully imprisoned.

20. If a majority of the evidence- but not all of it- suggests that the defendant committed the crime, the jury should vote *not guilty.*

21. If the defendant committed a victimless crime, like gambling or possession of marijuana, he should never be convicted.

22. Some laws are made to be broken.

APPENDIX E. GENERAL ATTITUDES TOWARD THE LEGAL SYSTEM

Scale Items and Directions: Each of the following reflects an opinion about the legal system and the courts. Please indicate how much you agree or disagree with each statement by circling the appropriate number below the statement. Use the following scale:

-3=strongly disagree, -2=moderately disagree, -1=slightly disagree, 0=neutral, +1=slightly agree, +2=moderately agree, +3=strongly agree

1. The punishments given to criminals accurately reflect the crimes they have committed.

2. The skills of lawyers determine the verdicts more than the truth.

3. High standards of honesty and justice prevail in American courts.

4. A defendant accused of child molestation will receive a fair trial.

5. If accused of a crime, I feel confident that I would receive a fair trial.

6. Too many criminals are out on parole.

7. The media unfairly biases potential jurors against as defendant by publicizing information about him or her prior to trial.

8. Police brutality is more common than people think.

9. If a defendant has enough money he or she will be able to but an acquittal.

10. As a group, judges are more impartial and fair than people in general.

11. The courts system is “color blind”; race of the defendant does not influence the outcome.

12. Juries base their decisions only on the evidence given in court.

13. Defendants who are guilty often “get off” because of technicalities.

14. I think that plea bargaining is a reasonable way to serve justice, given the demands on the court’s time.

15. Claims that the police have “planted” evidence are almost always made by guilty people.

16. If you have a lot of money, you have a good chance of being able to ‘get off” even if you committed the crime.

17. Too many criminals are let free because of prison overcrowding.

18. Only those who committed a crime are ever convicted.

19. Judges are more lenient in the sentences they give if the defendant is wealthy.

20. Too many criminals slip through the cracks because of loopholes in the legal system.

21. Jurors assume that a defendant is innocent until he or she is proved guilty.

22. Too often, criminals are successful in pleading that they are not guilty by reason of insanity.

23. Jurors are often intimidated by defendants who are known criminals.

24. When a suspect confesses to the police, he or she does so voluntarily.
25. Jurors are capable of accurately determining the innocence or guilt of a defendant.

26. Since witnesses at a trial are under oath, you can assume they are telling the truth.

27. The police do a good job of investigating crimes.

28. Court appointed attorneys and public defenders do as good a job as personally hired attorneys.

29. Defense attorneys waste too much time and energy helping people to get off easy.

30. Parole boards let too many still-dangerous offenders out on parole.

31. Pleas of insanity are often just ploys to get off easy.

32. Police will often keep a suspect in custody even when they don’t have any firm evidence against him.

33. The Supreme Court is, by and large, an effective guardian of the Constitution.

34. Upstanding citizens have nothing to fear from the police.

35. Most prosecuting attorneys have a strong sadistic streak.

36. All too often, minority group members do not get fair trials.

APPENDIX F. GENERAL EXPECTATIONS FOR EVIDENCE

These questions ask you to identify what types of evidence you expect will be presented to you in a criminal case if you are selected as a juror.

1=Yes
2=No
3=Unsure

1. Do you expect that the prosecution will gather and present the following types of evidence in **every criminal case?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness
    c. Circumstantial evidence
    d. Scientific evidence of some kind
    e. DNA evidence
    f. Fingerprint evidence
    g. Ballistics or other firearms laboratory

2. Do you expect that the prosecution will gather and present the following types of evidence in a case where the defendant is charged with **murder or attempted murder?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness
    c. Circumstantial evidence
    d. Scientific evidence of some kind
    e. DNA evidence
    f. Fingerprint evidence
    g. Ballistics or other firearms laboratory

3. Do you expect that the prosecution will gather and present the following types of evidence in a case where the defendant is charged with a **physical assault of any kind?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness
    c. Circumstantial evidence
    d. Scientific evidence of some kind
    e. DNA evidence
    f. Fingerprint evidence
    g. Ballistics or other firearms laboratory

4. Do you expect that the prosecution will gather and present the following types of evidence in a case where the defendant is charged with a **rape or other criminal sexual conduct?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness

c. Circumstantial evidence
d. Scientific evidence of some kind
e. DNA evidence
f. Fingerprint evidence
g. Ballistics or other firearms laboratory

5. Do you expect that the prosecution will gather and present the following types of evidence in a case where the defendant is charged with a **breaking and entering?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness
    c. Circumstantial evidence
    d. Scientific evidence of some kind
    e. DNA evidence
    f. Fingerprint evidence
    g. Ballistics or other firearms laboratory

6. Do you expect that the prosecution will gather and present the following types of evidence in a case where the defendant is charged with a **any theft?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness
    c. Circumstantial evidence
    d. Scientific evidence of some kind
    e. DNA evidence
    f. Fingerprint evidence
    g. Ballistics or other firearms laboratory

7. Do you expect that the prosecution will gather and present the following types of evidence in a case where the defendant is charged with a **any crime involving a gun?**
    a. Eyewitness testimony from the alleged victim
    b. Eyewitness testimony from at least one other witness
    c. Circumstantial evidence
    d. Scientific evidence of some kind
    e. DNA evidence
    f. Fingerprint evidence
    g. Ballistics or other firearms laboratory

APPENDIX G. BURDEN OF PROOF

These questions ask you how likely you are to find the defendant guilty or not guilty based on the types of evidence presented by the prosecution and the defense. At the beginning of a criminal trial, the judge instructs the jury as follows:
(1) A person accused of a crime is presumed to be innocent. This means that you must start with the presumption that the defendant is innocent. The presumption continues throughout the trial and entitles the defendant to a verdict of not guilty unless you are satisfied beyond a reasonable doubt that [he/she] is guilty. (2) Every crime is made up of parts called elements. The prosecutor must prove each element of the crime beyond a reasonable doubt. The defendant is not required to prove [his/her] innocence or to do anything. If you find that the prosecutor has not proven every element beyond a reasonable doubt, then you must find the defendant not guilty. (3) A reasonable doubt is a fair, honest doubt growing out of the evidence or lack of evidence. It is not merely an imaginary or possible doubt, but a doubt based on a reason and common sense. A reasonable doubt is just that--a doubt that is reasonable, after a careful and considered examination of the facts and circumstances of this case

1=I would find the defendant guilty
2=I would probably find the defendant guilty
3=I am not sure what I would do
4=I would probably find the defendant not guilty
5=I would find the defendant not guilty

1. In **any criminal case**, the prosecutor presents the testimony of the alleged victim and other witnesses but does not present any scientific evidence.
2. In **any criminal case**, the prosecutor presents circumstantial evidence but does not present any scientific evidence.
3. In a case charging the defendant with **murder or attempted murder**, the prosecutor presents the testimony of an eyewitness and other witnesses but does not present any scientific evidence.
4. In a case charging the defendant with **murder or attempted murder**, the prosecutor presents circumstantial evidence but does not present any scientific evidence.
5. In a case charging the defendant with **a physical assault of any kind**, the prosecutor presents the testimony of the alleged victim and other witnesses but does not present any scientific evidence.
6. In a case charging the defendant with **a physical assault of any kind**, the prosecutor presents circumstantial evidence but does not present any scientific evidence.
7. In a case charging the defendant with **rape or other criminal sexual misconduct**, the prosecutor presents the testimony of the alleged victim but does not present any scientific evidence.
8. In a case charging the defendant with **murder or attempted murder**, the prosecutor presents the testimony of an eyewitness and other witnesses but does not present any **DNA evidence**.

9. In a case charging the defendant with **a physical assault of any kind**, the prosecutor presents the testimony of the alleged victim and other witnesses but does not present any **DNA evidence.**
10. In a case charging the defendant with **rape or other criminal sexual misconduct,** the prosecutor presents the testimony of the alleged victim but does not present any **DNA evidence.**
11. In a case charging the defendant with **breaking and entering,** the prosecutor presents eyewitness testimony but does not present any **fingerprint evidence.**
12. In a case charging the defendant with **any theft**, the prosecutor presents eyewitness testimony but does not present any **fingerprint evidence.**
13. In a case charging the defendant with **any crime involving a gun,** the prosecutor presents the eyewitness testimony but does not present any **ballistics or other firearms laboratory evidence.**

APPENDIX H. RETROSPECTIVE EXPECTATIONS FOR TRIAL EVIDENCE (RETE)

1. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   Eyewitness tesimony from at least one witness
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

2. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   Eyewitness tesimony from more than one witness (others at the party)
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

3. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   Circumstantial evidence (i.e., evidence in a case which can be used to draw inferences about a series of events; also known as indirect evidence).
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

4. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   DNA evidence (in general)
   1. No expectations
   2. Low
   3. Moderate

4. High
5. Very high

5. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   DNA evidence from the victim
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

6. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   DNA evidence from the defendant
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

7. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   DNA evidence from all those involved in the incident
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

8. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   Ballistics evidence (in general)
   1. No expectations
   2. Low
   3. Moderate
   4. High

5. Very high

9. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

   Ballistics evidence matching the gun at the party to the bullets used to shoot Sandoval's van
   1. No expectations
   2. Low
   3. Moderate
   4. High
   5. Very high

10. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Fingerprint evidence (in general)
    1. No expectations
    2. Low
    3. Moderate
    4. High
    5. Very high

11. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Fingerprint evidence from the knife
    1. No expectations
    2. Low
    3. Moderate
    4. High
    5. Very high

12. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Fingerprint evidence from the log (allegedly held by the victim prior to the stabbing)
    1. No expectations
    2. Low
    3. Moderate

4. High
5. Very high

13. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Fingerprint evidence from the gun
    1. No expectations
    2. Low
    3. Moderate
    4. High
    5. Very high

14. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Gun shot residue test evidence (to help determine who fired the gun)
    1. No expectations
    2. Low
    3. Moderate
    4. High
    5. Very high

15. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Blood spatter analysis (to help determine how the stabbing occurred based on pattern of blood in house and on persons involved)
    1. No expectations
    2. Low
    3. Moderate
    4. High
    5. Very high

16. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Toxicology reports (measures alcohol, drugs, etc. ingested)
    1. No expectations
    2. Low
    3. Moderate

4. High
5. Very high

17. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    Lie detector test evidence
    1. No expectations
    2. Low
    3. Moderate
    4. High
    5. Very high

18. What expectations DID YOU HAVE, PRIOR TO THE TRIAL, that the prosecution would gather and present the following types of evidence in the trial that you just watched?

    A detailed reconstruction of the crime provided by a member of the crime scene investigation unit
    1. No expectations
    2 none
    3 none
    4 none
    5 none
    6 none
    7 Very well

APPENDIX I. MET EXPECTATIONS QUESTIONNAIRE

1. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   Eyewitness tesimony from at least one witness
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

2. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   Eyewitness tesimony from more than one witness (others at the party)
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

3. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   Circumstantial evidence (i.e., evidence in a case which can be used to draw inferences about a series of events; also known as indirect evidence).
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

4. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   DNA evidence (in general)
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

5. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   DNA evidence from the victim
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

6. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   DNA evidence from the defendant
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

7. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   DNA evidence from all those involved in the incident
   1. Not at all

2 none
3 none
4 none
5 none
6 none
7 Very well

8. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   Ballistics evidence (in general)
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

9. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

   Ballistics evidence matching the gun at the party to the bullets used to shoot Sandoval's van
   1. Not at all
   2 none
   3 none
   4 none
   5 none
   6 none
   7 Very well

10. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

    Fingerprint evidence (in general)
    1. Not at all
    2 none
    3 none
    4 none
    5 none
    6 none

7 Very well

11. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

    Fingerprint evidence from the knife
    1. Not at all
    2 none
    3 none
    4 none
    5 none
    6 none
    7 Very well

12. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

    Fingerprint evidence from the log (rumored to have been held by the victim prior to the stabbing)
    1. Not at all
    2 none
    3 none
    4 none
    5 none
    6 none
    7 Very well

13. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

    Fingerprint evidence from the gun
    1. Not at all
    2 none
    3 none
    4 none
    5 none
    6 none
    7 Very well

14. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

Gun shot residue test evidence (to help determine who fired the gun)

1. Not at all
2 none
3 none
4 none
5 none
6 none
7 Very well

15. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

Blood spatter analysis (to help determine how the stabbing occurred based on pattern of blood in house and on persons involved)

1. Not at all
2 none
3 none
4 none
5 none
6 none
7 Very well

16. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

Toxicology reports (measures alcohol, drugs, etc. ingested)

1. Not at all
2 none
3 none
4 none
5 none
6 none
7 Very well

17. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

Lie detector test evidence

1. Not at all
2 none
3 none

4 none
5 none
6 none
7 Very well

18. After watching the trial, did the prosecution meet your expectations regarding the following types of evidence that were presented against the defendant in this case?

A detailed reconstruction of the crime provided by a member of the crime scene investigation unit

1. Not at all
2 none
3 none
4 none
5 none
6 none
7 Very well

APPENDIX J. ANALYSIS OF TRIAL & VERDICT

The following questions ask about your perceptions of the trial, and specifically the evidence presented by both the defense and the prosecution. Please answer each question as honestly as possible using the scales provided.

1. Please describe your perceptions of the prosecution's overall case. Please discuss both strengths and weaknesses, especially as they apply to the eyewitnesses they used, expert witnesses, scientific/forensic evidence, and opening and closing statements.
2. Please describe your perceptions of the defense's overall case. Please discuss both strengths and weaknesses, especially as they apply to the eyewitnesses they used, expert witnesses, scientific/forensic evidence, and opening and closing statements.
3. The burden of proof is on the prosecution to prove that this was not a case of self-defense. Were they able to prove the case beyond a reasonable doubt? Why or why not?

You are now going to be asked to enter a verdict in this case. You may use the jury instructions to aid you in this process. It is very important that you enter a verdict for this case. After you enter a verdict you are going to be asked a series of questions specific to the trial you just viewed. Please follow the instructions presented on the monitor. Thank you.

4. Please select a verdict now.
    A. Not guilty (self-defense)
    B. Guilty (manslaughter)
    C. Guilty (second-degree murder)
    D. Guilty (first-degree murder)

APPENDIX K. NEED FOR COGNITION

Instructions: For each of the statements below please indicate to what extent the statement is characteristic of you. Please use the following scale:

1=extremely uncharacteristic of you (not at all like you)
2=somewhat uncharacteristic
3=uncertain
4=somewhat characteristic
5=extremely characteristic of you (very much like you)

1. I would prefer complex to simple problems.
2. I like to have the responsibility of handling a situation that requires a lot of thinking.
3. Thinking is not my idea of fun.
4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.
5. I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something.
6. I find satisfaction in deliberating hard and for long hours.
7. I only think as hard as I have to.
8. I prefer to think about small daily projects than long-term ones.
9. I like tasks that require little thought once I've learned them.
10. The idea of relying on thought to make my way to the top appeals to me.
11. I really enjoy a task that involves coming up with new solutions to problems.
12. Learning new ways to think doesn't excite me very much.
13. I prefer my life to be filled with puzzles that I must solve.
14. The notion of thinking abstractly is appealing to me.
15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.
16. I feel relief rather than satisfaction after completing a task that required a lot of mental effort.
17. It's enough for me that something gets the job done; I don't care how or why it works.
18. I usually end up deliberating about issues even when they do not affect me personally.

APPENIX L. SENSATION-SEEKING SCALE

Directions: Each of the items below contains two choices A and B. Please indicate which of the choices most describes your likes or the way you feel. In some cases, you may find items in which both choices describe your likes or feelings. Please choose the one that better describes your likes or feelings. In some cases, you may find items in which you do not like either choice. In these cases marked the choice you dislike the least. Do not leave any items blank. It is important you respond to all items with only one choice, A or B. we are interested only in your likes or feelings, not in how others feel about these things or how one is supposed to feel. There are no correct or incorrect answers as in other kinds of tests. Work quickly and give an honest appraisal of yourself.

1. A. I like “wild” uninhibited parties.
   B. I prefer quiet parties with good conversation.
2. A. There are some movies I enjoy seeing a second or even third time.
   B. I can’t stand watching a movie that I've seen before.
3. A. I often wish I could be a mountain climber.
   B. I can't understand people who risk their necks climbing mountains.
4. A. I dislike all body odors.
   B. I like some of the earthy body smells.
5. A. I get bored seeing the same old faces.
   B. I like the comfortable familiarity of everyday friends.
6. A. I like to explore a strange city or section of town by myself, even if it means getting lost.
   B. I prefer a guide when I am in a place I don't know well.
7. A. I dislike people who do or say things just to shock or upset others.
   B. When you can predict almost everything a person will do and say he or she must be a bore.
8. A. I usually don't enjoy a movie or play where I can predict what will happen in advance.
   B. I don't mind watching a movie or play where I can predict what will happen in advance.
9. A. I have tried marijuana or would like to.
   B. I would never smoke marijuana.
10. A. I would not like to try any drug which might produce strange and dangerous effects on me.
    B. I would like to try some of the drugs that produce hallucinations.
11. A. A sensible person avoids activities that are dangerous.
    B. I sometimes like to do things that are a little frightening.
12. A. I dislike “swingers” (people who are uninhibited and free about sex).
    B. I enjoy the company of real “swingers”.
13. A. I find that stimulants make me uncomfortable.
    B. I often like to get high (drinking liquor or smoking marijuana).
14. A. I like to try new foods that I have never tasted before.
    B. I order the dishes with which I am familiar so as to avoid disappointment and unpleasantness.

15. A. I enjoy looking at home movies, videos, or travel slides.
    B. Looking at someone's home movies, videos, or travel slides bores me tremendously.
16. A. I would like to take up the sport of water skiing.
    B. I would not like to take up water skiing.
17. A. I would like to try surfboard riding.
    B. I would not like to try surfboard riding.
18. A. I would like to take off on a trip with no preplanned or definite routes, or timetables.
    B. When I go on a trip I like to plan my route and timetable fairly carefully.
19. A. I prefer the "down to earth" kinds of people as friends.
    B. I would like to make friends in some of the "far-out" groups like artists or "punks".
20. A. I would not like to learn to fly an airplane.
    B. I would like to learn to fly an airplane.
21. A. I prefer the surface of the water to the depths.
    B. I would like to go scuba diving.
22. A. I would like to meet some persons who are homosexual (men or women).
    B. I stay away from anyone I suspect of being "gay" or "lesbian."
23. A. I would like to try parachute jumping.
    B. I would never want to try jumping out of a plane, with or without a parachute.
24. A. I prefer friends who are excitingly unpredictable.
    B. I prefer friends who are reliable and predictable.
25. A. I am not interested in experience for its own sake.
    B. I like to have new and exciting experiences and sensations even if they are a little frightening, unconventional, or illegal.
26. A. The essence of good art is in its clarity, symmetry of form, and harmony of colors.
    B. I often find beauty in the "clashing" colors and irregular forms of modern paintings.
27. A. I enjoy spending time in the familiar surroundings of home.
    B. I get very restless if I have to stay around home for any length of time.
28. A. I like to dive off the high board.
    B. I don't like the feeling I get standing on the high board (or I don't go near it at all).
29. A. I like to date persons who are physically exciting.
    B. I like to date persons who share my values.
30. A. Heavy drinking usually ruins a party because some people get loud and boisterous.
    B. Keeping the drinks full is the key to a good party.
31. A. The worst social sin is to be rude.
    B. The worst social sin is to be a bore.
32. A. A person should have considerable sexual experiences before marriage.
    B. It's better if two married persons begin their sexual experience with each other.
33. A. Even if I had the money, I would not care to associate with flighty rich persons in the "jet set."

B. I could conceive of myself seeking pleasures around the world with the "jet set."

34. A. I like people who are sharp and witty even if they do sometimes insult others.
B. I dislike people who have their fun at the expense of hurting the feelings of others.

35. A. There is altogether too much portrayal of sex in movies.
B. I enjoy watching many of the "sexy" scenes in movies.

36. A. I feel best after taking a couple of drinks.
B. Something is wrong with people who need liquor to feel good.

37. A. People should dress according to some standard of taste, neatness, and style.
B. People should dress in individual ways even if the effects are sometimes strange.

38. A. Sailing long distances in small sailing crafts is foolhardy.
B. I would like to sail a long distance in a small but seaworthy sailing craft.

39. A. I have no patience with dull or boring persons.
B. I find something interesting in almost every person I talk to.

40. A. Skiing down a high mountain slope is a good way to end up on crutches.
B. I think I would enjoy the sensation of skiing very fast down a high mountain slope.