THE IMPACT OF TRIAL EVIDENCE

ON JUROR DECISION-MAKING

by

Jeremy J. Shifton

A Dissertation

Submitted to the University at Albany, State University of New York

in Partial Fulfillment of

the Requirements for the Degree of

Doctor of Philosophy

School of Criminal Justice

December 2014

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

The Impact of Trial Evidence on Juror Decision-Making

by

Jeremy J. Shifton

Table of Contents

ABSTRACT v

CHAPTER 1 – INTRODUCTION 1

I. **Strength of Evidence Literature Review** 3

II. **Interrogation and Confession Literature** 10

III. **Situational Interrogation Factors** 13

CHAPTER 2 – PILOT STUDY 20

I. **Introduction** 20

II. **Methods** 20

III. **Results** 31

IV. **Discussion** 35

CHAPTER 3 – STUDY TWO 39

I. **Introduction** 39

II. **Methods** 39

III. **Results** 49

IV. **Discussion** 55

CHAPTER 4 – STUDY THREE 67

I. **Introduction** 67

II. **Impact of Defendant's Age on Juror Perceptions of Evidence** 69

III. **Impact of Defendant's Alleged Crime on Juror Perceptions of Evidence** 79

IV. **Methods** 84

V. **Results** 88

VI. **Discussion** 97

CHAPTER 5 – GENERAL DISCUSSION AND CONCLUSION 105

I. **Hypothesized Findings** 105

II. **Theoretical Implications** 109

III. **Implications for the Criminal Justice System** 111

REFERENCES 115

TABLES 127

Table 1.1 – Demographic Information 127

Table 1.2 – Evidentiary Variables 128

Table 1.3 – Evidentiary Variable Values - Main Effects by Scenario 129

Table 1.4 – Evidentiary Variable Values by Scenario – All Values 130

Table 1.5 – Evidentiary Variables by Number of Situational Interrogation Factors 131
Table 1.6 – Significant F-test Values 132
Table 2.1 – Listing of Study 2 Scenarios 133
Table 2.2 – Demographic Information 134
Table 2.3 – Bivariate Correlations (All Respondents) 135
Table 2.4 – MANCOVA Estimated Mean Comparisons 136
Table 3.1 – Listing of Study 3 Scenarios 138
Table 3.2 – Demographic Information 139
Table 3.3 – Bivariate Correlations (All Respondents) 140
Table 3.4 – Bivariate Correlations (Accurate Respondents) 141
Table 3.5 – MANCOVA Estimated Mean Comparisons (All Respondents) 142
Table 3.6 – MANCOVA Estimated Mean Comparisons (Accurate Respondents) 143
Table 3.7 – Logistic Regression Results Predicting Verdict by Model (All Respondents) 144
Table 3.8 – Logistic Regression Results Predicting Verdict by Model (Accurate) 145
FIGURES 146
Figure 2.1 – Study 2 Comparison of Key Evidentiary Variables by Dataset 146
Figure 2.2 – Study 2 Comparison of Significant Differences in MANCOVA Estimated Means Due to Interrogation Length 147
Figure 2.3 – Study 2 Comparison of Significant Differences in MANCOVA Estimated Means Due to How Recently Defendant Slept 148
Figure 2.4 – Study 2 Percent Guilty Verdicts by Survey Condition (All Respondents) 149
Figure 3.1 – Study 3 Comparison of Key Evidentiary Variables by Dataset 150
Figure 3.2 – Study 3 Comparison of Significant Differences in MANCOVA Estimated Means Due to Interrogation Length (All Respondents) 151
Figure 3.3 – Study 3 Comparison of Significant Differences in MANCOVA Estimated Means Due to Interrogation Length (Accurate Respondents) 152
Figure 3.4 – Study 3 Percent Guilty Verdicts by Survey Condition (All Respondents Compared to Accurate Respondents) 153
APPENDICES 154
Appendix A – Pilot Study Scenario 8 154
Appendix B – In Class Survey Instructions 164
Appendix C – Study 2 Control Scenario 165
Appendix D – Study 3 Murder Scenario 172

ABSTRACT

It is widely accepted that a confession is one of the most incriminating piece of evidence that can be presented in a criminal case (Kassin & Neumann, 1997). However, little prior research has examined the impact of situational characteristics (e.g., length of interrogation, how recently suspect has slept, etc.) of the interrogation and resulting confession. While police tactics and personal characteristics are known to impact perceptions of the resulting confession, little is known about how aspects of an interrogation might impact the perceptions of jurors. In three studies, this dissertation seeks to determine how mock jurors' perceptions of evidence strength are impacted by the inclusion of known risk factors for false confessions.

The first study uses an in-person, student sample to evaluate the impact of interrogation length, how recently the suspect slept, and how many interrogators questioned the suspect. The second study repeats the measures of the first study using an online sample of adults. Situational interrogation factors, specifically the length of the interrogation, were found to have a significant effect on perceived evidence strength and resulting trial verdict. A confession resulting from a lengthy (16 hour) interrogation was perceived to be significantly weaker than a confession resulting from a shorter (1 hour) interrogation. Overall, when situational interrogation factors were presented to mock jurors, the evidence was perceived to be weaker and less indicative of guilt, and respondents voted to convict the defendant significantly less often.

The final study varies the age of the defendant and the alleged crime committed along with the length of the interrogation to determine whether any or all of these factors impact perceptions of evidence strength. This third study finds that confessions offered by younger defendants are viewed as less strong than older defendants, and that this effect is magnified when there is a lengthy interrogation. Similarly, defendants accused of murder who faced a lengthy interrogation were less likely to be convicted than those accused of assault. The final chapter concludes with an overall discussion of the three studies and avenues for future research.

CHAPTER 1 – INTRODUCTION

Much is known about the importance of evidence strength in criminal cases, both at trial and through plea bargaining. Several studies have found that the strength of the evidence presented at trial "is the primary determinant of jury verdicts in criminal trials in most circumstances" (Devine et al., 2001, p.686). A great deal of prior research has examined how confession evidence impacts the outcome of criminal cases. Within the total case evidence, the single most impactful piece of evidence is a suspect's confession, which can affect a case to such an extent that other contradictory evidence cannot overcome a confession, even a false one (Kassin, Bogart & Kerner, 2012; Hasel & Kassin, 2009; Kassin & Sukel, 1997).

Within the research concerning evidence strength and confessions, several studies have examined specific aspects of the confession evidence. Research has shown that personal characteristics such as age, education level, and emotional state can affect the likelihood of a suspect confessing, either truthfully or falsely (Najdowski, Bottoms, & Vargas, 2009; Redlich, Ghetti, & Quas, 2008; Redlich, Quas, & Ghetti, 2008). Other studies have examined the effects of confession tactics used by interrogators (Kassin & McNall, 1991; Kassin & Sukel, 1997; Leo & Liu, 2009; Blandon-Gitlin, Sperry, & Leo, 2010; Costanzo, Shaked-Schroer, & Vinson, 2010). These tactics include promises, threats, "good cop/bad cop", the presentation of false evidence, and several other strategies in common use among law enforcement officials. However, Kassin and Sukel (1997) discuss

that at the time of their publication, there were no known studies which analyzed what they called “circumstances of the setting” (p.44).

The concept that Kassin and Sukel (1997) call “circumstances of the setting” refers to situational characteristics of the interrogation setting that may influence jurors’ perceptions of the resulting confession. Kassin and Sukel’s (1997) examples of circumstances of the setting included “number of interrogators present, length of detention, and availability of food and sleep” (p. 44). In addition to the examples they gave, aspects of the interrogation such as the length of the interrogation and whether the confessor has recently slept have all been individually identified as risk factors for falsely confessing. However, their impact on jury perceptions of the evidence has not been evaluated (Kassin et al., 2012). Confessions are generally seen as overwhelmingly indicative of a suspects’ guilt. Although the presence of risk factors may increase the likelihood of a false confession, it is not known whether jurors interpret the confession any differently when presented with factors that may indicate a false or coerced confession. This research will examine whether jurors ignore these situational aspects of confessions or whether they are taken into account when deciding the resulting trial verdict.

This dissertation also seeks to determine how the interrogation setting impacts perceived evidence strength by presenting respondents with an experimental trial scenario which varies situational aspects of the confession. First, a pilot study was conducted to test the experimental manipulation to determine whether there is evidence of an effect of the interrogation setting

which would warrant further exploration. As will be discussed later, the pilot study supports the idea that the interrogation setting can influence perceptions of confessions. The second study of this dissertation evaluated the impact of situational factors of a confession on the overall strength of evidence in a larger, more representative sample than the pilot study. The final study builds on the first two by varying the presentation of situational interrogation factors with the age of the defendant and the crime committed. Taken together, these studies seek to explain how the interrogation setting can potentially impact the perception of the evidence in a criminal trial. Before describing the methodology of the studies themselves in detail, I discuss the extant literature dealing with evidence strength and confessions.

I. Strength of Evidence Literature Review

Previous research has asserted that the concept known as "strength of evidence" is the most important influence on convictions at trial (Devine, 2012; Devine et al., 2009; Devine et al., 2001). Strength of evidence has been defined as "a global term referring to the quantity and quality of evidence presented by the plaintiff/prosecution during a trial" (Devine et al., 2001, p.684). Evidence strength has a far greater impact on the outcome of a case than any other legal or extra-legal variable, and thus has been found to be the strongest influence on the case verdict (Martin, De La Fuente, De La Fuente, & Garcia, 2007). Before discussing the factors that may affect evidence strength in the current research, it is necessary to briefly review what strength of evidence is, and how it has been

measured in the existing literature. There are two main identified problems: 1) all evidence has typically been treated as having the same impact on a case, and 2) individual opinions on evidence have been ignored.

First, the ability of a piece of evidence to influence a conviction decision, regardless of whether it is direct or circumstantial evidence, is considered the unique "strength" of that evidence. The vast majority of previous strength of evidence studies assume for the sake of simplicity that each individual piece of evidence in a case contributes some knowable, consistent amount of strength to a juror's perception of the case's strength (Taylor & Hosch, 2004; Visher, 1987; Werner, Strube, Cole & Kagehiro, 1985). Calculating evidence strength depends on whether evidentiary variables are given the same or different weight, but in general the overall case strength has been measured as the summation of some strength value for each piece of evidence.

Some research has calculated evidence strength by treating each piece of evidence as equal, regardless of the nature of the evidence (Taylor & Hosch, 2004; Visher, 1987; Werner, Strube, Cole & Kagehiro, 1985). This model has obvious benefits, most notably that it is simple to calculate a value for evidence strength. However, this model gives no consideration to the individual pieces of evidence that make up a larger case. For example, if two eyewitnesses testified to the same, their combined testimony would be twice as impactful as a solitary confession according to this approach to measuring case strength. If some types of evidence have a greater impact on the case outcome than others, this method of calculating evidence strength would not fully capture the impact of evidence

strength on trial outcomes. As will be discussed in more detail, there is a great deal of research that discusses how uniquely impactful a confession can be, to the point that it would be misguided to treat a confession the same as other evidence (e.g., Wells, 1992; Niedermeier, Kerr & Messé, 1999).

One of the major weaknesses of an approach to evidence strength which merely tallies the number of pieces of evidence presented is that it does not allow for the possibility that jurors make judgments about the relative importance of different evidentiary variables. Some studies have indicated that jurors give four to five times more weight to direct evidence compared to circumstantial evidence, a phenomenon referred to as the "Wells Effect" (Wells, 1992; Niedermeier, Kerr & Messé, 1999). Direct evidence is defined as evidence which "proves a fact without an inference or presumption and which in itself, if true, establishes that fact (Heller, 2006, p.248). Examples of this type of evidence are eyewitness testimony, confessions, and eyewitness identifications. "Circumstantial evidence is evidence from which the fact-finder can infer whether the facts in dispute existed or did not exist," but which does not by itself establish a fact (Heller, 2006, p.250). Examples of this type of evidence include fingerprinting, DNA analysis, and blood typing.

Shifton (2011) examined the assumption that all evidence has the same weight in a criminal case. These findings indicated that the strength of individual pieces of evidence can vary as other evidence is presented; rather than being independent, pieces of evidence interact. Additionally, individual variation in perceptions of evidence strength was found, which could impact criminal trials.

The findings of Shifton (2011) are relevant to the current study in several ways. One noteworthy finding in this prior research was that the perception of the strength of confessions was not impacted by other evidence. Regardless of whether it was the only piece of evidence or one of several, the strength of the confession was rated similarly and strongly indicative of the suspect's guilt. Though the presentation of other evidence had no effect on perceptions of the confession, this dissertation hopes to identify variables whose inclusion would impact the strength of the confession evidence. If situational interrogation factors can change the perceived strength of a confession when other evidence does not, the inclusion of these factors in a criminal defense could prove more effective than the inclusion of other evidence unrelated to the confession.

Based on the finding that jurors give more weight to direct than circumstantial evidence, it is necessary to calculate evidence strength to allow for some variation in evidence weight. Researchers have argued that jurors are reluctant to convict when presented with circumstantial evidence, despite a similar perceived likelihood of guilt, because jurors can more easily envision a situation which does not implicate the defendant when considering circumstantial evidence (Niedermeier et al., 1999). Niedermeier et al. (1999) demonstrated that jurors react to evidence differently depending on what specific pieces of evidence they are given, indicating that all evidence must not be equally weighted in the minds of jurors. In order to allow for variation in opinions between jurors, measurement of evidence strength in this research will be reported at the individual level, rather than aggregated at the jury level.

Previous research has also surveyed individual jurors and then combined their responses into an average for the overall jury (e.g., Eisenberg & Hans, 2007). Computing a value for evidence strength based on the average ratings of jurors creates a problem for understanding the impact of strength of evidence. An overall mean hides whether there is any variability in terms of individual perceptions of evidence strength. Other studies report the responses of individual jurors, but only measure opinions about the entire case strength without also including individual pieces of evidence (Collett & Bull Kovera, 2003; Martin et al., 2007). Given that not all evidence is treated equally by jurors, knowing their perceptions of each evidentiary variable would be important. Within the measurement of evidence strength research, it is thus far unknown whether there are major perceptual differences among individuals.

In a jury trial, the outcome is directly based on the opinion of the individual juror, meaning that studying the opinions of individual jurors is valuable. Eisenberg, Hannaford-Agor, Hans, Mott, and Munsterman (2004) argue that jurors within a single jury are interdependent and thus the correct unit of analysis is the jury. Though it is unquestionably true that jurors are interdependent, this fact does not preclude a researcher from analyzing data at the individual level, particularly pre-deliberation; data can be collected and analyzed at both the juror and jury levels. A simple global rating of evidence strength does not consider whether individual pieces of evidence have different value and weight to individual jurors, and obscures disagreement between jurors with regards to evidence strength.

Outside of the evidence strength measurement research, several studies have discussed the potential for differing opinions about evidence. Kalven and Zeisel (1966) discussed the "liberation hypothesis," which states that jurors feel free to use their own viewpoint when they are presented with ambiguous evidence (see also Kassin, Reddy, & Tulloch, 1990; Devine et al, 2009). The hypothesis is that when the outcome of a case is clear, jurors feel less of a need to bring in their own opinions. When the case is somewhat ambiguous, jurors have more leeway to interpret events. Eisenberg et al. (2004) state that "evidentiary strength in a case may not be independent of juror characteristics or even of case characteristics" (p.25). Jurors' own viewpoints would naturally differ based on their own experiences as well as the conscious and unconscious biases they bring to a trial. In the current study, individuals are likely to bring in their own viewpoints when considering the confession evidence. This is because the situational characteristics of the interrogation do not have a definite effect on the resulting confession, which allows individuals to have different interpretations of the evidence. Because a goal of this research is to study jurors' potentially differing opinions of evidence, the confession evidence is intentionally ambiguous, meaning that the confession is not clearly indicative of guilt or innocence.

As discussed in Shifton (2011), prior research assumed that individual variation in perceptions of evidence strength was either non-existent, or had little impact. This comprehensive exam research impacts the current study in that individual variation in evidence perception was found; the perceived strength of individual pieces of evidence was not constant between respondents despite the

evidence presentation being invariant. This gives reason to believe that situational interrogation factors may impact some respondents' views of the confession more so than others. Even a small change in evidence perception could swing a juror's vote from guilty to not guilty, depending on how the individual views the evidence as a whole. Additionally, even if the perceived strength of evidence in the case does not significantly change, a small shift in the standard deviation among individual respondents could lead to a greater likelihood that a jury as a whole might change its vote from guilty to not guilty. Thus any potential differences in individual reactions to situational factors are important to explore.

Given a jury's preference for direct evidence, there is no more damning evidence than the defendant's own admission of guilt (Niedermeier et al., 1999). This means that jurors who are unable to believe that a person would falsely confess to a crime may ignore evidence which could be exculpatory. There is some research to explain how a confession can taint a case to the point where other contradictory evidence cannot overcome the confession (Kassin et al, 2012; Hasel & Kassin, 2009; Kassin & Sukel, 1997). Although in theory it should be simple to present ambiguous evidence to a jury, the weight normally given to a confession makes it difficult to present a confession that is not immediately seen as a sure sign of the defendant's guilt. In these situations, confessions taint the strength of the entire case evidence as well as the opinions of the jurors. Because of the unique power that confessions can have over a criminal case,

this research seeks to determine whether there are situational factors that may lower jurors' opinions of the strength of the confession.

II. Interrogation and Confession Literature

Whereas the perceived strength of evidence in a case is the most important influence on convictions at trial (Devine, 2012), within the overall evidence strength, a confession is regarded as the most incriminating piece of evidence (Kassin & Neumann, 1997). Confessions can then be seen as the single most important factor in jury trials. Despite its importance, a better understanding of how jurors view confessions and what factors influence their perceptions of strength and voluntariness is required. Shifton (2011) focused on the measurement of evidence strength and how individuals perceive evidence at trial, and found that individual evidentiary variables are not independent, and that individual respondents view evidence strength differently.

This dissertation extends the author's previous research by looking at factors that can influence the strength of a confession. A large amount of research has been conducted on the impact of a suspect's confession on guilty verdicts (Kassin & Wrightsman, 1980, 1981; Kassin & McNall, 1991; Kassin & Neumann, 1997; Kassin & Sukel, 1997; Redlich et al., 2008a, 2008b; Najdowski et al., 2009). I found that confessions were unique in that their perceived strength did not vary based on the presentation of other evidence. This finding fits with the findings of previous research that confessions, even when false, are difficult to

overcome because they are such strong indicators of a defendant's guilt that they cannot be overridden (Hasel & Kassin, 2009; Kassin & Sukel, 1997).

One of the reasons why it is difficult to overcome confessions known later to be false is because research indicates that respondents may not know how to disregard a confession they find to be unreliable. Respondents can correctly identify confessions which show signs of being false or coerced, and report that they do not intend to factor the confession into their verdict; however, these same respondents are more likely to find the suspect guilty than in situations where no confession was given (Kassin & Sukel, 1997; Kassin & McNall, 1991). Even when told that a confession was inadmissible, Kassin and Sukel (1997) found that 53% of respondents reported considering the confession in the mock trial when determining their ruling. Sometimes consciously, sometimes not, a confession influences trial verdicts. Laypersons are likely to have an imprecise understanding about the role that confessions play in trial outcomes, which can result in downplaying a dubious confession but then using the confession to convict a suspect anyway (Blandon-Gitlin et al., 2010; Chojnacki, Cicchini, & White, 2008). Given that these studies note a lack of juror understanding about confessions, it is likely that situational interrogation factors may also impact trial outcomes.

Several studies have found that although respondents believe that false confessions do exist, they find it difficult to imagine themselves or others falsely confessing (Kassin & Sukel, 1997; Kassin & McNall, 1991). A jury's inability to believe that a confession is false likely contributes to the difficulty in overcoming

a false confession. Conversely, jurors who understand that false confessions can occur might be more willing to believe that a confession is false. Recording respondent opinions about false confessions will enable this study to determine if individuals who readily believe that false confessions occur are more likely to believe that the confession in this study is false.

Despite the large amount of research devoted to confessions, there is little exploration of the link between risk factors associated with false confessions and the resulting perception of the confession's strength. Kassin and Sukel (1997) presented high-pressure and low-pressure interrogation settings and surveyed individuals about their opinions of the evidence in each of those situations. Several aspects of their research formed the basis of the current research. One such aspect is that the researchers presented respondents with a stimulus transcript consisting of opening and closing trial statements and witness examination. Respondents in Kassin and Sukel's (1997) study were asked to read the transcript and answer questions about the high-pressure scenario. In the current study, respondents were presented with a similar fictional transcript and give their opinions about the evidence.

Along with replicating Kassin and Sukel's (1997) survey methods, the current study was shaped by their recommendations for future research. The researchers identified three areas that future confessions research should explore. The first recommendation was for future research to look into how personal characteristics of the suspect impact a confession. In the 15 plus years following this recommendation, only a few studies have examined how personal

characteristics of the suspect, such as juvenile status or mental disability, impact a confession (Redlich et al., 2008a, 2008b; Najdowski et al., 2009).

Kassin and Sukel's (1997) second research recommendation focused on the interrogation methods used to secure a confession. Interrogation methods have been much more thoroughly researched (see Kelly, Miller, Redlich, & Kleinman, 2013), including studies that compared minimization and maximization techniques, threats to a suspect, and feigned friendship (Blandon-Gitlin et al., 2010; Costanzo et al., 2010; Leo & Liu, 2009; Henkel, Coffman, & Dailey, 2008; Kassin & Sukel, 1997; Kassin & McNall, 1991). These studies consistently find that the tactics used to elicit a confession are important to respondents, though the impact of these tactics varies among the cited studies. Techniques that are viewed as overtly coercive tend to produce confessions that respondents believe are less strong than confessions produced through the use of less coercive practices (Blandon-Gitlin et al., 2010). Henkel et al., (2008) specifically note that respondents reported that interrogation tactics "work" and are effective at securing truthful confessions. However, Kassin and Sukel's (1997) final proposed research focus — to look into the impact of circumstances of the interrogation setting — has, to the author's knowledge, gone unheeded in the 17 years since it was suggested and forms the basis of the current research.

III. Situational Interrogation Factors

This dissertation measures the impact that situational aspects of the interrogation have on the strength of the confession and the case as a whole.

Situational factors related to the setting or circumstances of the interrogation could have a great deal of influence on perceptions of the resulting confession. This influence could be intentional (e.g. police are aware of the impact that multiple interrogators have on a defendant), or unintentional (e.g. a defendant is tired at the beginning of an interrogation because he slept poorly the previous night). It is important to test whether the overall case is impacted by situational factors for several reasons. A change in the perception of a single piece of evidence, even one as important as a confession, may not be significant enough to change a verdict in a trial. Because trial outcomes are dichotomous, a change to the perceived strength of the confession may not be large enough to change the resulting verdict, but is it still of interest to determine if situational aspects of the interrogation influence confession perceptions.

Another reason to test for the impact of situational factors is that a confession is not viewed as entirely independent of other evidence. This means that the perceived strength of other pieces of evidence could differ solely because of the change in perceived confession strength (Hasel & Kassin, 2009). Multiple studies by Kassin (Hasel & Kassin, 2009; Kassin et al., 2012; Kassin et al., 2013) have concluded that distinct pieces of evidence are presumed independent according to the law, but are in reality highly dependent on other evidence. For example, eyewitnesses are significantly more confident in their identification when they are told that the identified suspect has confessed to the crime in question (Hasel & Kassin, 2009). This finding was replicated by Kassin et al. (2012), which also noted that faulty forensic analyses frequently

corroborated false confessions, likely because analysts were seeking to confirm the validity of the confession rather than independently arrive at a conclusion.

In prior research (Shifton, 2011), the presence of a confession influenced respondents to perceive other evidence as being more strongly indicative of the defendant's guilt. This effect was found even though the evidence being rated stronger did not change; the only change was the addition of a confession. Appleby, Hasel, and Kassin (2011) found that any admission of guilt in a false confession scenario, even a generic confession that contained no crime-specific details, was often sufficient for mock jurors to convict. Thus it will be interesting to determine whether situational factors are important enough to jurors that they help override the confession, or whether they are merely another aspect of a confession that gets ignored because of the overwhelming impact of an admission of guilt.

This dissertation first analyzes three situational factors: the number of interrogators present during an interrogation, the length of the interrogation, and whether the suspect has recently slept, to see how these factors impact the perception of the resulting confession. Because Kassin and Sukel's (1997) suggestion to look at factors such as these three has not been followed as of yet, there is little research dealing with these factors directly. However, there are studies which have identified each of this study's three situational factors as causing potential problems with the reliability of confessions, and thus the resulting perceived strength, of confessions.

The first situational factor tested is the number of interrogators present during the confession. The presence of multiple interrogators is not necessarily a police tactic used to intentionally induce a confession, but a jury may nonetheless see this as a coercive behavior that lessens the evidentiary strength in their minds. A scientific consensus paper by Kassin et al. (2010) about interrogation tactics outlines current interrogation methods used by police to obtain suspect confessions and explains potentially coercive practices in detail. The tactic popularly known as “good cop, bad cop” or “Mutt and Jeff” illustrates how multiple interrogators could have a stronger influence on a suspect than a single interrogator. This tactic pairs an aggressive, threatening interrogator with a gentler, more understanding interrogator in order to build a rapport between the “good cop” and the defendant which could lead to a confession (Kelly et al., 2013). The additional pressure caused by having to answer to multiple interrogators could be seen as a coercive situation, resulting in a confession that jurors perceive as less strongly indicative of the suspect’s guilt. Kassin et al. (2010) discuss the idea that the social isolation that occurs in an interrogation setting, where a suspect is confined and singled out for their alleged crime, can influence a suspect to confess. The pressure put on the suspect by multiple interrogators only exacerbates this feeling of social isolation. This research sought to identify whether a confession induced by multiple interrogators is perceived to be as reliable, and as strong, as one which is obtained by a single interrogator.

The second experimental factor, varying the length of the interrogation, is already known to be a risk factor for false (i.e., unreliable) confessions. Several studies have found that a prolonged interrogation indicates that the obtained confession is more likely to be false than one produced after a shorter interrogation (Kassin et al., 2010; Leo & Drizin, 2010; Drizin & Leo, 2004). Kassin et al. (2010) report several studies that found that the vast majority of interrogations last between 30 minutes and two hours. In contrast, Drizin and Leo's (2004) study of 125 false confessions found that the average interrogation in those cases lasted 16.3 hours. A former "Reid" technique interrogator considers any interrogation lasting longer than six hours to be "coercive" (Blair, 2005). Kassin et al. (2010) specifically recommend that police departments implement time limits for interrogations as a means of lessening the risk of false confessions. While there is no bright line time limit after which an interrogation is more likely than not to be false, analysis of false confessions has found that a lack of attentiveness and wakefulness is associated with multiple consecutive hours of interrogation. This dissertation sought to identify whether a lengthy interrogation is perceived to be a less reliable indicator of the suspect's guilt than a shorter interrogation.

The final situational factor in this study was the presumed wakefulness of the suspect. Multiple studies have identified fatigue and sleep deprivation as situational risk factors that increase the likelihood of a false confession (Kassin et al., 2010; Leo & Drizin, 2010; Drizin & Leo, 2004). It is important to note that the lack of sleep that these studies examine is usually due to a lengthy interrogation,

and is thus attributed directly to police behavior. However, the current study varied the wakefulness of the suspect in a more innocuous manner, where the suspects' lack of sleep is due to their occupation, rather than police inflicted sleep deprivation. It is well documented that past false confessions have occurred in part due to a lack of recent sleep caused by a lengthy interrogation (for a specific example, see the wrongful conviction of Frank Sterling at http://www.innocenceproject.org/Content/Frank_Sterling.php). Additionally, recent research by Scherr, Miller, and Kassin (2014) found that individuals who were being interrogated during the time of day when they are cognitively at their weakest (morning people (larks) interrogated late at night, or night owls interrogated early in the morning) are more susceptible to confessing to a crime. Jurors may be aware of the influence that a lack of sleep can have on confessions, but it remains to be seen whether a suspect being tired at the outset of the interrogation will influence the perceived reliability of their confession, which would lead to a perceived decrease in the confession strength.

It is likely that respondents' perceptions of evidence strength would change if jurors thought that situational interrogation factors impacted the truthfulness, voluntariness, and coerciveness of the confession. Truthfulness is defined simply as the degree to which the survey participant believes that the confession was a true admission of guilt. Voluntariness and coerciveness are similar concepts. Voluntariness refers to the suspects' personal freedom to confess, and coerciveness measures police/situational pressure to confess that might be independent of the personal voluntariness of the confession. A suspect

can confess because of their own choice, or because of police pressure, or a combination of the two.

It is easy to see how a change in the perception of whether a confession was given voluntarily and truthfully or if it resulted from police pressure could impact the reliability and believability of a confession. In hindsight, the 25% of Innocence Project exonerations that contained false admissions had clear reliability issues, rather than being the product of a lying or delusional suspect (www.innocenceproject.org). The three studies that make up this dissertation will examine whether the presentation of situational interrogation factors influences how survey respondents perceive the reliability of the confession, causing them to have doubts about the truthfulness, voluntariness, and/or coerciveness of the confession.

To summarize, though the impact of a confession is well understood in some respects, the impact that specific aspects of a confession have on the jurors who are considering confession evidence is less clear. Highlighting situational factors of interrogations will aid in determining whether there are any mitigating circumstances that might give jurors pause before they convict a defendant based on their own admission of guilt.

CHAPTER 2 – PILOT STUDY

I. Introduction

The purpose of this pilot study was to examine three factors related to situational factors of suspect confessions and how these factors influence the resulting strength of the confession. Kassin and Sukel (1997) suggested that studies incorporate situational interrogation factors into their experimental models, but so far no published studies that the author is aware of have done so. For this research, the impact of three interrogation factors, the number of interrogators present during the confession, the length of the confession, and the wakefulness of the suspect, are examined. In order to determine the impact of situational interrogation factors on evidence perception, an experimental survey was created and distributed. An experimental design enables random assignment to control variables such as existing knowledge of the legal system, personal opinions about criminal justice, and other unmeasured variables which are outside the scope of this research. Because of this control, any changes in the perception of evidence strength can be attributed to the changing situational aspects of the confession.

II. Methods

Participants

In order to obtain the sample for the pilot study, surveys were distributed to two undergraduate classes at the University at Albany, SUNY. Both classes were introductory level Criminal Justice courses, and thus participants likely had

prior interest in criminal justice issues that may potentially influence their opinions. In total, 200 students completed the experimental sections of the survey, with only 17 students declining to provide demographic information. The demographics obtained for the pilot study are listed in Table 1.1. The data for age and education are in line with what is expected for an introductory undergraduate class, as the average student was nearly 19 years old and close to their sophomore year in college. These numbers are only slightly shifted by a small number of "non-traditional" students. The gender and racial composition of this sample differs only slightly from the overall UAlbany student body; male and White students were slightly overrepresented compared to the school averages (http://www.albany.edu/admissions/who.php). Finally, out of the 183 respondents who correctly answered at least three of four manipulation check questions and completed the full survey, only four indicated that they had previously served as a juror.

It should be noted that the overall sample size is smaller than would ideally be obtained to establish statistical power to detect small effect sizes. This was determined by performing a power analysis according to the standard set by Cohen (1988). Cohen recommends a conventional power level of .80. A two-tailed alpha-level of .05 is conventional for social science research. In order to ensure a power of at least .80 at a significance level of $\alpha = .05$ to detect small effect sizes, a study would need at least 30 participants in each condition. The number of participants in this pilot study ranged between 22 and 28 in each survey condition, and the total sample size of 200 falls short of the stated goal of

240 respondents. However, this sample size is large enough to detect differences due to the experimental manipulations if they have medium to large effect sizes. Because the goal of this pilot study was to test the methods and face validity of the measures, medium to large effects, if present, are sufficient.

Trial Transcript

In order to evaluate the influence of situational interrogation factors on perceived evidence strength, it was necessary to create an experimental survey. Similar to Shifton (2011), a trial transcript was created to present respondents with a fictional crime and courtroom testimony that they would then have to rule on. The fictional trial described below constitutes the control condition which presented a description of confession evidence presented during a trial. The control scenario is compared with conditions where situational factors may impact the perception of the confession. No matter which condition respondents received, they read a fictionalized account of the trial and then reported their ratings on several questions of interest. Respondents reported their perceptions of the strength of each individual piece of evidence, the overall case strength, their verdicts, and the confidence of their verdicts.

The experimental manipulations in this research are the variation of situational interrogation factors which could influence jurors' perception of evidence. The three situational interrogation factors, number of interrogators, length of interrogation, and suspect wakefulness, are varied within the fictional trial testimony. In the control scenario, there is only one interrogator involved, the interrogation took one hour, and the suspect was picked up at home at 9:00 am.

In the experimental manipulations, three interrogators were involved in the confession, the interrogation lasted six hours, and the suspect was picked up just as they were returning home at 9:00 am after having worked the previous eight hours.

In addition to the presentation of the experimental factors during the trial testimony, the survey for this research presents additional evidence of the suspect's guilt. In addition to creating a more realistic trial, it is possible that situational interrogation factors could influence a juror's perception of not just the resulting confession, but other evidence as well (Kassin & Neumann, 1997; Hasel & Kassin, 2009; Kassin et al., 2012; Kassin et al., 2013).

This fictional trial scenario and accompanying survey will be used in various forms for the first two stages of this research. The first stage is the pilot study which was used to evaluate whether the experimental manipulations presented in the trial testimony elicit different responses. This pilot study is intended to determine if at least some of the manipulations result in responses for values of voluntariness, truthfulness, coerciveness, or evidence strength that differed from the control scenario. The second stage will utilize a similar survey instrument but with a larger, and more heterogeneous, sample.

Legal Considerations

In order to stay as true to an actual criminal trial as possible, there are legal considerations regarding how evidence can be presented at trial that must be taken into consideration. The survey design attempted to make sure that the legal proceedings were as true to form as possible and did not violate the

fictional defendant's Constitutional rights. Given that this experimental survey is about presenting evidence in a criminal trial, the design took into account the defendant's Sixth Amendment rights.

The Sixth Amendment of the U.S. Constitution in part states that "in all criminal prosecutions, the accused shall enjoy the right…to be confronted with the witnesses against him" (U.S. Constitution). Though the area of law dealing with the "Confrontation Clause" is unsettled, several court cases have established guidelines about how evidence should be presented in accordance with the defendant's Sixth Amendment rights (*Ohio v. Roberts*; *Crawford v. Washington*; *Davis v. Washington*; *Melendez-Diaz v. Massachusetts; Bullcoming v. New Mexico; Williams v. Illinois*). In general, Confrontation Clause cases decided by the U.S. Supreme Court hold that the use of testimonial statements in a criminal trial require that the person is available for cross-examination (*Crawford v. Washington*). *Davis v. Washington* (547 U.S. 813, 2006) defines testimonial to mean "any statement that an objectively reasonable person in the declarant's situation would believe likely to be used in court." Several more recent Supreme Court cases have ruled that the Confrontation Clause applies to law enforcement officials and laboratory technicians who work on criminal cases (*Melendez-Diaz v. Massachusetts; Bullcoming v. New Mexico*).

These Confrontation Clause cases are relevant to the design of this dissertation because they influence how evidence must be presented to jurors. In this research, all three pieces of evidence in the trial—eyewitness identification, blood test, and confession—were presented as testimonial evidence at trial

where the witnesses made statements as to the evidence against the defendant and were subsequently cross-examined by the defense. Because the blood test in this dissertation was performed by a lab technician, when this evidence was presented at the trial, the individual who performed the tests testified about the results so that the defendant's Sixth Amendment rights were protected. For the same reasons, the interrogator who secured the defendant's confession presented the confession evidence to the jury. The manner in which the evidence was presented would thus be considered Constitutional.

A final issue regarding the legal accuracy of the survey scenario is whether asking respondents to read a trial transcript can be a plausible substitution for jurors working on real cases. Though most juror research studies (e.g., Hasel & Kassin, 2009; Kassin & Sukel, 1997; Kassin & McNall, 1991) involve written testimony, it is important to consider whether this is analogous to any actual trial scenarios. There are several instances in actual criminal courts that mirror the survey's construction as a transcript of testimony. For example, if a witness was unavailable to testify during trial proceedings but had previously given testimony which was subject to cross-examination, therefore satisfying the requirements set forth in *Crawford v. Washington*, written testimony could be entered into evidence for jurors to read. Thus an actual criminal trial could present jurors with written statements to consider and use in the verdict, without the benefit of seeing a live witness. Similarly, making a legal judgment based solely on a trial record happens during criminal appeals. Appellate courts examine trial records that resemble the current study's transcript, albeit in a

much larger form, and may make rulings without hearing any live testimony. Overall, the trial scenario used in this research is fictional, but steps have been taken to ensure that it resembles real trials whenever possible.

In sum, the goal of this research is to determine if situational interrogation factors influence juror opinions about evidence strength and thus criminal trial outcomes. The trial transcript in this research is not from a real case. However it was created in such a manner that it follows the framework of an actual criminal trial.

Procedures

Along with the control condition, there are seven experimental manipulations designed to vary the presentation of situational factors of the interrogation setting. These situational interrogation factors are the key experimental manipulations and are being tested to determine the magnitude of their impact on juror perceptions of the voluntariness, truthfulness, coerciveness, and overall strength of the resulting confession. The survey scenarios were constructed so that the control scenario presented the most innocuous interrogation setting, and subsequent manipulations added one, two, or three situational interrogation factors. The control and experimental scenarios will be presented in eight survey conditions; all of the conditions will have the same evidence presented, and will only vary according to which, if any, situational factors accompany the confession evidence. The eight conditions are broken down as follows:

- 1 control condition, where confession evidence is presented but no situational interrogation factors are added
- 3 conditions which contain one situational factor
- 3 conditions where two of the three situational factors are presented
- 1 condition which presents all three situational factors

Because the only differences between conditions are which situational interrogation factors, if any, are presented, I will be able to discover effects that may result from any one factor or the combination of multiple situational factors. By comparing each condition with other similar conditions, changes in respondent ratings of the evidence will be attributable to the situational factor treatment.

Survey respondents were recruited by the researcher in two undergraduate Criminal Justice classes. The classes were read a brief description about the study and the estimated survey time and procedure was explained to them. The instructions are included as Appendix B. After students who did not want to participate left the room, surveys were distributed to the remaining participants. The surveys were handed out in numerical order (Conditions 1-8, repeating until all participants had been given a single survey) to ensure that students sitting in close proximity to each other would not receive the same survey condition. This procedure was used to approximate random assignment. All respondents read and gave their informed consent by completing the survey, read the survey materials, and answered questions regarding their own opinions on the trial scenario, the justice system in general, and their

demographic information. After finishing the survey, it was returned to the researcher and respondents were thanked for their participation.

In addition to the fictitious presentation of evidence that will make up the majority of the survey instrument in this research, different types of questions were developed. Several questions test whether respondents read and understood key aspects of the transcript. These comprehension checks are questions about case facts that can be used to discard survey responses that were obtained from subjects who were not paying sufficiently close attention to the survey. This would help ensure that the overall results of the study were not tainted by answers from respondents who did not seriously consider the transcript.

In addition to comprehension checks, several questions ask the respondent to rate the strength of each individual piece of evidence as well as the entire case strength, and record a verdict and resulting confidence in the chosen verdict. Individuals will also answer questions about the likelihood that the confession was false, that the confession was voluntary, and whether the suspect was pressured to confess, which measures the perceived truthfulness, voluntariness, and coerciveness of the confession situation.

Voluntariness and coerciveness are similar constructs in that they both relate to how freely the suspects confession was given. If subject responses on these two constructs match up, then respondents are viewing these ideas as interchangeable. If instead there is less correlation between the two constructs, then a respondent likely believes there is a difference between the concepts of

voluntariness and coerciveness. For the purposes of this dissertation, perceptions of truthfulness, voluntariness, and coerciveness are self-reported by survey participants.

Respondents also answered questions about whether any person would be likely to confess to a crime they did not commit, and how likely it was that the respondent would personally confess to a crime they did not commit. For these confession questions, a value of 7 indicated that the behavior was “very likely” to occur versus “not at all likely” if the value of 1 was selected. The questions were worded such that responses should differ if given careful thought, since selecting the same value for each question would be somewhat nonsensical. All high or low marks would give contradictory opinions about the validity of the confession. All questions are listed in Appendix A in the form of Scenario 8 used in this research, which included all interrogation factors.

Hypotheses

Based on previous research, it was hypothesized that situational factors would influence the perceived strength of the confession (Kassin & Sukel, 1997; Kassin & McNall, 1991). For example, Kassin and Sukel (1997) found that mock jurors discounted confessions when they identified the confession as having resulted from a threat by an interrogator. These aspects of the interrogation setting are expected to introduce doubt about the voluntariness and truthfulness of the confession.

H_1: The presence of situational factors will decrease the perceived voluntariness and truthfulness of the confession compared to the control scenario confession that does not include situational factors.

It is expected that the perception of the strength of the confession will be the main determinant of the verdict in this study. If respondents believe that the confession is strong, they will likely vote to convict regardless of their opinions about the other evidence in the case. The other evidence will have less impact on the outcome of the case. However, in cases where the confession is seen as weak and not helpful to the prosecution, it is expected that respondents will render a not guilty verdict. The additional evidence presented in the case will be unlikely to change the perception of the case as a whole.

H_2: Perception of the strength of the confession will be the main determinant of the verdict such that perceptions of the other case evidence will not influence the verdict. The strength rating of the confession will be strongly correlated with the resulting verdict.

Respondent opinions about the strength of the confession are hypothesized to be affected by the situational factors presented in this research. Mock jurors' perception of the confession evidence will be influenced by the situational factors presented to them. Situational factors which seem to exert pressure on the suspect may lead jurors to discount the strength of the resulting confession; factors that make a suspect appear more likely to be guilty could make a juror think the confession is more damning. Whether the magnitude of the influence of situational factors is enough to change the dichotomous outcome

of a trial remains to be seen. Respondents may still convict the suspect in the survey scenario, but the presence of situational factors might make them less confident in their verdict. Because Shifton (2011) found that the presence of confession evidence raised the perceived strength of other evidence, it is conceivable that the addition of situational factors might influence not only the perception of the confession evidence, but also the perception of the other case evidence.

> H_3: Including situational factors will result in a small but significant decrease in the conviction rate in conditions when confession strength was perceived to be lower.

III. Results

Descriptive Data

The results across all 200 surveys for the variables related to evidence strength, the confession, and end verdict are summarized in Table 1.2. Rating evidence strength as a 1 meant that the evidence was “very weak against the defendant” and a 7 indicated evidence that was “very strong against the defendant”.

According to the results presented in Table 1.2, the confession was the strongest piece of evidence, with a mean response of 5.09 (SD = 1.43). As expected, this was the most highly rated piece of evidence, as much previous literature has found that confessions are the strongest piece of evidence that can be presented against a defendant. However, this number is also not informative

on its own because the experimental manipulation in this study is the addition of situational interrogation factors which should influence the results in different scenarios. The correlations between the verdict and each individual piece of evidence also show that the confession is the largest driver of the verdict. The eyewitness (r = .40) and blood test evidence (r = .39) correlations are less strong than the confession evidence (r = .58). The distribution of answers according to the survey scenarios will be discussed shortly. Overall respondents voted to convict the defendant 59.3% of the time, and on a scale of 1-7, the average respondent's confidence in their chosen verdict was 5.29, meaning that the average respondent was fairly confident in his/her response.

Respondent Demographics

Respondent age was found to be uncorrelated with any of the dependent variables in the experiment. Spearman correlations for the gender of the respondent were significant for confession strength (r = -.19, p = .011) and likelihood that the confession was false (r = .26, p < .001). Thus the average male respondent found the confession to be stronger and less likely to be false than did the average female respondent.

Evidence Strength

A main goal of this pilot study was to determine whether the inclusion of up to three situational interrogation factors had a significant effect on the perception of variables related to the case evidence. A series of 2 (length of interrogation) x 2 (number of interviewers) x 2 (amount of sleep) ANOVAs indicate that the presence of situational interrogation factors had no significant

effect on ratings of evidence strength for any of the evidentiary variables or the overall case strength. A second group of ANOVAs analyzing the same evidentiary variables according to how many situational interrogation factors (0 to 3) were presented found no significant effects. While the included interrogation factors are known to affect the reliability of a confession, respondents' ratings of evidence strength were unchanged whether zero, one, two or three interrogation factors were included.

Finally, out of the 200 respondents, 183 answered at least three comprehension check questions correctly. All analyses were repeated using only the results from these 183 respondents. The resulting analyses showed no changes, as there were no newly significant results.

Confession Measures

Multiple 2 (length of interrogation) x 2 (number of interviewers) x 2 (amount of sleep) ANOVAs on the measures of voluntariness, coerciveness, and truthfulness revealed some significant main and interaction effects due to the situational interrogation factors. For the measure of whether respondents felt that the suspect was pressured to confess, a significant main effect of the number of interrogators performing the interrogation was found (F (7, 200) = 4.33, p = .039). Additionally, there was a significant interaction effect between the number of interrogators and the length of the interrogation (F (7, 200) = 5.13, p = .025). Respondents were asked to rate the likelihood that the confession was false. For this response, there was a non-significant trend on the length of the interrogation (F (7, 200) = 3.19, p = .076) indicating that the six hour interrogation was slightly

more likely to be considered false than the hour long interrogation. For the final confession measure--whether the obtained confession was likely to be voluntarily given--no significant main or interaction effects were found. To address concerns that the questions asking for measures of voluntariness and coerciveness would be measuring the same concept (thus warranting a multivariate analysis of variance), a correlation between the two sets of responses was calculated. The correlation between the two values is significant (r = -.31, p<.001), though one would expect that the correlation would be much higher if these two questions were actually measuring the same concept (see Table 1.6). Studies 2 and 3 of this dissertation will drop the measure of pressure/coercion and only ask about voluntariness so as to eliminate confusion about the difference between these two concepts. Once again, ANOVAs using zero, one, two, or three factors found all non-significant effects. Because respondent gender was significantly correlated with perceptions of the confessions strength and likelihood of being false, the previous analyses were repeated controlling for gender. There were no significant differences when gender was controlled.

Verdict Measures

A logistic regression to predict the dichotomous verdict outcome found that the overall model which included the three situational interrogation factors and their interactions was significant (X^2 (6) = 14.85, p = .021). However, within this model only the interaction between suspect wakefulness and number of interrogators was significant (p = .032), indicating that the defendant being tired and questioned by three interrogators was the only situation that mattered to

respondents. For the confidence in the verdict, a 2 (length of interrogation) x 2 (number of interviewers) x 2 (amount of sleep) ANOVA found that both the wakefulness of the suspect factor (p = .090) and the number of interrogators factor (p = .060) were near significant. An interaction effect between these two factors was also significant (p = .012). This interaction indicated that respondents were most confident in their chosen verdict when the suspect had recently slept and was confronted by only one interrogator. Testing these factors with zero, one, two, and three factors included yielded no significant results. Lastly, there were once again no significant differences when the gender of the respondent was considered.

IV. Discussion

The pilot study results found partial support for this study's hypotheses. The first hypothesis, that situational factors will lessen the perceived voluntariness and truthfulness of a confession, was somewhat supported by the data, although only some of the differences in voluntariness and truthfulness were statistically significant. As mentioned previously, the two questions regarding the likelihood of a voluntary confession and of there being police pressure to confess could be construed as measuring the same concept. However, it does not appear that voluntariness and coerciveness are measuring the same concept or viewed similarly, as the correlation between these two values is small (r = -.31).

The second hypothesis of the pilot study stated that the strength of the confession would be the main determinant of the verdict and far more important than other evidence, meaning that confession strength would be highly correlated with the resulting verdict choice. In comparison to the correlations between the other pieces of evidence, the confession was found to be the most strongly correlated with the resulting verdict. The eyewitness (r = .40) and blood test evidence (r = .39) correlations are lower in magnitude than the confession evidence (r = .58). A regression of the three independent evidentiary variables with the verdict as the dependent variable finds that that all three pieces of evidence are significant, but that the confession's coefficient is three times larger than that of the other two evidentiary variables.

The final hypothesis, that the inclusion of situational interrogation factors will result in a small but significant decrease in the conviction rate, was not supported. As discussed above, there were few significant relationships between any of the scenarios within any of the relevant variables. The conviction rate changed slightly between scenarios, but no significant differences were found. Though small effects may exist in larger samples, the pilot study found no support for the hypothesis that situational interrogation factors have a significant effect on the resulting trial outcome.

Overall, respondents seem to be relatively unaffected by the presence of interrogation factors in that they did not see interrogation factors as something important enough to overcome the defendant's confession. The evidence supported the defendant's guilt, and contrary to the expectations of Kassin and

Sukel (1997), the addition of situational interrogation risk factors made no significant difference. This may be because these factors have little impact or because respondents did not notice the situational factors because they were not sufficiently prominent. Either way, it appears as though the mere addition of these factors did not sway respondent opinions about the evidence.

The results of the pilot study, despite finding that situational factors do not have an overwhelming effect on perceptions of evidence strength, are interesting because of what they may imply about jury behavior. The three situational interrogation factors used in this study — number of interrogators, length of interrogation, and suspect wakefulness — are all factors known to impact the reliability of confessions (Kassin et al., 2010). Prominent research studies (Kassin et al., 2010; Kassin & Sukel, 1997) and anecdotal criminal exonerations (e.g., Frank Sterling) have indicated that these issues are risk factors for false confessions and those confessions that have these characteristics are less reliable indicators of a suspect's guilt. That respondents in the pilot study either may have ignored or not appreciated the importance of these factors is an interesting result that merits further research in subsequent studies.

In addition to the finding that respondent opinions were not significantly influenced by situational interrogation factors, there are several other reasons why it is important to follow up on these results. Because the respondents were all college students it is possible that a more representative population would interpret the confession evidence differently. Respondents who have not previously served on a jury may have ignored pertinent situational interrogation

factors, whereas older and more experienced respondents may be swayed by the inclusion of these factors. Additionally, it is possible that there are small-sized effects between the control and experimental manipulation scenarios which could not be detected due to the relatively small sample size. The remaining studies in this dissertation will involve larger, more representative samples that expand on the pilot study in both sample size and survey methodology.

Another reason why the results of the pilot study do not eliminate the possibility that situational interrogation factors can affect the perception of evidence strength is because the criminal trial could have been more realistic. Though the presentation of evidence in the pilot study was accurate to legal standards, the overall case in the initial study is less detailed than an actual criminal trial would be. The third study in this dissertation is designed to build off of the first by presenting mock jurors with additional case information that may influence their opinions about the evidence and the defendant's guilt. The final study includes information about the defendant's age and varies the alleged crime. As will be discussed shortly, the age of the defendant and the crime committed may have a large influence on jurors' opinions about the evidence, confession, and the ultimate outcome of a criminal case.

CHAPTER 3 – STUDY TWO

I. Introduction

The second stage of this dissertation research takes the initial pilot study survey to a larger scale, and to a pool of respondents that is more heterogeneous than UAlbany undergraduate students. Despite all respondents in the initial pilot study likely being jury eligible, only four respondents stated that they had previously served on a jury. The second study attempts to sample respondents who are more likely to be representative of the larger United States population than undergraduate students.

The pilot study was meant to determine whether the experimental manipulations had any effect on respondent perceptions of evidence strength, and the results discussed above support this possibility. Some small differences in evidence perceptions were found that were due in part to the inclusion of situational interrogation factors, thus providing justification to warrant an expansion of the initial study. The goal of this second study research project was similar to the initial pilot study in that situational factors of a confession were presented to mock jurors to determine what, if any, effect they have on determinations of evidence strength, guilt, and defendant culpability.

II. Methods

Present Study

The trial materials used in Study 2 are based on the transcript given to respondents in the pilot study. However, there are several important differences

between the pilot study and Study 2. First, because the respondent sample was to be collected online rather than in person, it was necessary to change the style of trial materials from a transcript to a narrative summary. Lengthy transcripts are avoided when using an online sample because presumably most participants' attention spans are relatively short, which can lead to low response rates and general lack of attention to study details (Buhrmester, Kwang & Gosling, 2011; Paolacci, Chandler & Ipeirotis, 2010; Pickett, Mancini & Mears, 2013).

Second, a ninth survey condition was included. This condition varied the use of an expert witness to determine if this type of witness affected respondents' perceptions of the evidence strength and overall case. Study 2 conditions were as follows:

- 1 control condition, where confession evidence is presented but no situational interrogation factors are added
- 3 conditions presenting one situational factor (i.e., interrogation length, number of interrogating officers, how recently defendant slept)
- 3 conditions where two of the three situational factors are presented
- 1 condition which presents all three situational factors
- 1 condition presenting all three situational factors as well as expert testimony

A third change from the pilot study was that the experimental condition for interrogation length was changed to 16 hours. The pilot study used a one hour interrogation as the control condition and a six hour interrogation as the experimental manipulation. A six hour interrogation is regarded as the outside

boundary of an acceptable, non-coercive interrogation (Blair, 2005). Drizin and Leo's (2004) study of proven false confessions found the average interrogation in those cases lasted an average of 16.3 hours. I thus used a 16 hour interrogation as the length of the "long" interrogation. In addition, the pilot study only found marginally significant differences due to interrogation length, which potentially indicated that the change from 1 to 6 hours was not as important or salient as originally hypothesized.

Fourth, changes to questions from the pilot study were made for Study 2. Because several published studies utilize a guilty verdict confidence scale of 1-10 (Hasel & Kassin, 2009; Kassin & Neumann, 1997; Wallace & Kassin, 2012), Study 2 used a 1-10 scale instead of the 1-7 scale used in the pilot study. Also, two questions were asked about characteristics of the defendant that were not actually included in the crime summary, a suggestion made by Dean Lizotte during the prospectus defense. Respondents were asked to give the race and age of the defendant, with an option for observant readers to note that the information was not given.

Finally, Study 2 (as well as Study 3) will drop the measure of pressure/coercion and only ask about voluntariness so as to eliminate confusion about these two concepts. These two perceptions were significantly (and negatively) correlated and it is likely that they are tapping the same underlying construct. These next two studies eliminate the possibility that the two concepts are being confused by participants by removing the question about perceptions of whether the suspect was pressured to confess to the crime in question.

Online Sampling

Part of the rationale for changing the pilot study transcript to a shorter, narrative format in Studies 2 and 3 is that this format change allows survey scenarios to be administered to an online audience. There are several websites or services for conducting online research, including SurveyMonkey Audience, Amazon Mechanical Turk, GfK (formerly called Knowledge Networks) and QUALTRICS. GfK and QUALTRICS provide much the same service as SurveyMonkey Audience or Amazon Mechanical Turk, but are far more expensive. SurveyMonkey Audience is similar to Amazon Mechanical Turk in that the researcher can use any number of templates to design a study that can be distributed online. Both tools offer the ability to target a certain audience if desired, or to merely pay for a sample of the general population of users. The general population of online users is slightly different than the overall U.S. population because internet access and survey-taking is not universal, but these differences are not dramatic (http://help.surveymonkey.com/articles/en_US/kb/Is-my-SurveyMonkey-Audience-sample-representative).

The major differences between SurveyMonkey Audience and Amazon Mechanical Turk concern their approaches to survey-taking and respondent compensation. When paying for responses with Amazon Mechanical Turk, a researcher determines the price they want to pay per completion; for social science surveys, the amount paid is generally $1-1.50, which goes directly to the survey-taker upon completion. There is also an additional 10% fee added to cover Amazon's costs. In the minds of some researchers, this can lead to

respondents not taking surveys seriously, thus providing lower quality data as a result (Pickett, Mancini & Mears, 2013). On the other hand, SurveyMonkey's Audience tool is straightforward, and does not directly compensate a survey taker. Each paid survey response costs $1 for up to 10 questions, and $.50 more for each additional block of five questions. The updated narrative crime summary includes 15 questions outside of the descriptive text questions which do not count toward the price of the survey. Instead of offering the same reward of $1.50 to Amazon Mechanical Turk respondents, which is the upper end of the normal compensation for similar studies (in addition to a 10% fee to Amazon), SurveyMonkey Audience allows the researcher to collect a sample at a lower cost and arguably more effectively. Finally, when SurveyMonkey participants complete a survey, they are entered into drawings for cash prizes, and money can get donated to charity. Users are only sent one survey per week, at most, (https://contribute.surveymonkey.com/help), whereas MTurk users can do as many surveys as they desire.

The surveying model used by SurveyMonkey Audience does not directly reward completion, and also randomizes distribution of surveys to members, rather than using Amazon Mechanical Turk's setup which allows members to pick and choose which surveys they wish to do. Also, because the conditions were run concurrently, there were no concerns about any respondents doing multiple versions of my survey. Limiting respondents to a single version of the current study would be more difficult to achieve using Amazon Mechanical Turk because their system only allows respondents to complete a survey once but

does not limit their ability to take multiple versions (Paolacci, Chandler & Ipeirotis, 2010). This means that each completed survey solicited by SurveyMonkey Audience will cost the researcher $1.50, which is comparable to Amazon Mechanical Turk with the additional benefit of randomization of respondents and exclusion of multiple survey-takers.

While SurveyMonkey Audience is arguably the preferred survey response gathering service, the majority of published social science research has utilized and/or examined other methods for acquiring online samples, most notably Amazon Mechanical Turk. For example, Martire et al. (2013) gathered responses to a mock jury study using Mechanical Turk, and two notable studies evaluated how Amazon Mechanical Turk would likely be a good source for inexpensive, high-quality data that compares favorably to in-person sampling (Paolacci, Chandler, & Ipeirotis, 2010; Buhrmester, Kwang, & Gosling, 2011). Other studies have used public opinion research firms similar to GfK (Park, 2011). Pickett et al. (2013) utilized SurveyMonkey Audience for their study regarding public opinions about sex offenders in the United States.

One of the most important considerations when using an online survey gathering instrument is the sample the service is accessing. Because survey-takers choose to take surveys voluntarily, those who join any particular website may differ from those who do not join. Baker et al. (2010) discussed this in their review of the "current empirical findings related to opt-in online panels utilized for data collection" at the directive of a task force established by the American Association for Public Opinion Research (AAPOR). Among their many

recommendations and conclusions, Baker et al. (2010) suggested that online non-probability sampling can be the appropriate choice for survey research, though researchers must be cautious about their conclusions given that the online survey-taking sample is not identical to the overall United States population. While SurveyMonkey claims to take steps to ensure that their paid Audience responses are gathered from a sample representative of the United States population (http://help.surveymonkey.com/articles/en_US/kb/Who-is-the-SurveyMonkey-Audience), accessing a truly representative sample may not be achievable using online sampling methods. SurveyMonkey does not provide detailed information about their users and how they differ from either the paid sample a researcher is given, or the United States population as a whole.

It should be noted that while the goal for most social science research is achieving a sample that is generalizable to the overall United States population, jury-eligible individuals who are sought for the current type of research are different from the overall population. Studies frequently find that minorities are underrepresented in both jury pools and resulting juries (Randall, Woods, & Martin, 2008), and the lack of a specific standard for jury diversity means a representative jury is difficult to achieve (Hannaford-Agor & Waters, 2011). The typical juror is thus often an older, White, highly educated individual (York & Cornwell, 2006); this average juror is not representative of the average United States citizen (www.census.gov). As will be discussed shortly, the sample gathered in Study 2 (and later in Study 3) more closely represents the demographics of the average juror rather than the average U.S. citizen.

Despite the inherent drawbacks associated with online research, the use of services like SurveyMonkey Audience and Amazon Mechanical Turk allows for inexpensive, high-quality data to be collected quickly. Because its service is newer, SurveyMonkey Audience has lagged behind Amazon Mechanical Turk in terms of usage for, and evaluation of, social science experimental research. However, although published social science research has predominantly utilized Amazon Mechanical Turk up to this point, SurveyMonkey Audience represents the best, most attainable option for the current research.

Participants

476 unique responses were gathered by SurveyMonkey and provided to the researcher. The respondents as a group were close to evenly split between male (49%) and female (51%). Among the age groupings provided by SurveyMonkey, 24% of respondents were 18-29 years old, 21% were 30-44, 33% were between the ages of 45 and 59, and 22% were age 60 or older. The median respondent completed either an associate or bachelor's degree, and reported an annual household income of $50,000-99,999. Responses were collected from all over the United States and were overwhelmingly collected from white individuals (88% of sample). Overall, the respondents to this survey are reflective of the belief that internet access and survey-taking is not representative of the US population as respondent demographics do not match the overall U.S. demographics (http://help.surveymonkey.com/articles/en_US/kb/Is-my-SurveyMonkey-Audience-sample-representative).

Materials

The first page of the survey presented respondents with an informed consent that detailed what they would be reading and what was expected of their participation. Participating respondents were asked to read a summary of a fictional criminal trial. The case summary first presented a list of facts relating to the crime which the prosecution and defense both agreed on, including a brief description of the incident that occurred and information about the defendant's arrest. Next, respondents read summaries of each of three pieces of evidence in the case: the testimony of an eyewitness, physical evidence presented by a state laboratory technician, and testimony by a police officer about the interrogation which led to the defendant's confession. All three pieces of evidence were presented as summaries of the arguments made by the prosecution followed by defense cross-examination. Following the presentation of the confession evidence, the defense and prosecuting attorneys gave closing statements.

After reading all of the evidence, respondents were given the statute that applied to the crime in question. Respondents were then asked to answer several questions about their views of the trial as well as questions about themselves. The first set of multiple-choice questions asked respondents to specify how many officers interrogated the suspect, the time that police picked up the suspect for questioning, the length of the interrogation, and the defendant's age and ethnicity. Next, respondents reported their opinions about the strength of the eyewitness, blood test, and confession evidence, as well as the overall case. As in the pilot study and is typical in this type of research (e.g., Eisenberg, et al.,

2004; Eisenberg & Hans, 2007), a 1-7 scale was used where 1 indicated "very weak evidence against the defendant" and 7 indicated "very strong evidence against the defendant." Respondents were also asked to report how likely they thought the defendant's confession was false and how likely the confession was voluntary using a 1-7 scale where 1 meant "not at all likely" and 7 meant "very likely."

After answering questions about the evidence strength, respondents recorded their chosen verdict (not guilty or guilty) and rated their confidence in their chosen verdict on a 1-10 scale. A confidence level of 1 represented being "not at all sure" of the chosen verdict, while a 10 meant that respondents were "completely sure" about their choice. Finally, respondents were asked to specify their race/ethnicity, as well as report whether they believed they were eligible to serve on a jury. There were no mandatory questions, so respondents were free to skip anything that they did not wish to answer.[1] The control condition of the survey is presented in Appendix C – Study 2 Control Scenario.[2]

Procedures

Through SurveyMonkey Audience, an invitation to complete a survey was sent out to a random sample of Audience members. Respondents choosing to participate clicked an email link to their randomly assigned survey condition. After reading the initial informed consent page, respondents clicked through to pages that outlined a criminal trial.

[1] After completely blank responses were removed from analysis, the highest percentage of missing data for an individual question was 2.2%.
[2] The control condition of the online survey can also be accessed at https://www.surveymonkey.com/s/Shifton1

Participants were allowed to view the trial evidence for as long as they wanted, but were instructed not to go back to the evidence once they left that page. After finishing the survey, participants were directed to a final page thanking them for participation, and the completed survey was saved to SurveyMonkey Audience. On average, completion of the survey took slightly less than 10 minutes. Data collection occurred over two days in October 2013.

Participants who completed the survey were rewarded by SurveyMonkey with an entry into a random drawing for a cash prize. A small amount of money is also donated to charity when a survey is completed. Users can only complete up to two surveys per week. Unlike other online survey methods, SurveyMonkey Audience respondents are not being directly paid for their participation. According to Pickett et al. (2013), paid participation can lead to respondents not taking surveys seriously, thus resulting in data that are less reliable.

III. Results

Data

Using SurveyMonkey Audience, 476 unique survey responses were collected across nine survey conditions (listed in Table 2.1). Four responses were considered incomplete because they included only demographic data and were dropped from further analysis. Out of the remaining 472 responses, 339 respondents (71.8%) answered all three manipulation check questions[3] correctly, 80 (16.9%) answered two correctly, 24 (5.1%) answered one of three correctly,

[3] Respondents were asked to identify how long the interrogation was, how many officers conducted the interrogation, and when the defendant was picked up for questioning.

and 26 (5.5%) missed all three questions. The demographic information for all respondents as well as the subset of respondents who answered all manipulation check questions correctly (hereafter called “accurate respondents”) is presented in Table 2.2. Despite paying presumably more attention to the survey as shown by getting all of the manipulation check questions correct, answers given by the subset of accurate respondents do not meaningfully differ from the larger set of all respondents. In order to have the greatest possible power to identify significant relationships, analyses will be performed using all 472 respondents. However, analyses were also performed with only the subset of accurate respondents, and differences, if and when they exist, are noted.

87% of respondents reported that they did not know the age of the defendant; this was the correct answer since no age was given. It is not known whether individuals were nonetheless picturing a defendant of a certain age, but respondents were generally aware that the age of the defendant was not given. Similarly, 91% of respondents reported that they did not know the race of the defendant. We do not know what impact the race of the defendant may have had on evidence perceptions. However, there were significant effects found in Study 2 due to the race of the respondent. It is not known whether the defendant’s race would impact the perceived strength of evidence in a criminal trial; determining this was beyond the scope of Study 2.

Variable Correlations

To first determine whether there were significant relationships between jury perceptions of key variables, bivariate correlations were computed. These

correlations are presented in Table 2.3. Several correlations stand out as being particularly noteworthy. Most variables measuring juror evidence perceptions were correlated with the likelihood that the defendant's confession was false. As the perceived likelihood of a false confession increased, perceptions of evidence strength decreased. The respondent's gender is also significantly correlated with strength of evidence measures such that male respondents perceived evidence to be stronger than female respondents. Several measures are also correlated with the race of the respondent. To be conservative, subsequent analyses were conducted controlling for participant gender and race.

Correlations between variables measuring the eyewitness testimony, blood test, confession, and overall case strength were relatively large (ranging from r=.50 to r=.79). The largest of these correlations was between confession strength and case strength (r=.79) which supports the prevailing wisdom that the confession is a very important driver of perceived case strength (Kassin, Bogart & Kerner, 2012; Hasel & Kassin, 2009; Kassin & Sukel, 1997). Given the large magnitude of correlations between the key strength of evidence variables, it was necessary to test for multicollinearity issues using collinearity diagnostics in SPSS. Multicollinearity tests showed no issues with including all four of these variables in subsequent analyses, as the largest VIF was 4.15, lower than the typical threshold of concern of 10 (O'Brien, 2007). Subsequent analyses are thus conducted using all evidence strength measures.

Impact of Situational Interrogation Factors

In order to test hypotheses about situational interrogation factors, a 2 (length of interview) x 2 (number of interviewers) x 2 (recent sleep) Multivariate Analysis of Covariance (MANCOVA) was performed on the evidence strength variables and variables concerning the confession's voluntariness and likelihood of being false. The covariates were respondent's race and gender, since these demographic factors were significantly correlated with several of the evidence strength variables. The MANCOVA results indicated significant main effects of gender (F (7, 423) = 3.22, p=.002), interrogation length (F (7, 423) = 10.60, p<.001), recent sleep (F (7, 423) = 2.93, p=.005), and expert witness (F (7, 423) = 2.10, p=.043) for the general model.

In addition to the significant effects with the general 2x2x2 MANCOVA model, there were several significant univariate relationships with specific variables. Though it did not significantly impact the overall model, the race of the respondent had a significant effect on the perceived likelihood of a false confession (F (1, 429)[4] = 7.75, p=.006, d=.27)[5] and a voluntary confession (F=5.36, p=.021, d=.22) as well as perceptions of the strength of the eyewitness (F=5.11, p=.024, d=.22), confession (F=10.31, p=.001, d=.31), and overall case (F=7.56, p=.006, d=.26). Respondent gender significantly impacted the strength of the eyewitness (F=6.46, p=.011, d=.25), blood test (F=4.21, p=.041, d=.20), confession (F=11.99, p=.001, d=.33), and case (F=17.84, p<.001, d=.41), as well as perceptions of a false (F=10.48, p=.001, d=.31) and voluntary confession

[4] The degrees of freedom for all MANCOVA F-tests on specific evidence strength variables are the same (1, 429) and are not reported each time
[5] Cohen's d measure of effect size

(F=3.63, p=.057, d=.18). In general, women seemed to be more skeptical of the entire case, as female ratings of evidence strength were significantly lower than the perceptions of male respondents. Minority respondents found evidence to be weaker than non-minority respondents, and found the confession more likely to be false and less likely to be truthful. It should be noted that although race appears to be a factor, the small number of minorities (53 respondents, 11.2% of total) surveyed makes it difficult to draw firm conclusions.

The length of the interrogation significantly affected perceptions of the strength of the eyewitness testimony (F=4.86, p=.028, d=.21), the confession (F=51.88, p<.001, d=.70), and the overall case (F=23.92, p<.001, d=.47), as well as perceptions of the confession's likelihood of being false (F=37.61, p<.001, d=.59) and voluntary (F=28.72, p<.001, d=.52). Figure 2.2 shows the impact of changing the interrogation length from 1 to 16 hours. In general, findings were consistent with hypotheses. Specifically, longer interrogations resulted in reductions in the perceived strength of the confession and overall evidence, and voluntariness of the confession, and increases in the perceived likelihood of a false confession (see Table 2.4 and Figure 2.2).

Whether the defendant had recently slept had a significant impact on perceptions of the strength of the confession (F=12.12, p=.001, d=.34) and overall case (F=7.03, p=.008, d=.26), and the likelihood that the confession was false (F=13.24, p=.001, d=.35). As shown in Figure 2.3, the defendant working all night prior to the interrogation led to a decrease in the perceived strength of the confession and overall case, and an increase in the likelihood that the confession

was false. Finally, a significant effect was observed regarding perceived confession strength due to the number of interrogators (F=4.74, p=.030, d=.21). As the number of interrogators increased from 1 to 3, confession strength decreased. Similarly, the inclusion of an expert witness had a significant effect on the strength of the confession (F=4.60, p=.033, d=.21). However, this effect went in the opposite direction from what was theorized: the confession was rated to be stronger when an expert witness testified (5.17) than when there was no expert witness (4.50). There were no significant interaction effects. The specific estimated means for all main effects are presented in Table 2.4. Finally, all analyses reported in Table 2.4 were performed using all respondents; there were no differences in any of the results when only the subset of accurate respondents was included.

Impact of Key Variables on Verdict

In order to determine the impact of survey variables on the resulting respondent verdict, a series of logistic regressions were conducted. Three separate models predicted verdict using (1) all situational factors and interactions, (2) ratings of evidence strength, and (3) all situational factors, ratings of evidence strength, and interactions. Each of these three logistic regressions also included participant gender and race.

The full models are reported in Table 2.5 along with the odds ratios and confidence intervals for all computed variables. In Model 1 (X^2=37.67, p<.001) which included all situational factors, the verdict was influenced by the length of the interrogation and whether the defendant recently slept. Additionally,

respondent gender and race significantly predicted verdicts. In model 2, situational factors were dropped and replaced with evidence strength ratings, along with gender and race. In model 2 (X^2=326.29, p<.001), the significant predictors of respondent verdict are respondent ratings of the overall case and perceptions of the likelihood of a false and voluntary confession. Finally, model 3 includes all of the variables used in models 1 and 2. As shown in Table 2.5, models 2 and 3 have essentially the same significance despite model 3 (X^2=327.52, p<.001) including the situational factor variables. Using pseudo-R^2 values for logistic regression models 2 (Nagelkerke = .706) and 3 (Nagelkerke = .707) we find that there is virtually no benefit to including situational factor variables. The main predictors of verdict are perceptions of the strength of the case, the likelihood that the confession was false, and the likelihood that the confession was voluntary. When analyses were redone with only the subset of accurate respondents, results remained the same.

IV. Discussion

Hypotheses

The goal of Study 2 was to determine whether the presence of situational interrogation factors affected respondents' interpretation of trial evidence. The first hypothesis of this study asserted that all three situational factors would decrease the perceived voluntariness and truthfulness of the confession. Though not all situational factors had the same effect, a defendant that faced a lengthy interrogation and, to a lesser extent, lacked a full night's sleep, gave a confession

that respondents deemed less likely to be voluntary and more likely to be false than a confession given without the presence of these situational factors. While using three interrogators versus one interrogator was expected to significantly impact juror perceptions of the confession, there were no significant effects found.

Varying the number of interrogators was suggested originally by Kassin and Sukel (1997) as a situational factor that could potentially impact juror opinions of the confession. Kassin et al. (2010) suggest that suspects are socially isolated by interrogators questioning their supposed criminal involvement, and this research hypothesized that respondents would believe that the presence of three interrogators to lead to a more socially isolating, coercive environment than the presence of only one interrogator. Prior studies have looked at the effect of different interrogation tactics (Kassin & McNall, 1991; Kassin & Sukel, 1997; Leo & Liu, 2009; Blandon-Gitlin, Sperry, & Leo, 2010; Costanzo, Shaked-Schroer, & Vinson, 2010). In the present study, the tactics used by one or three interrogators were not specified, which may have led respondents to draw their own conclusions about the impact of three interrogators. Additionally, three interrogators were used in the experimental manipulation rather than two specifically so that respondents would not immediately envision a “good cop, bad cop” scenario, defined by Cialdini (1987) as a situation where “a pair of interrogators confronts a suspect with vastly different styles” in order to induce a confession. However, rather than interpreting the three-interrogator scenario as more coercive than the one-interrogator scenario, respondents may have not

known how the number of interrogators would matter, and thus ignored the information.

Hypothesis 2 was relevant to previous studies' findings that the confession in a criminal case is the most important piece of evidence (Devine, 2012; Devine et al., 2009; Devine et al., 2001). In this study, I found that the strength rating of all of the evidentiary variables (eyewitness, blood test, and confession) to be significantly correlated with the resulting verdict. Though the strongest correlation with verdict was the perception of the strength of the entire case (r=.70), the strongest correlation for any individual piece of evidence belonged to the confession (r=.62). This finding replicates previous research that a confession is the most important piece of evidence, since the perception of its strength was more closely related to the verdict than any other singular piece of evidence.

Finally, the third hypothesis was that the inclusion of situational factors would result in significant decreases in the conviction rate. Partial support was found for this hypothesis. The number of interrogators and amount of sleep the defendant recently received had little to no effect on the resulting verdict. As discussed above, the presence of three interrogators was intended to indicate a coercive environment that can lead to a false confession, but respondents did not find this to be the case. For both the lack of sleep and number of interrogators, it is possible that jurors could not imagine that these situational factors could cause a person to falsely confess, an idea first proposed by Kassin and McNall (1991).

Though Kassin and McNall (1991) found that mock jurors acknowledged that false confessions could happen, mock jurors could not imagine falsely

confessing when placing themselves in the same situation. Woody and Forrest (2009) asked 361 respondents about whether “someone else” would confess without being physically coerced, and whether they themselves would confess in the same situation. While 87.3% of respondents said that someone else would confess even without physical coercion, only 32% of respondents said that they themselves would confess in that situation. Respondents in the current study may have been unable to imagine how three interrogators and a lack of recent sleep could lead to a suspect falsely confessing to a crime, as they are unlikely to see themselves falsely confessing under such circumstances. Respondents who were not presented with expert testimony, which explained how these factors could induce a false confession, were likely unaware of how these interrogation tactics and sleeplessness can increase the risk of false confessions. However, as will be discussed, number of interrogators and amount of sleep did not significantly impact perceptions of those presented with expert testimony in this study.

Although the number of interrogators and amount of sleep had no effect on resulting verdict, changing the interrogation length from 1 hour to 16 hours did influence verdicts. The conviction rate in the control scenario which presented no situational factors was significantly higher than the conviction rate in almost all scenarios where the interrogation length was 16 hours. Respondents who viewed confession evidence obtained after 16 hours of interrogation were less likely to convict the defendant (35% voted to convict) than if it had only taken the defendant 1 hour to confess (55% voted to convict). Given that prior research by

Blandon-Gitlin et al. (2010) and others has found that jurors who are aware that a confession may be false or coerced still convict the defendant, the current study finding a significant decrease in conviction rate is noteworthy. The current study's findings may differ from prior findings because respondents in this study are from the general population, rather than the college students used in prior research. Additionally, false confessions are an increasingly common news topic (google.com/trends) and thus respondents today may be more aware of the potential for a false confession than respondents were in prior studies. Regardless of the explanation, mock jurors were less likely to convict when presented with a confession that resulted from a lengthy interrogation.

Additional Findings

In addition to results that specifically addressed the hypotheses of Study 2, several interesting findings emerged that merit further discussion. First, the length of the interrogation significantly affected the perceived strength of the eyewitness. Prior research has discussed how confession evidence can taint other aspects of the case, such as an inability to overcome the weight of a confession against a defendant (Kassin et al, 2012; Hasel & Kassin, 2009; Kassin & Sukel, 1997). Kassin, Dror, and Kukucka (2013) discuss how context impacts the conclusions of forensic work whereby incorrect conclusions can be drawn in a lab based on outside information such as a suspect confession. They find that although researchers expect individual pieces of evidence to be treated as independent from one another in theory, this is not always the case in practice.

Given the finding of Kassin et al. (2013) that evidence is not independent, the finding of the current study that the presence of a confession impacts the rest of the case is perhaps not surprising. However, the current research is notable in finding that the length of the interrogation which produces a confession impacts perceptions of the strength of a wholly separate piece of evidence. Now not only does the presence of a confession impact evidence in the rest of a criminal case, but situational details about the confession setting can have an impact. This finding shows the power of the confession to impact perceptions of other evidence and how skepticism about the confession leads to skepticism about the entire case.

A second noteworthy finding concerned how expert testimony on false confessions impacted evidence perceptions. At the suggestion of a committee member, an expert witness condition was included to determine whether juror opinions would change when they were made aware of false confession risk factors and potential problems with the current confession. Based on several prior studies, the inclusion of an expert witness was hypothesized to significantly affect juror perceptions of evidence strength. Chojnacki et al. (2008) found that knowledge of false confession risk factors was beyond the common knowledge of the average juror, and that expert testimony would be educational. Survey participants have even told researchers that they want to hear expert testimony about why false confessions might occur (Costanzo et al., 2010). Finally, Blandon-Gitlin et al. (2010) found that the inclusion of expert testimony produced a significant decrease in the percentage of respondents who found the fictional

criminal guilty, and lowered the perceived strength of the evidence against the defendant.

Based on this prior research, the presumption was that an expert testifying about false confessions would educate jurors about how they could determine if a confession was false or coerced. Study 2 hypothesized that respondents who read testimony by an expert witness would be more likely to find the confession false and coerced, and would be less likely to convict. However, the opposite result was found in Study 2; the inclusion of expert witness testimony led to a significant increase in the perceived strength of the confession. Thus rather than helping their case, the defense's expert witness influenced jurors to the point that they found the confession more convincing of the defendant's guilt.

Blandon-Gitlin et al. (2010) found that expert testimony significantly influenced juror findings in a criminal case. Jurors read expert testimony about false confessions and coercive interrogation tactics, and then reported that the confession was more likely to be false and coercive. Consequently, jurors found the defendant guilty less often than they did prior to reading the expert testimony. It is possible that if the current research had duplicated the testing methodology used by Blandon-Gitlin et al (2010), a similar result could have been found. However, Blandon-Gitlin et al. (2010) used the same respondents to evaluate juror beliefs with and without expert testimony; respondents were given questionnaires before and after expert testimony, and evaluated whether their opinions changed after reading the expert testimony. It is possible that the reason the current study found a negative impact of the expert testimony is

because respondents were unable to compare the expert testimony with a presentation of evidence that did not include expert testimony.

There are several studies which lend support to the idea that expert testimony for the defense may not provide much benefit to the defense's case. In a study of actual jurors who had participated in criminal trials in Texas, Boccaccini, Murrie, and Turner (2014) found that the presentation of expert testimony for the defense side led jurors to become skeptical of expert testimony offered by both sides. However, Boccaccini et al. (2014) found that jurors did not believe that expert witnesses were biased; neither defense nor prosecution witnesses were rated as dishonest, and disagreements between experts were attributed to the complexity of the case rather than being due to opposing experts being paid by one side or the other. Similarly, Levett and Bull Kovera (2008) found that jurors thought experts for both sides were less credible when opposition to an expert's testimony was offered by another expert, but these experts were again not presumed to be biased by mock jurors. One possible solution would be to follow the recommendation put forth by Robertson and Yokum (2012) who suggest the courts should use blinded experts when asked to review a case without being told which side they would work for. By allowing expert witnesses to issue a report on the case without jurors thinking experts are being influenced by the side that is paying them, Robertson and Yokum (2012) found that expert witnesses were rated as more credible and more influential.

A final explanation for the somewhat unexpected finding in this study could have also been caused by the manner in which the expert testimony was

presented to respondents. Because of the nature of the evidence presentation, perhaps the importance of an expert's testimony was not sufficiently salient to respondents. Given that Costanzo et al. (2010) found that jurors wanted to hear expert testimony and that Blandon-Gitlin et al. (2010) found that the inclusion of expert testimony had a significant impact, it is possible that jurors simply did not pay attention to the expert testimony in the current study. Future research should present live, in-person expert testimony to respondents to determine whether jurors would pay more attention to it. Following Robertson and Yokum (2012), expert testimony could also be varied according to whether experts were hired "blinded" or not to determine what effect that may have on the perceptions of criminal juries.

Study 2 Limitations

One limitation deals with the respondent sample collected for Study 2. Because Internet access is not universal in the United States, a truly nationally representative population is unlikely to be achieved through online sampling. It is also possible that self-selection bias occurred such that some individuals were more likely to participate than others, potentially leading to a systematic bias where participants and non-participants are not from the same population (Wright, 2005). Although we know that SurveyMonkey Audience members have self-selected into surveys, we do not know how these people differ from those who do not sign up for the service. Using 2010 U.S. Census data to compare survey respondents to the U.S. population, survey respondents are less racially diverse[6]

[6] 88% of the respondent sample is White compared to 72% of Census respondents identifying as White

than the overall population. Respondents are also older, more highly educated, and have higher annual household incomes than the overall population. It is not known how these differences between the U.S. population and the survey sample impact the results of this study.

As has been discussed previously, collecting the sample online through SurveyMonkey Audience rather than in-person necessitated the use of a trial summary rather than a complete transcript. The shortened summary, while used in several other recently published studies, is at best only an approximation of a real world criminal trial (Greene & Evelo, 2013; Martire et. al., 2013; Park, 2011; Peters, Lampinen & Malesky, 2013; Wallace & Kassin, 2012). It would have been prohibitively expensive to collect a similar sized, heterogeneous, in-person sample that utilized a full criminal trial transcript.

Despite these limitations, Study 2 is believed to be the first to examine more than one situational interrogation risk factor simultaneously. This study found that the length of the interrogation significantly influenced mock jurors' opinions on evidence strength as well as their resulting verdict in a hypothetical case. The current study helps to highlight which risk factors are pertinent to jurors without being conspicuously highlighted during a criminal trial, and which factors need to explained to jurors in more thorough detail. Respondent opinions were affected by interrogation length simply by being told how long the interrogation lasted, yet simply being told that the defendant was interrogated by three interrogators had little effect on respondent opinions of evidence strength. With proper explanation, this study provides support for thinking that jurors can

accurately discern between coerced and involuntary confessions and those which are truthful and indicative of defendant guilt.

Impact of Study 2 on Study 3

The finding that interrogation length has a significant impact on the perceived likelihood that a confession is false or involuntary is not surprising given prior research into the correlates of false confessions (Kassin et al., 2010; Drizin & Leo, 2004; Leo & Drizin, 2010). Defendants subjected to lengthy interrogations become tired, confused, and unable to match interrogators who use tactics designed to induce a confession (Blair, 2005). Although a lengthy interrogation does not automatically lead to a confession, these tactics and conditions can make a false confession more likely (Drizin & Leo, 2004). However, prior research has also found that even if jurors are able to determine that a confession is at least questionable if not outright false, those same jurors find it difficult to discount the presence of the confession, and tend to convict the defendant (Blandon-Gitlin et al., 2010; Chojnacki, Cicchini, & White, 2008; Kassin & Sukel, 1997; Kassin & McNall, 1991). Here is where Study 2 deviates from prior findings in that I found that significantly fewer jurors were willing to convict a defendant when the defendant's confession resulted from a 16 hour long interrogation compared to a one hour interrogation.

Varying the length of the interrogation, either 1 hour or 16 hours long, produced the largest impact in Study 2 in comparison to varying the amount of recent sleep and number of interrogators. Interrogation length affected perceptions of the strength of the eyewitness, confession, and overall case, as

well as the perceived voluntariness and truthfulness of the confession. Most importantly, a lengthy interrogation decreased the likelihood that the defendant would be found guilty. Because the length of the interrogation had the most influence on dependent measures, this factor, but not the other two factors, will be experimentally manipulated in the third study. The findings of the third study, which introduces dispositional interrogation risk factors, will be particularly noteworthy if respondents continue to question a confession that results from a lengthy interrogation.

Based on the results of the questions which asked respondents to give the age and race of the defendant, characteristics that were not provided, I cannot draw conclusions about how these factors would impact respondent opinions. 87% of respondents reported that they did not know the age of the defendant, and 91% of respondents reported that they did not know the race of the defendant. It is impossible to know whether respondents chose this option because they knew that this information was not given, or whether they believed that they could not remember the correct answer. However, as discussed in the introductory literature review, youthfulness is a dispositional risk factor identified in false confessions. Whereas Study 2 focused only on situational risk factors, Study 3 examines the combined impact of dispositional and situational false confession risk factors on perceptions of trial evidence.

CHAPTER 4 – STUDY THREE

I. Introduction

Kassin and Sukel's (1997) recommendation that future research look into how situational confession factors impact the perception of confession evidence forms the basis for the current research. The pilot and second studies both presented experimental scenarios that included situational factors to determine what, if any, effect they have on jurors' perception of evidence strength. The final study in this dissertation tests interrogation length along with the introduction of additional variables found in actual criminal trials which have already been shown to influence perceptions of evidence at trial. This is partly because the first two studies incompletely, but purposefully, represented a criminal trial by leaving out details about the defendant. The simpler design of the first two studies allowed for the discovery of any potential influence of situational factors of a confession. In this follow-up study, the age of the defendant was varied, as was the crime the defendant is accused of committing. I first discuss reasons for choosing these variables to manipulate, and then provide a background literature review.

There are multiple reasons why crime severity and defendant age are expected to impact perceptions of evidence strength. In this third study, the defendant will be either 16 years old or 22 years old. In most states, though notably not New York, this age difference could lead the younger defendant to be tried in the juvenile system, whereas the older defendant will always remain in the adult criminal justice system. As will be discussed, the different court systems based on age could result in vast differences in trial outcomes. Additionally,

juvenile and young adult confessions are generally viewed differently by jurors assessing their reliability (Najdowski et al., 2009).

Crime severity is relevant in that since 1989, most of the currently identified false confessions are for serious crimes such as murder (47% of exonerations) and rape (35% of exonerations) (http://www.law.umich.edu/special/exoneration). Because pressure is put on police to identify a suspect and the prosecution to hold the suspect accountable for the crime, presumably more intense pressure is put on an individual to confess to the crime. In addition, because of the severe consequences attached to severe crimes, there is often more motivation to exonerate someone wrongly convicted. A confession that results from pressure may be more likely to be false, yet also more likely to be accepted by the prosecution and the jury as truthful because of the severity of the crime. The desire to hold someone accountable for the crime and close the case can trump other evidence, even when the evidence does not implicate the suspect who confessed (Kassin, 2012). This research seeks to identify what effect the inclusion of situational interrogation factors has on two different crimes with differing levels of perceived severity.

In addition to omitting the age of the defendant, in the first two studies the alleged crime was specified to the jury but was never varied. The age of the defendant and varying degrees of crime severity are details that jurors would likely discuss and consider when determining the defendant's culpability. For example, Einat and Herzog (2011) found significant differences in punishment and perceptions of the seriousness of a crime based on the offender's age.

Younger offenders' crimes were rated as less serious and they were given more lenient punishments compared to older offenders.

A final reason why crime severity and defendant age will be varied in the third study is because these are aspects of a criminal trial which may affect a juror's perception of evidence strength and the confession. A defendant confessing to a serious crime that holds the possibility of a lengthy incarceration might be viewed differently than confessing to a minor crime with only a short period behind bars. Darley, Carlsmith, and Robinson (2000) found that increases in crime severity led to more punitive punishment when a defendant was convicted, but their study did not take into account how juror opinions on evidence strength might impact the likelihood of conviction in the first place. Varying these aspects of the criminal trial provides an additional way to determine whether the length of the interrogation increases or decreases the perceived strength of the confession and the whole case.

II. Impact of Defendant's Age on Juror Perceptions of Evidence

Including information about the age of the defendant in the case scenario is a worthwhile follow-up because this will allow jurors to consider a case which more closely resembles an actual criminal trial. Given that the evidence is intended to be at least somewhat ambiguous, jurors may have to in part utilize their own biases about the defendant, who will either be a minor or an adult depending on the survey scenario. Because age is an important factor in the U.S. criminal justice system, the inclusion of the age of the defendant in this research

should be important to jurors and may influence their perceptions of the evidence as well as their verdict. The defendant's age can determine whether he or she is tried in juvenile or adult court, which then impacts the type and severity of punishment that can be administered if found guilty. Age can also be important to jurors because the perception of culpability for the crime can be impacted by the age of the defendant.

In part, this third study seeks to determine whether the perception of evidence strength varies based on the age of the defendant. The extant literature indicates that the age of the defendant will change the way confession evidence is perceived, though the direction of the change is less clear. Some studies support the idea that younger offenders will be given more leniency, while others find that young offenders are punished more harshly. Whether age is found to be a mitigating or aggravating factor differs depending on the study. This study attempts to determine how age affects the perception of the strength of the evidence against the defendant.

Prior research has shown that a defendant's age can affect the likelihood of a suspect confessing, the likelihood of a false confession, and juror perceptions of culpability (Najdowski et al., 2009; Redlich et al., 2008a; 2008b). Najdowski et al. (2009) found that juvenile confessions that were perceived as coerced were generally discounted by jurors. When jurors viewed the confession as voluntary, it was more strongly indicative of the defendant's guilt. Conversely, Redlich et al. (2008a; 2008b) found an inverse relationship between perceptions of juvenile suspects' understanding of their rights during a confession, and the

resulting perceptions of guilt. As juvenile's perceived level of understanding of their rights decreased, the likelihood that study participants would find the suspect guilty increased. These three prior studies found that aspects of a confession impacted the resulting trial outcomes for juvenile offenders, but with opposite results.

Other studies on the impact of age on culpability and guilt ratings are more supportive of the belief that jurors will be more lenient toward a juvenile who is confronted with a potentially coercive confession environment. Porter, ten Brinke, and Gustaw (2011) found that individuals whose appearance was judged to be untrustworthy were convicted more easily, with less evidence against them, than those who appear trustworthy. They mention the possibility that youthfulness could be treated similarly to trustworthiness, affording young individuals with an extra defense against judgments of guilt and subsequent incarceration. Camilletti and Scullin (2012) arrive at a similar conclusion, finding that lawyers and mock jurors believed that a youthful, less adult-like, defendant would be seen as less culpable than defendants who were clearly adults. The authors suggested that attorneys highlight their defendant's youthfulness and innocent appearance to play into jurors' preconceived notions about youthful offenders.

While an innocent, youthful appearance may make it easier for a jury to sympathize with the defendant, research by Scott and Steinberg (2008) offers a different reason for juveniles to perhaps be seen in a less harsh light. Scott and Steinberg argue that cognitive development continues through age 25; younger brains have not developed to the point where consideration of the consequences

of one's actions always occurs (see also Bryan-Hancock and Casey, 2010). Though in the current study the hypothetical defendants are ages 16 and 22, the older defendant would likely be seen as more developed and more able to consider the consequences of their actions. These studies, which find that youthful offenders are treated less harshly and found less culpable for their actions, lend support to the idea that individuals find young offenders to be less blameworthy.

Another way in which youthful defendants are given leniency is in the perceived seriousness of the crimes that they commit. Several studies have shown that respondents view crimes committed by juveniles as less serious violations of the law than those same crimes committed by an older individual. Einat and Herzog (2011) found significant differences in punishment and perceptions of the seriousness of a crime based on the offender's age; as noted above, crimes committed by younger offenders were rated as less serious and given more lenient punishments compared to older offenders.

Einat and Herzog's (2011) study was an updated replication of an earlier study by Hawkins (1980) which examined the impact of juvenile status on determinations of culpability and appropriate punishment. Hawkins (1980) found that juvenile crimes were generally given lower punishment and lower severity ratings by mock jurors. This indicates that juvenile status can induce leniency amongst jurors compared to similar crimes committed by adults.

Hawkins (1980) also found that juveniles were given this benefit no matter what respondents viewed the perceived "cause" of the juvenile's criminal

behavior to be, though the amount of leniency given to juveniles varied according to the perceived severity of the crime committed. A follow-up study by Hawkins (1981), however, indicated that seriousness and severity of punishment did vary depending on what the jury thought the crime's root cause was. Hawkins presented respondents with causes for the criminal act that were either personal (self-control theory, psychological theories, and biological theories were represented) or societal (anomie/strain theory, and differential association theory). Hawkins found that the crimes personally associated with the offender were rated more deserving of punishment and severe in nature. Those crimes which were attributed to something outside of the offender's control were rated as less severe and less likely to require a lengthy incarceration. Hawkins (1981) found that no matter the cause of the criminal act, juvenile status was enough to lower the perceived seriousness of the crime, as well as the culpability of the offender (see also, Willis Esqueda & Swanson, 1997).

For the purposes of the present research, these studies indicate that respondents may be more lenient when presented with a juvenile defendant than with an adult defendant, and that this effect may be magnified when they believe that the crime's root cause was outside of the defendant's control. The main experimental manipulation of this dissertation is the inclusion of a situational interrogation factor, something that is essentially outside the defendant's control. The situational factor, in this case interrogation length, may magnify the perception that responsibility for the crime and the confession lies largely outside the control of the offender, resulting in a decrease in the perceived culpability of

the offender (and a not guilty verdict). In this case, the age of the defendant and a lengthy interrogation may combine to lower the perceived strength of evidence and result in an acquittal that may be a guilty verdict for an older defendant.

Though the entirety of the research discussed so far has found that age may be seen as a mitigating factor that decreases the culpability of a juvenile or younger defendant, there is research suggesting age as an aggravating factor. Some studies have frequently found that juveniles are sentenced more harshly than the above studies might predict, especially when the crimes are severe (Johnson & Kurlychek, 2012; Kurlychek & Johnson, 2010; 2004). Johnson and Kurlychek found that juveniles sentenced in adult court received harsher punishment than adults just over the age of majority who commit the same crimes. The stigma attached to a juvenile prosecuted in the adult court system for an “adult crime” results in less sympathy from jurors rather than more. Juvenile status might indicate an individual who is less responsible for their actions in theory, but in practice these young offenders may receive even more punishment. The inconsistent results from juvenile offender studies indicate that factors other than age may be to blame.

Regardless of the evidence presented, jurors may consider other factors, in this case age, in order to determine the defendant’s guilt or innocence. This may lead jurors to rely on what Kalven and Zeisel (1966) termed the “liberation hypothesis” where jurors make determinations in ambiguous cases by using extra-legal factors to come to a decision (see also Kassin, Reddy, & Tulloch, 1990). Eisenberg et al. (2004) argued the possibility that characteristics of an

individual juror and their own unique preferences may impact their ratings of evidence strength. This idea indicates that, when in doubt, jurors may decide the case by determining whether the age of the defendant tells them something about their likelihood of guilt. Individuals may convict an offender out of fear regardless of whether they view younger offenders as being less responsible for their crimes.

Overall, there is no clear picture about who will receive leniency from jurors, younger or older defendants. This may be due to the fact that younger and older individuals are dissimilar in more ways than just age. As discussed by Bushway and Piehl (2007), two offenders with the same criminal history, one young and one old, are different in more ways than simply their age. A younger individual who has the same criminal history as an older offender is treated differently because the youthful offender amassed the same history in a shorter period. This is yet another factor to consider when looking at the existing research which finds no clear effect of age on the resulting outcome. However, in the third study, no information about prior criminal history of the defendant will be supplied.

While the above research is inconsistent about whether a youthful offender will be convicted more or less often, the research that discusses minors' likelihood of false confessions is clearer. Whether due to their deficient emotional, cognitive, and physical maturity, many prior studies have found that juveniles are at a higher risk of falsely confessing than are adults. An experiment by Redlich and Goodman (2003) designed to test the effects of age and suggestibility on

likelihood of false confession found that false confessions decreased as age increased. This finding also translates to known false confessions in criminal cases, as Drizin and Leo (2004) found that 35% of the proven false confessions were given by juveniles younger than 18 years old. Drizin and Leo (2004) contend that “this suggests that suspect’s age is strongly correlated with the likelihood of eliciting a false confession” (p. 942).

Why are juveniles at risk for false confession? Many studies have found that disabled adults and juveniles are less likely to understand their *Miranda* rights and thus less likely to exercise their rights (for a review, see Kassin et al., 2010). Though waiving one’s *Miranda* rights is supposed to be done knowingly, intelligently, and voluntarily, it is difficult to consistently determine whether juveniles correctly understand their rights (Goldstein et al., 2003; Grisso, 1981; Grisso et al., 2003).

The recent research on brain development (for example, Scott & Steinberg, 2008) indicates that juveniles under the age of 18, or even age 25, do not have the same decision-making abilities as older individuals. The inability to properly consider the consequences of one’s actions can lead juveniles to make poor decisions about confessing to crimes, whether innocent or not. Because adolescents are less likely to understand their rights and the evidence against them, they become more likely to admit to whatever is suggested to them by police, even when the juvenile knows she or he is innocent. The increased risk of juveniles falsely confessing is hypothesized to have a direct impact on the perceived reliability of their confession.

Since previous studies have found that juveniles are more likely to misunderstand their rights and falsely confess, on the one hand, it stands to reason that adults will be seen as more able to understand their *Miranda* rights and less likely to be pressured to falsely confess. Ghetti and Redlich (2001) found that respondents believed that older adolescents were more likely to be legally competent, more likely to understand the situation, and were more blameworthy than younger children. Thus it is apparent that mock jurors are aware of potential limitations in reasoning ability due to age. The studies that find that juveniles do not have fully developed decision-making skills should lead jurors to believe that adults are more aware of what they are doing when they confess.

On the other hand, though the existing research indicates that juveniles are more likely to falsely confess to a crime they did not commit, it remains to be seen whether jurors consider this when evaluating the reliability of a juvenile confession. The fact that juveniles are overrepresented in known false confession cases may indicate that jurors are not necessarily attuned to the idea that juveniles are less capable of standing up to interrogators when innocent. Thus juvenile status may not decrease the perceived reliability of a juvenile's confession. This study seeks to determine whether there are any differences between respondent's views on the reliability of confessions offered by a juvenile and a young adult.

There have been numerous studies which examine the impact of the age of the defendant on the punishment received, and the perceived severity of their

actions, but the author has found no research that has looked specifically at the impact that age has on perceptions of evidence. Samuel and Moulds (1986) found widespread agreement on crime severity and deserved punishment, but age of the defendant was not varied like it was in studies by Hawkins (1980; 1981). When a jury is presented with the age of the defendant or potentially exacerbating factors such as situational confession factors, there might be less agreement on the outcome of the case. The interrogation length is varied in this study as a situational factor, and this study will determine whether the impact of a lengthy interrogation might be exacerbated or minimized by the suspect's age. Any of the situational factors from the initial study – length of interrogation, number of interrogators, and sleep deprivation – describe stressful situations that could be even worse for a younger suspect, though only interrogation length will be varied in Study 3.

In summary, it is uncertain whether defendants of different ages are treated differently because of their age, or differences in their opportunities to commit crimes. What might be measured in a study are individual differences in the opinions of respondents about the role that age plays in culpability and subsequent punishment. The current research examines whether the age of a defendant affects the subsequent trial outcome. A focal point of the study is whether juror perceptions of evidence strength and defendant guilt are impacted by the age of the defendant, and how situational confession factors might change the impact of the defendant's age. There are examples in the prior research of age being a mitigating factor where juveniles are given more lenient punishments,

as well as studies that conclude that age is an aggravating factor whereby juvenile status leads to worse outcomes. The current study predicts that the young defendant will be perceived as less culpable and convicted less frequently than the older defendant, and that a lengthy interrogation will widen the difference between the two conviction rates.

III. Impact of Defendant's Alleged Crime on Juror Perceptions of Evidence

Many studies have found general agreement about which crimes are comparatively more or less severe (Einat & Herzog, 2011; Hawkins, 1980, 1981; Samuel & Moulds, 1986; Willis Esqueda & Swanson, 1997). For this research, part of the third study examines whether the severity of the crime committed impacts the perception of the evidence in the case. The length of the interrogation will be varied in several scenarios, including survey conditions where a person is being accused of a more or less severe crime. It is difficult to form a hypothesis for how crime severity will impact perceptions of evidence strength and situational interrogation factors because the existing literature displays no consensus on the subject. Neither result--that it is easier or more difficult to convict a defendant accused of a serious crime--would be surprising based on the existing literature. This current research expects to find that it will be more difficult to convict the defendant of the more serious crime, and that the presence of a lengthy interrogation will make it even harder to convict the defendant because it will lessen the perceived strength of the confession.

The prior literature has not come to agreement on how crime severity impacts juror perceptions of evidence and resulting determinations of suspect guilt. More than 30 years ago, Kerr (1978) reviewed the literature on the relationship between crime severity, severity of punishment, and juror perceptions of evidence. Kerr found that as crime and punishment severity increased, the likelihood of conviction decreased. Jurors generally thought that a more severe crime required more evidence to convict. If these perceptions hold true today, this research should find that a person accused of a more severe crime will be less likely to be convicted with the same evidence compared to a person committing a less severe crime. A lengthy interrogation that calls the reliability of the confession into question would only make it more difficult to convict. More recently, research by Freedman, Krismer, MacDonald, and Cunningham (1994) reported strong support for Kerr's (1978) findings that increased crime severity led to jurors requiring more evidence to convict. However, this article set off a back and forth discussion about the merits of these findings between Freedman (1994) and Kaplan (1994a, 1994b), with Kaplan questioning the methods used in prior studies (Freedman et al., 1994; Kerr, 1978). Kaplan argued that future studies need to vary the evidence presented to respondents to determine the relationship between crime severity and the resulting verdict.

The critiques posed by Kaplan (1994a; 1994b) state that Freedman et al. (1994) ignored prior research which found a difference between mock juror studies and studies of actual criminal trials. Kaplan (1994a; 1994b) argued that

the differences found in other studies lessened support for Kerr's (1978) study. These disagreements indicate that the role that evidence plays in the determination of the relationship between crime severity and perceived suspect guilt is not yet definitive. The current study evaluates whether changes to the evidence, mainly the presentation of potentially mitigating interrogation factors, will exacerbate the tendency of jurors to require stronger evidence of guilt for more severe crimes.

Following the study by Freedman et al. (1994) and subsequent discussion by Kaplan (1994a; 1994b) and Freedman (1994), there has only been limited research on crime severity. One exception is a study by Darley and colleagues (2000), which found that increases in crime severity led to more punitive punishment, regardless of any external factors or variations in juror perceptions of future offending. If this holds true for the current research, a lengthy interrogation could be seen as an external factor which has no impact on perceptions of the evidence in a criminal case. A lengthy interrogation may not result in any change in the reliability of the confession and thus would not impact the resulting strength of the confession.

It is important to study how interrogation length impacts the reliability of a confession depending on crime severity because the vast majority of known false confessions have occurred in very serious crimes. Drizin and Leo's (2004) study of 125 known false confessors found that 81% of all subjects falsely confessed to a murder charge. The second and third most prevalent crimes to be falsely confessed to were rape and arson at 9% and 3% respectively. This supports the

idea that false confessions happen more for serious crimes due to there being more pressure on police to solve cases (Drizin & Leo, 2004). A more recent review of all known exonerations containing a false confession found that 125 of 178 exonerees[7] (70.2%) were charged with murder (http://www.law.umich.edu/special/exoneration). In contrast, murder accounts for less than one tenth of 1% of all arrests (http://www.fbi.gov/about-us/cjis/ucr).

One of the important points to come from the National Registry of Exonerations is that an overwhelming majority of exoneration cases are serious, violent crimes. Over 93% of the cases with crime type listed were violent crimes such as homicide, sexual assault, child sexual abuse, and robbery. Drizin and Leo's (2004) sample of 125 proven false confessors contained only a single instance where the most serious crime of conviction was non-violent. These findings would seem to indicate that more serious crimes have a higher likelihood of a false confession or other miscarriage of justice, and/or that more serious crimes have a higher likelihood of being identified and corrected. Thus in serious crimes, the reliability of a confession, or any piece of evidence, might be more questionable than in less serious crimes. However, it may be that false confessions are easier to detect for serious, high profile cases compared with lower severity crimes. It is unknown whether convictions for lesser crimes, many of which are the result of guilty pleas, have high rates of unreliable confessions.

Overall, there has been inconsistent support found for the belief that increased crime severity would necessarily raise the amount of evidence required by a jury to convict. Kerr (1978) and Freedman (1994) found support for

[7] As of July 2014

this idea, but subsequent publications (Kaplan 1994a, 1994b; Darley et al., 2000) question these findings. It is possible that when a severe crime is presented, a juror will be less likely to vote for a conviction than if the same evidence was given for a less serious crime. Conversely, respondents may be more likely to convict a defendant accused of committing a serious crime, perhaps due to fear that a serious criminal might be let go, regardless of how strongly the evidence links the defendant to the crime. The present research will provide evidence on one side or the other for the argument about the effect of crime severity on case outcomes. It is expected that it will be more difficult to convict the defendant when they are accused of murder compared to when they are accused of assault, and that this difference in conviction rates will be increased by the inclusion of a length interrogation.

Present Study

The trial materials used in Study 3 are based on the materials used in the pilot study and in Study 2. The scenario used in Study 3 is largely unchanged from Study 2. The only differences in the transcript are that instead of the experimental manipulations being three separate interrogation factors (i.e., interrogation length, number of interrogators, and recent defendant sleep), the manipulated variables are 1) the age of the defendant (16 vs 22 years), 2) the severity of crime committed (assault vs. murder), and 3) the length of the interrogation (1 hour vs. 16 hours) in Study 3. For the scenarios presenting an alleged murder, the section which gives facts about the crime is different than in the assault scenario. For the murder condition, the facts about the crime were

loosely based on the murder scenario used by Kassin and Neumann (1997). The overall design of Study 3 is a 2 (age of the defendant) x 2 (crime type) x 2 (interrogation length) to produce 8 unique scenarios.

The only other changes from Study 2 to Study 3 concern respondent questions. The Study 2 question which asked about the number of interrogators was removed and replaced with a question regarding the charged crime in the specific scenario, since the crime is experimentally manipulated in Study 3. Finally, because very few people answered the question about the defendant's ethnicity, which was not given in the case materials, this question was removed in Study 3 and replaced with a question asking respondents to evaluate the reliability of the eyewitness. The cost of purchasing SurveyMonkey Audience responses necessitated capping the survey length at 15 questions.

IV. Methods

Participants

529 completed individual responses were gathered by SurveyMonkey and provided to the researcher. 58 percent of the total respondents were female, and among the age groupings provided by SurveyMonkey, 15% of respondents were 18-29 years old, 22% were 30-44, 33% were between the ages of 45 and 59, and 30% were age 60 or older. Over 90 percent of respondents had at least some college education, and over 77 percent reported an annual household income of at least $50,000. Responses were collected from all over the United States and were overwhelmingly collected from white individuals (85% of sample). Similar to

Study 2, the responses gathered for this survey reflect the belief that internet access and survey-taking is not representative of the US population as respondent demographics do not match the overall U.S. demographics (http://help.surveymonkey.com/articles/en_US/kb/Is-my-SurveyMonkey-Audience-sample-representative).

Materials

Other than the differences detailed above, the materials used in Study 3 are the same as used in Study 2. The first page of the survey presented respondents with an informed consent that detailed what they would be reading and what was expected of their participation. Participating respondents were asked to read a summary of a fictional criminal trial. The case summary first presented a list of facts relating to the crime which the prosecution and defense both agreed on, including a brief description of the incident that occurred and information about the defendant's arrest. Depending on which condition respondents were randomly assigned to, the summarized facts described either a 16 or 22 year old male allegedly committing either Assault in the First Degree or Murder in the First Degree. Next, respondents read summaries of each of three pieces of evidence in the case: the testimony of an eyewitness, physical evidence presented by a state laboratory technician, and testimony by a police officer about the interrogation which led to the defendant's confession. All three pieces of evidence were presented as summaries of the arguments made by the prosecution followed by defense cross-examination. Following the presentation

of the confession evidence, the defense and prosecuting attorneys gave closing statements.

After reading all of the evidence, respondents were given the statute that applied to the crime in question. Respondents then answered several questions about their views of the trial as well as questions about themselves. The first set of multiple-choice questions asked respondents to specify the defendant's age and the current criminal charge, as well as the length of the interrogation. Next, respondents reported their opinions about the strength of the eyewitness, blood test, and confession evidence, as well as the overall case. As in the previous studies, a 1-7 scale was used where 1 indicated "very weak evidence against the defendant" and 7 indicated "very strong evidence against the defendant." Respondents were also asked to report whether they found the eyewitness testimony to be reliable, whether the blood test results indicated that the defendant committed the crime, how likely they thought the defendant's confession was false and how likely the confession was voluntary using a 1-7 scale where 1 meant "not at all likely" and 7 meant "very likely."

After answering questions about the evidence strength, respondents recorded their chosen verdict (not guilty or guilty) and rated their confidence in their chosen verdict on a 1-10 scale. A confidence level of 1 represented being "not at all sure" of the chosen verdict, while a 10 meant that respondents were "completely sure" about their choice. Finally, respondents were asked to specify their race/ethnicity, as well as report whether they believed they were eligible to serve on a jury. There were no mandatory questions, so respondents were free

to skip anything that they did not wish to answer. Condition 3 of the online survey which presents the fictional murder scenario is included as Appendix D.[8]

Procedures

Online survey respondents were recruited by SurveyMonkey Audience and invited to participate in the current research using the same procedure as Study 2. Respondents choosing to participate clicked through an email link to their randomly selected survey condition. Because all of the survey conditions were begun at the same time, there are no concerns about any respondents having been assigned to multiple versions of the survey. Invited participants were emailed a link to only one survey condition.

The first page of the survey presented respondents with an informed consent reading that detailed what they would be reading and what was expected of their participation. If individuals agreed to participate, they clicked through to pages that outlined a criminal trial. As in Study 2, participants were allowed to view the trial evidence for as long as they wanted, but were instructed not to go back to the evidence once they left that page. Following the evidence presentation, respondents were asked to answer several pages of questions about their views of the trial as well as questions about themselves. After finishing the survey, participants were directed to a final page thanking them for participation, and the completed survey was saved to SurveyMonkey Audience. On average, completion of the survey took slightly less than 10 minutes. Data collection occurred over two days in April 2014.

[8] Condition 3 of the online survey can also be accessed at https://www.surveymonkey.com/s/Shifton33

V. Results

Data

Using SurveyMonkey Audience, 529 unique survey responses were collected across eight survey conditions (listed in Table 3.1). Six responses were considered incomplete because they included only demographic data and were dropped from further analysis. Out of the remaining 523 responses, 427 respondents (81.6%) answered all three of the manipulation check questions[9] correctly, 66 (12.6%) answered only two correctly, 14 (2.7%) answered one of three correctly, and 16 (3.1%) missed all three questions. The demographic information for all respondents as well as the subset of respondents who answered all manipulation check questions correctly (hereafter called "accurate respondents") is presented in Table 3.2. There are only minor differences between the overall respondents and the subset of accurate respondents in both demographics and perceptions of evidence strength variables. The evidence strength responses for both datasets are compared in

Despite paying presumably more attention to the survey as shown by getting all of the manipulation check questions correct, answers given by the subset of accurate respondents do not meaningfully differ from the larger set of all respondents. In order to have the greatest possible power to identify significant relationships, analyses will be performed using all 523 respondents. However, analyses were also performed with only the subset of accurate respondents, and differences, if and when they exist, are noted.

[9] Respondents were asked to identify the age of the defendant, the crime the defendant was being charged with, and the length of the interrogation.

Variable Correlations

As in Study 2, bivariate correlations were first computed to determine whether there were any significant relationships between jury perceptions of key variables. The correlations for all respondents are presented in Table 3.3; correlations for accurate respondents are presented in Table 3.4. Several correlations stand out as being particularly noteworthy. For all respondents and the subset of accurate respondents, all evidence strength measures are significantly correlated with each other. Also, evidence strength measures are significantly correlated with other opinions about the evidence such as the reliability of the eyewitness, the probative value of the blood test, and the confession being false and/or voluntary. For example, as the perceived likelihood of a false confession increased, perceptions of evidence strength decreased. Unlike Study 2, respondent demographics are generally not significantly correlated with evidence strength measures among either all respondents or only accurate respondents. The lone exception is the self-reported education level of the respondent, which is significantly correlated with some evidence strength measures among all respondents. Among only accurate respondents, education level is significantly correlated with all key variables. To be conservative, subsequent analyses were conducted controlling for respondent education, as well as gender and race since these factors were important but to a lesser extent.

Correlations between variables measuring eyewitness testimony, blood test, confession, and overall case strength were relatively large (ranging from r=.55 to r=.76 among all respondents, and r=.54 to r=.75 among only accurate

respondents). As in Study 2, the largest of these correlations was between confession strength and case strength (r=.75 or r=.76). As in Study 2, because the evidence strength measures are highly correlated with each other, it is necessary to check for multicollinearity issues. Multicollinearity tests showed no issues with including all four of these variables in subsequent analyses, as the largest VIF was 4.56, lower than the typical threshold for concern of 10 (O'Brien, 2007). Subsequent analyses are thus conducted using all evidence strength measures.

Impact of Experimental Manipulations

In order to test hypotheses about the effects of the experimental manipulations, a 2 (defendant age) x 2 (crime committed) x 2 (length of interrogation) Multivariate Analysis of Covariance (MANCOVA) was performed on the evidence strength variables, variables concerning the reliability of the eyewitness, probative value of the blood test, the confession's voluntariness and likelihood of being false, and respondent confidence in chosen verdict. The covariates were respondent's race, gender, and education level, as these demographic factors were significantly correlated with several of the evidence strength variables. The MANCOVA results for all respondents indicated a main effect of interrogation length (F (9, 470) = 7.389, p<.001). Respondent race (F (9, 470) = 1.860, p=.056) and education levels (F (9, 470) = 1.812, p=.064) were significant at the p< .10 level or less for the general model, while gender (F (9, 470) = .898, p=.527) was not significant.

In addition to the significant effects in the general 2x2x2 MANCOVA model, there were several significant univariate relationships with the model covariates. Race of the respondent had a significant effect on the perceived likelihood of a false confession (F (1, 470)[10] = 3.94, p=.048, d=.18)[11], perceived reliability of the eyewitness (F=7.75, p=.006, d=.26), and the strength of the confession (F=8.25, p=.004, d=.26), and overall case (F=4.84, p=.028, d=.20). The MANCOVA model indicates that minority respondents perceived the evidence to be significantly weaker, and found the confession more likely to be false than White respondents.

Similar to race, the education level of the respondent was not significant at a standard .05 alpha level. At the univariate level, the strength of the confession (F=10.55, p=.001, d=.30) and case (F=6.36, p=.012, d=.23) were significantly affected, as were the perceived likelihoods that the eyewitness was reliable (F=5.66, p=.018, d=.22), that the blood test indicated defendant guilt (F=5.12, p=.024, d=.21), and whether the confession was false (F=10.17, p=.002, d=.29) and/or voluntary (F=10.55, p=.001, d=.30). Respondents with more formal education perceived the evidence to be weaker and less indicative of guilt than those with less education. As the "highest level of education achieved" increased[12], respondents perceived the confession and overall case to be weaker. Similarly, higher educational attainment was associated with being more skeptical about the blood test results, and believing that the confession was unlikely to be voluntary and likely to be false. Most notably, the chosen verdict in

[10] The degrees of freedom using all respondents for all MANCOVA F-tests on specific evidence strength variables are the same (1, 470) and are not reported each time
[11] Cohen's d measure of effect size
[12] There were five Education level categories set by SurveyMonkey: Less than high school degree, High school degree, Some college, Associate or bachelor degree, and Graduate degree

the hypothetical case appears to be significantly affected by respondent education level. Respondents earning a high school degree (*N*=37) voted to convict the defendant 73.0% of the time. This is the highest conviction rate among educational groupings; respondents with some college education (*N*=150, 56.7% guilty), an associate or bachelor's degree (*N*=173, 47.4% guilty), or a graduate degree (*N*=141, 47.5% guilty) were all significantly less likely to vote to convict than were respondents whose education stopped after earning a high school diploma or equivalent. There were no significant impacts associated with respondent gender.

Outside of the covariates, the only significant results concerned interrogation length. Thus, there were no significant main or interaction effects involving defendant age and crime severity. Changing the length of the interrogation from 1 hour to 16 hours significantly affected the perceived strength of the confession (F=21.91, p<.001, d=.43), as well as perceptions regarding the confession's voluntariness (F=9.23, p=.003, d=.28) and likelihood of being false (F=23.42, p<.001, d=.44). As interrogation length increased, the perceived confession strength and likelihood of being voluntary decreased, and the likelihood that the confession was false increased. Figure 3.2 shows the impact of changing the interrogation length from 1 to 16 hours using all respondents. Finally, there were no significant interaction effects in the MANCOVA model using all respondents. The specific estimated means for all main effects are presented in Table 3.5.

When the MANCOVA was repeated using only the accurate respondents, significant main effects were found for interrogation length (F (9, 384) = 7.680, p<.001) and respondent education level (F (9, 384) =1.942, p=.045). Similar to the analysis done with all respondents, every factor is significantly influenced by education level, save confidence in the verdict. The strength of the eyewitness (F (1, 384) =4.53, p=.034, d=.21) [13], blood test evidence (F=5.57, p=.019, d=.24), confession (F=13.99, p<.001, d=.38) and case (F=8.13, p=.005, d=.29) were significantly affected, as were the perceived likelihoods that the eyewitness was reliable (F=5.51, p=.019, d=.24), that the blood test indicated defendant guilt (F=7.29, p=.007, d=.27), and whether the confession was false (F=7.88, p=.005, d=.29) and/or voluntary (F=10.43, p=.001, d=.33).

Using only the subset of accurate respondents, the covariate measuring the race of the respondent only had a significant impact on the perceived likelihood that the confession was false (F=4.63, p=.032, d=.22). There were no other significant effects resulting from respondent race, nor were there any effects of respondent gender.

Unlike the previous analysis using all respondents, there was a significant effect of the change in age of the defendant when using only the respondents who answered all manipulation check questions correctly. The change from a 16 year old defendant to a 22 year old defendant had a significant univariate effect on perceptions of the confession strength (F=5.79, p=.017, d=.25). Accurate respondents found the confession given by a 22-year-old defendant to be

[13] The degrees of freedom using only the subset of accurate respondents for all MANCOVA F-tests on specific evidence strength variables are the same (1, 384) and are not reported each time

significantly stronger and more indicative of guilt than the confession given by a 16-year-old defendant. This effect was not found when all respondent answers were used in the analysis.

As found with the entire sample, interrogation length continued to have an impact. With the subset of accurate respondents, significant effects emerged for the perceived strength of the confession (F=20.25, p<.001, d=.45), as well as perceptions regarding the confession's voluntariness (F=4.25, p=.040, d=.21) and likelihood of being false (F=21.77, p<.001, d=.47) due to interrogation length. As the interrogation length increased from 1 hour to 16 hours, the perceived confession strength and likelihood of being voluntary decreased, and the likelihood that the confession was false increased. Figure 3.3 shows the impact of changing the interrogation length from 1 to 16 hours when only accurate respondent data are used. Finally, as in the MANCOVA that used all respondents, there were no significant interaction effects in the MANCOVA model using only accurate respondents. The specific estimated means for all main effects are presented in Table 3.6.

Impact of Key Variables on Verdict

To determine what factors impacted juror verdict, a series of logistic regression models were conducted. Three models were conducted on all respondents as well as just the accurate respondents. Model 1 predicted verdict using defendant age, crime committed, and interrogation length, the interactions between these three factors, and the key demographic variables of respondent race, gender, and education level. Model 2 included all variables related to

evidence strength, as well as race, gender, and education level. Finally, Model 3 was the combination of Models 1 and 2. The full model descriptions and results using all respondents are included in Table 3.7.

The first set of results use all respondents. Model 1 (X^2=19.42, p=.022) shows that verdict was significantly influenced by the crime committed, as well as race and education level of the respondent. When evidence strength measures are used in Model 2 (X^2=356.64, p<.001), case strength, opinions on the value of the blood test and likelihood of a false confession, and respondent confidence in the verdict are all significant predictors of verdict. Though demographic variables are also included in this model, they are not significant predictors. Finally, in combining Models 1 and 2 into Model 3 (X^2=366.99, p<.001) several significant predictors of verdict emerge. Case strength, blood test probative value, perceptions of a false confession, confidence in verdict, crime committed, the interaction between defendant age and crime committed, and respondent race were all significant (see Table 3.7). As perceptions of the overall case strength increased, participants were 2.95 times more likely to convict the defendant. With each 1 step increase in perceived likelihood that the confession was false (on a 1-7 scale), respondents were .56 times less likely to vote to convict the defendant. Being presented with a murder case instead of an assault case decreased the likelihood of voting guilty by .22 times. Finally, white respondents were more likely to convict than minority respondents.

When these analyses are duplicated using only accurate respondents, there are some notable differences. Model 1 (X^2=14.96, p=.092) is only

marginally significant, and only respondent education has a significant impact on verdict. Similar to when all respondents are used, Model 2 (X^2=326.83, p<.001) is significant, and the verdict is significantly impacted by case strength, perceptions of the confession's truthfulness, and confidence in the verdict. Demographic variables in Model 2 are present, and remain non-significant as in Model 1. When Model 3 (X^2=342.82, p<.001) is conducted with only accurate respondents, experimental variables and evidence strength variables were more robust predictors than when using all respondents. Perceived confession and case strength, perceptions of a false confession, confidence in verdict, the age of the defendant, the crime committed, and the length of the interrogation remained significant. The main difference between all respondents and the subset of accurate respondents is that accurate respondents exhibited a significant decrease in likelihood of voting to convict when presented with the long interrogation scenario. Accurate respondents who read a scenario containing the 16 hour long interrogation were .26 times less likely to vote to convict than those respondents who read that the interrogation only took one hour. The odds ratios of voting guilty in this study were statistically no different when using either all respondents or only the accurate respondents for the variables that were significant in both sets of analyses. The interaction between defendant age and crime committed was less significant with only accurate respondents (p<.10) but still noteworthy. Overall, when only using accurate respondents no demographic variables or interactions were significant. The full model descriptions and results are included in Table 3.8.

VI. Discussion

Study 2 found that jurors were less likely to convict a defendant when they were told that the defendant confessed after a 16 hour interrogation than when the interrogation lasted 1 hour. The goal of Study 3 was to determine whether varying the length of the interrogation continued to impact juror perceptions of trial evidence when the defendant's age and alleged crime committed, risk factors for false confessions, were also varied. Existing research is conflicted on whether older or younger defendants would be viewed more or less harshly by jurors. Similarly, while more serious crimes are generally punished more severely, serious crimes should theoretically also require stronger evidence to convict given the harsh penalties that result from a conviction. Given the uncertainty regarding what might happen when defendant age and crime committed was varied, Study 3 sought to add some clarity to the prior research.

Research Hypotheses

First, it was predicted that varying the length of the interrogation would significantly impact perceptions of evidence strength and resulting verdict, as was found in Study 2. In this study, varying the length of the interrogation (either 1 or 16 hours) was found to significantly impact perceptions of evidence strength. This effect was present whether the entire sample of respondents was used in analysis or whether it was only the subset of respondents who answered all manipulation check questions correctly. Respondents who were told that the interrogation lasted an hour reported an average strength rating of the confession

of 4.82[14]; respondents who were told that the interrogation lasted 16 hours rated the confession strength as 4.08, a significant decrease. There was a small effect on verdict due to interrogation length, as respondents who viewed confession evidence obtained after 16 hours of interrogation were less likely to convict the defendant (48.5%) than if it had only taken the defendant 1 hour to confess (52.7%). Even without the inclusion of an expert witness to discuss false confession risk factors (as was included in Study 2), respondents in Study 3 found that a lengthy interrogation was enough to reduce the perceived strength of the confession.

The finding that interrogation length impacts juror perceptions evidence is essentially a replication of the same finding in Study 2. The changes to the design of Study 3, namely the inclusion of defendant age and alleged crime committed as dispositional factors, serve to provide a more generalizable criminal case with which to evaluate the impact of interrogation length. That interrogation length continued to have an impact on juror perceptions given a more complete criminal case shows the power of the confession to impact perceptions of evidence strength.

The second experimental manipulation of Study 3, varying the age of the defendant (16 or 22 years old), was expected to cause respondents to convict the younger defendant less often than the older defendant. Varying the age of the defendant had an effect on the perceived strength of the confession, but only when those respondents who answered all manipulation check questions

[14] Evidence strength was rated on a 1-7 scale, with 7 = the evidence was “very strong” against the defendant

correctly were analyzed. Though some prior research found that youthful offenders are treated more harshly than older offenders (Johnson & Kurlychek, 2012; Kurlychek & Johnson, 2010; 2004), the current study expected that confessions offered by 22 year old defendants would be seen as stronger and more indicative of guilt than those given by 16 year olds, an expectation supported by other prior studies (Bryan-Hancock & Casey, 2010; Camilletti & Scullin, 2012; Einat & Herzog, 2011; Porter, ten Brinke, & Gustaw, 2011; Scott & Steinberg, 2008). The direction of the effect on perceived confession strength was as expected: respondents who were told the defendant was 16 rated the confession strength as 4.29 (out of 7) whereas those respondents who believed the defendant was 22 rated confession strength higher at 4.62.

The studies by Johnson and Kurlychek (Johnson & Kurlychek, 2012; Kurlychek & Johnson, 2010; 2004) found that juvenile defendants were treated more harshly than older defendants specifically when juveniles were tried and sentenced in adult courts. Though the court was not specified in the current study, the 16 and 22 year old defendants in this study would generally both be tried and sentenced in adult court given the severity of the crime they were being charged with (especially in the murder condition). It is therefore interesting that survey responses showed a clear difference in perceived confession strength between the younger and older defendant. It is possible that, like the Johnson and Kurlychek studies, this study would have found that the youthful defendant was sentenced more harshly as a result of the criminal trial than the older defendant,

despite respondents viewing the evidence against the older defendant as more strongly indicative of guilt.

The final manipulation in Study 3 varied the alleged crime committed by the defendant, either murder or assault, in order to determine whether the difference in severity had an effect on perceptions of evidence strength or resulting verdict. It was expected that because the same evidence was presented for both crimes, it would be more difficult to convict the defendant accused of the most serious crime. The current study found that respondents voted to convict the defendant more often when the alleged crime was assault (57.5% guilty) than when the defendant was being tried for murder (45.4% guilty). This significantly different result lends support to prior research by Kerr (1978), who found that as the severity of the crime committed increased, the likelihood of conviction decreased. In Kerr's (1978) study, jurors reported that more evidence of guilt should be required to convict a person of a more serious crime. Later research by Freedman et al. (1994) reported strong support for Kerr's (1978) findings, though Kaplan (1994a, 1994b) argued that the previous studies using mock jurors did not approximate actual criminal trials with real jurors. Support for Kaplan's assertion that increased crime severity should lead to higher conviction rates was found by Darley et al., (2000). The current research supports Kerr's (1978) finding in that respondents in Study 3 voted to convict a defendant significantly more often when the defendant was accused of a less serious crime.

Effects of Respondent Demographics

In addition to findings related to Study 3's experimental manipulations, there were several notable effects found due to respondent demographics. In Study 2, racial minority respondents perceived evidence strength to be weaker than White respondents, though because there were few minority respondents it was not possible to determine whether this effect would hold up with a more representative sample. In Study 3, a similar effect was found in that the race of the respondent had a significant effect on perceptions of whether the confession was false and the strength of the confession, the reliability of the eyewitness testimony, and the overall case strength. The direction of the effect in Study 3 was the same as in Study 2; White respondents found evidence to be stronger than did minority respondents.

Several studies have demonstrated a broad difference between racial groups in terms of juror decision making (Sommers, 2006; Skolnick & Shaw, 1997; Bernard, 1979). Farrell, Pennington, and Cronin (2013) suggest that trust in the criminal justice system is a predictor of juror outcomes, and that this effect is more pronounced for Black jurors than it is for White jurors. The current study did not measure the attitude of respondents toward the criminal justice system, but it is possible that differing levels of trust explains how racial groups perceive evidence strength on average. Prior research has found that White jurors are more likely to convict and to believe that evidence strongly supports the prosecution's argument (Johnson, 1984; Pennington & Hastie, 1990) than minority jurors (Williams & Holmes, 1981). The results of Study 3 support the

existing literature which indicates that minorities perceive evidence to be weaker than White jurors.

The second piece of demographic information that impacted perceptions of evidence strength was the self-reported education level of the respondent. As the “highest level of education achieved” increased, respondents perceived the confession and overall case to be weaker. Most notably, the chosen verdict in the hypothetical case appears to be significantly affected by respondent education level. Costanzo et al. (2010) did not report any significant effects due to respondent education in their analysis of interrogations and false confessions. Chojnacki et al. (2008) found that young, highly educated individuals were more knowledgeable about false confessions and interrogation tactics than older and less educated mock jurors. Though Chojnacki et al. (2008) found that more educated respondents were more aware of the limits of confession evidence, the impact of education on the perceived strength of a confession in a hypothetical case was not tested.

It makes logical sense that more highly educated individuals might think more carefully about the evidence presentation and be less persuaded by circumstantial evidence. It is also possible that individuals with more education are more likely to be aware of false confessions through reading news about false confessions and/or exonerations. However the extreme difference in conviction rates between respondents who graduated high school (73% voted to convict) and respondents with at least a 2-year associate degree (47%) is striking enough to warrant further testing.

Study 3 Limitations

The limitations of Study 3 are similar to the limitations of Study 2. The respondent sample for Study 3 suffers from the same sampling issues due to the lack of universal Internet access. A nationally representative population is unlikely to be achieved through online sampling. Study 3 also has the same potential for self-selection bias in that some individuals may have been more likely to participate than others, potentially leading to a systematic bias where participants and non-participants are not from the same population (Wright, 2005). Although we know that SurveyMonkey Audience members have self-selected into surveys, we do not know how these people differ from those who do not sign up for the service. Using 2010 U.S. Census data to compare survey respondents to the U.S. population, survey respondents are less racially diverse[15] than the overall population. Respondents are also older, more highly educated, and have higher annual household incomes than the overall population. With the exception of respondent education, it is not known how these differences between the U.S. population and the survey sample impact the results of this study.

As has been discussed previously, collecting the sample online through SurveyMonkey Audience rather than in-person necessitated the use of a trial summary rather than a complete transcript. The shortened summary, while used in numerous other published studies, is at best only an approximation of a real world criminal trial (Greene & Evelo, 2013; Martire et. al., 2013; Park, 2011;

[15] 85% of the respondent sample is White compared to 72% of Census respondents identifying as White

Peters, Lampinen & Malesky, 2013; Wallace & Kassin, 2012). It would have been prohibitively expensive to collect a similar sized, heterogeneous, in-person sample that utilized a full criminal trial transcript, but that type of sampling would be ideal.

Despite the sample limitations, Study 3 is, one of the few studies to combine experimental manipulations of situational and dispositional risk factors into a single study. This study, which built on the results of Study 2, continued to find that the length of the interrogation significantly influenced mock jurors' opinions on evidence strength as well as their resulting verdict in a fictional case. The current study also found that confessions offered by younger defendants may be viewed as less strong by respondents regardless of how long the interrogation lasted. Finally, the severity of the alleged crime impacted the verdict, as respondents were more likely to convict the defendant for the less serious crime than the more serious crime when presented with the exact same evidence.

CHAPTER 5 – GENERAL DISCUSSION AND CONCLUSION

The goal of this dissertation was to better understand how situational interrogation factors impact evidence strength and how the inclusion of these factors may affect the outcomes of criminal trials. By looking at situational factors related to the interrogation setting, as originally suggested by Kassin and Sukel (1997), I attempted to explain how aspects of an interrogation influence jurors' perception of the reliability of the confession and its resulting strength toward conviction. This dissertation's first study provides support for the idea that interrogation factors can impact the perceived strength of a confession and overall case. The second study used a larger, more representative sample to expand on the findings of the first study, and identified interrogation length as the situational factor that has the greatest impact on juror perceptions (as compared to number of interrogators and suspect wakefulness). Finally, the third study aimed to vary the interrogation length along with a presentation of a more complete criminal case. These three studies combine to further the existing knowledge of how a defendant confession impacts perceptions of evidence in a criminal trial. This final chapter aims to discuss the hypotheses which were and were not supported in the first three studies, as well as discuss the implications of this study for criminal justice theory and the criminal justice system.

I. Hypothesized Findings

One of the main hypotheses in this dissertation was that the inclusion of situational risk factors would lead to a small but significant decrease in conviction

rates. The decrease was expected to be small because the verdict is a dichotomous variable, and thus added risk factor(s) were not expected to be important enough to change the verdicts of all respondents. While there were a few scenarios in Study 2 where the conviction rate significantly decreased due to the inclusion of situational factors, this hypothesis overall was generally not supported. Although interrogation length was consistently found to significantly lower the perceived strength of the confession, this however generally did not translate to a lower likelihood of conviction. Several prior studies would have predicted that the conviction rate would not significantly change, as mock jurors have been found to recognize potentially false or coerced confessions yet still use that same confession as evidence of defendant guilt (Blandon-Gitlin et al., 2010; Chojnacki, Cicchini, & White, 2008; Kassin & McNall, 1991; Kassin & Sukel, 1997). Because a juror's only vote is either guilty or not guilty, it can be difficult to change opinions regarding the guilt of the defendant. In addition, respondents were similarly confident in their chosen verdict regardless of the evidence presented to them. As this study is among the first to directly vary the inclusion of situational interrogation factors, it is left to future studies to determine whether there may be a consistent effect of these factors on the conviction rate. Since there were no scenarios in any of the studies where the presence of one or more situational interrogation factors led to a significant increase in the conviction rate, at worst the inclusion of situational interrogation factors has no effect on jurors.

An additional finding that did not support the initial hypothesis concerned the impact of multiple interrogators. Prior research indicates that police use of

multiple interrogators as a tactic can be successful in eliciting a confession, but the use of multiple interrogators may also be a risk factor for false confessions (Kassin et al., 2012). The social isolation felt by a suspect when they are being questioned by multiple interrogators can lead to false confessions if suspects are innocent. It was thus expected that in Study 2, respondents who read that three interrogators questioned the suspect (as opposed to one interrogator) would find this situation to be coercive, which would lead to a decreased perception of the confession's strength as well as a decrease in the conviction rate. Though there was a small decrease in perceived confession strength, it was not statistically significant, and the resulting verdict was not affected. As discussed previously, the lack of a significant effect due to multiple interrogators was likely due to respondents not having enough information about what methods the three interrogators used. If information had been included about specific tactics being used, it is possible that this hypothesis would have been supported. Though this manipulation was not supported in Study 2, it remains to be seen whether future studies that explain interrogation procedures in more detail would affect respondent perceptions of the evidence.

The last situational factor included in Study 2, suspect wakefulness, also did not have a significant impact on juror perceptions of evidence. While a lack of sleep and mental exhaustion is a clearly defined risk factor in the literature (Kassin et al., 2010; Scherr et al., 2014) and in recent exonerations (e.g. Frank Sterling), respondents in Study 2 were unaffected by the defendant's lack of sleep. This may be tied into previous findings that jurors could not imagine

themselves falsely confessing to a crime when placed in a similar situation as a defendant (Kassin & Sukel, 1997; Kassin & McNall, 1991). Though respondents can understand how a lack of sleep could be harmful to a defendant, a respondent's inability to place themselves in a defendant's shoes may remove the potential for a lack of sleep to significantly impact perceptions of evidence strength.

In Study 3, the age of the defendant and the severity of the accused crime were varied along with the interrogation length to determine whether these crime-related factors significantly impacted perceptions of evidence and suspect guilt. It was expected that evidence against the more youthful defendant (16 years old) would be seen as weaker than evidence against the older defendant (22 years old). Perceptions of confession strength, the main driver of convictions, followed these expectations. Respondents who were told the defendant was 16 rated the confession strength weaker than respondents who were told the defendant was 22, despite the confessions being exactly the same. This relative difference persisted when interrogation length was varied, meaning that the age of the defendant impacted respondents perceptions of the confession regardless of interrogation length. Other evidence was not significantly impacted by the age of the defendant.

The final manipulation of this research, crime severity, was also expected to impact perceptions of evidence strength and defendant guilt. The existing literature has been divided on whether it will be easier to convict defendants of more severe crimes (Kaplan, 1994a; 1994b) or less severe crimes (Kerr, 1978;

Freedman et al., 1994). The current research supports Kerr's (1978) finding that respondents are more likely to convict a defendant when the defendant was accused of a less serious crime. As the same exact evidence is presented for the most serious crime (murder) and the less serious crime (assault), it appeared to be more difficult for respondents to convict the defendant of the murder. This was likely due to Kerr's (1978) belief that a more serious crime will be more carefully considered by jurors, and that those jurors will want to see a large amount of evidence pointing to the accused's guilt before deciding that they should receive a severe punishment.

II. Theoretical Implications

Kalven and Zeisel (1966) hypothesized that when the outcome of a case is readily apparent, there is no need for jurors to rely on their own experiences and biases. When the defendant is obviously guilty or obviously innocent, there is less need for interpretation of evidence given that the outcome has already been proven convincingly by either the defense or the prosecution. However, when the case outcome is ambiguous and jurors need to make a determination of guilt or innocence based on evidence that could go either way, other factors outside the evidence, such as characteristics of the defendant, or the juror themselves, are used (see also Devine et al., 2009, 2012; Kassin et al., 1990). This idea is called the "liberation hypothesis."

In order to determine whether the current findings support the liberation hypothesis, it should first be determined whether the evidence presented to

respondents was viewed as ambiguous. If the evidence was consistently viewed as very weak or very strong, in theory, respondents should not be using their own viewpoints or biases in this case. Overall, as intended, evidence strength ratings were right around the midpoint of the 1-7 scale given to respondents, as the eyewitness, physical evidence, confession, and overall case were consistently given average strength ratings in the 4-5 range in all three studies. Thus the average respondent found the evidence to slightly favor the prosecution, but not overwhelmingly so. Additionally, the resulting conviction rates were not consistently in favor of guilt or innocence, lending more support to the idea that the outcome was somewhat in dispute. The overall rate of conviction was 50.0% across all three studies (59.3% guilty in the pilot study, 43.8% in Study 2, 51.9% in Study 3).

Thus, the liberation hypothesis is potentially applicable given the ambiguity of the evidence presented to respondents. Now, we must determine whether the results of these studies indicate that respondent perceptions of the evidence strength or their overall verdict determination were guided by factors other than the direct evidence. The findings for both Study 2 and Study 3 indicate that there were in fact several factors not related to the case that had a significant impact on perceptions of evidence and resulting verdict. Respondent demographics such as race, gender, and level of education significantly impacted the perceived strength of evidence. For instance, more educated respondents perceived the evidence as weaker and less indicative of the defendant's guilt. Likewise, minority and female respondents perceived the evidence to be weaker

than did White and male respondents. By finding that characteristics of the respondent impacted perceived evidence strength, there is support for the liberation hypothesis. Even though one or more situational interrogation factors were included, evidence was still ambiguous enough to allow jurors to use factors other than the evidence to assist them in making decisions.

Although support was found for the influence of the liberation hypothesis, I have already discussed how aspects of the case were significant determinants of perceptions of evidence strength and resulting verdict. The length of the suspect's interrogation had a significant effect on respondent perceptions. This does not support the liberation hypothesis, as Kalven and Zeisel (1966) suggested that in cases where the evidence is ambiguous, extra-legal factors would be what determined the overall outcome of a case. While support was found for the liberation hypothesis due to influence of respondent demographics, these extra-legal factors were not the sole determinant of the outcome of ambiguous cases because of the influence of the length of the interrogation.

III. Implications for the Criminal Justice System

Though prior research has found that knowledge of false confession risk factors was beyond the common knowledge of the average juror (e.g., Chojnacki et al., 2008), that jurors want to hear expert testimony about why false confessions might occur (Costanzo et al., 2010), and that expert testimony significantly assists the defense in a criminal trial (Blandon-Gitlin et al., 2010), the criminal justice system still tends to treat knowledge of false confessions as not

"beyond the ken" of the average juror (see Schmechel, O'Toole, Easterly, & Loftus, 2006 for a discussion of this legal standard). Because judges in the criminal justice system have wide discretion over whether to allow expert testimony, the belief that false confessions are understood by jurors limits the defense's ability to present false confession testimony. Thus while research has found that jurors want to hear expert testimony, this testimony may not be allowed by a particular judge. Though Study 2 did not find expert testimony to be impactful, this dissertation has found limits to what jurors know about confessions and interrogations. For example, though sleeplessness and the presence of multiple interrogators are both risk factors for false confessions, respondents in Study 2 did not see these factors as something that weakened the strength of the defendant's confession.

One of the clearest—albeit preliminary—conclusions that can be drawn from the current research is that mock jurors see meaningful differences between confessions that result from a short, 1 hour interrogation, and confessions resulting from an extremely long, 16 hour interrogation. Though the interrogation led to the same outcome (i.e., a confession) and the case contained the same evidence presentation, lengthy interrogations led to confessions that were routinely seen as less strong and less convincing of the defendant's guilt than confessions resulting from a shorter interrogation. Most respondents were given no additional information about the risks of a lengthy interrogation, so the perception of a long interrogation as potentially untrustworthy is something that may not be beyond the ken of the average juror. However, at the same time, 50%

of those participants in the lengthy interrogation condition still voted to convict, and of importance, for the most part, interrogation length did not influence dichotomous verdicts.

Though perceptions of the strength of a confession resulting from a lengthy interrogation significantly differed from perceptions of a confession resulting from a short interrogation, the same cannot be said for the impact of sleeplessness and multiple interrogators. In Study 2, there was little or no significant effects associated with a defendant having not recently slept or a defendant being interrogated by three police officers. This finding could be viewed as troublesome given that sleeplessness, police pressure, and social isolation are all factors known to increase the likelihood of a false confession when the suspect is innocent. Thus the impact of these factors is seemingly not well understood by mock jurors in the current research. This is potentially problematic for the criminal justice system, as there is wide discretion given to the courts to determine whether jurors need to be educated about false confession risk factors. Even with the inclusion of an expert witness' explicit testimony about these factors, mock jurors in Study 2 were resistant to seeing this information as leading to unreliable confessions. Though expert witness testimony in Study 2 was inconclusive, the current research highlights the need for expert testimony to explain to jurors the potential impact that sleeplessness and police interrogation tactics can have on a defendant.

It is important to mention once more that this dissertation uses mock jurors reporting on fictional criminal trial scenarios, rather than using data from actual

jurors in actual criminal trials. While the current research took current legal guidelines for evidence presentation into account when constructing the trial narrative, this method at best can only approximate a real trial. It is unknown how actual criminal trial data would differ from the reported results; though the current study has enough statistical power to find significant effects of the experimental manipulations, it does not always follow that the observed findings would also be observed if actual trial data were used.

With these limitations in mind, perhaps the most robust implication for the criminal justice system is that perceptions of the confession continue to be the main driver of the entire criminal case. Even in cases where the confession is presented to respondents with one or more situational interrogation risk factors, perceptions of the confession are the strongest predictor of verdicts. Thus respondents who view the confession as less strong when presented with situational or dispositional risk factors still convict the defendant based on their apparent belief that the confession was still strong enough to indicate the defendant's guilt. More work is needed to get to the point where confessions that are seen as potentially false or less than completely trustworthy are not still used as the main piece of evidence that leads to the conviction of innocent defendants.

REFERENCES

Appleby, S. C., Hasel, L. E., & Kassin, S. M. (2011). Police-induced confessions: an empirical analysis of their content and impact. *Psychology, Crime & Law*, 1-18.

Baker, R., Blumberg, S. J., Brick, J. M., Couper, M. P., Courtright, M., Dennis, J. M. … Lavrakas, P. J. (2010). "Research Synthesis: AAPOR Report on Online Panels," *Public Opinion Quarterly, 74(4)*, 711-781.

Bernard, J. L. (1979). Interaction between the race of the defendant and that of jurors in determining verdicts. *Law & Psychology Review, 5*, 103-111.

Blair, J. P. (2005). A test of the unusual false confession perspective using cases of proven false confessions. *Criminal Law Bulletin, 41*, 127-144.

Blandon-Gitlin, I., Sperry, K., & Leo, R. (2010). Jurors believe interrogation tactics are not likely to elicit false confessions: Will expert witness testimony inform them otherwise? *Psychology, Crime, and Law, 16*, 1477–1744.

Boccaccini, M. T., Murrie, D. C., & Turner, D. B. (2014). Jurors' views on the value and objectivity of mental health experts testifying in sexually violent predator trials. *Behavioral Sciences and the Law, 32,* 483-495.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6(1)*, 3-5.

Bryan-Hancock, C. & Casey, S. (2010). Psychological maturity of at-risk juveniles, young adults, and adults: Implications for the justice system. *Psychiatry, Psychology and Law, 17(1)*, 57-69.

Bullcoming v New Mexico , 564 U.S. ___; 131 S.Ct. 2705 (2011)

Bushway, S. D. & Piehl A. M. (2007). The inextricable link between age and criminal history in sentencing. *Crime & Delinquency, 53(1)*, 156-183.

Camilletti, C. R. & Scullin, M. H. (2012). Attorney and lay beliefs about factors affecting jurors' perceptions of juvenile offender culpability. *Psychology, Crime & Law. 18(1)*, 113-128.

Chojnacki, D. E., Cicchini, M. D. & White L. T. (2008). An empirical basis for the admission of expert testimony on false confessions. *Arizona State Law Journal* 40:1–45.

Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., & Beaman, A. L. (1987). Empathy-based helping: Is it selflessly or selfishly motivated? *Journal of Personality and Social Psychology, 52(4),* 749–758.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd Ed.). Hillsdale, NJ: Erlbaum.

Collett, M. E., & Bull Kovera, M. (2003). The effects of British and American trial procedures on the quality of juror decision-making. *Law and Human Behavior, 27(4),* 403-422.

Costanzo, M., Shaked-Schroer, N., & Vinson, K. (2010). Juror beliefs about police interrogations, false confessions, and expert testimony. *Journal of Empirical Legal Studies* 7:231–247.

Crawford v. Washington, 541 U.S. 36 (2004);

Darley, J. M., Carlsmith, K. M., & Robinson, P. H. (2000). Incapacitation and just deserts as motives for punishment. *Law and Human Behavior, 24(6),*659-683.

Davis v. Washington, 547 U.S. 813 (2006);

Devine, D. J. (2012). *Jury decision making: The state of the science*. New York: New York University Press.

Devine, D.J., Buddenbaum, J., Houp, S., Studebaker, N., & Stolle, D. P. (2009). Strength of evidence, extraevidentiary influence and the liberation hypothesis: Data from the field. *Law and Human Behavior, 33(2),* 136-148.

Devine, D. J., Clayton, L. D., Dunford, B. B., Seying, R., & Pryce, J. (2001). Jury decision making: 45 years of empirical research on deliberating groups. *Psychology, Public Policy, and Law, 7(3),* 622-727.

Drizin, S. A. & Leo, R. A., (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review, 82*, 891-1007.

Einat, T. & Herzog, S. (2011). Understanding the relationship between perceptions of crime seriousness and recommended punishment: An exploratory comparison of adults and adolescents. *Criminal Justice Studies, 24(1)*, 3-21.

Eisenberg, E., Hannaford-Agor, P. L., Hans, V. P., Mott, N. L., Munsterman, G. T., Schwab, S. J., & Wells, M. T. (2004). Judge-jury agreement in criminal cases: A partial replication of Kalven & Zeisel's *The American Jury*. *Cornell Law School – Legal Studies Research Paper Series*. 1-33.

Eisenberg, E., & Hans, V. P. (2007). Taking a stand on taking the stand: The effect of a prior criminal record on the decision to testify and on trial outcomes. *Cornell Law Review, 94,* 1353-1390.

Farrell, A., Pennington, L., & Cronin, S. (2013). Juror perceptions of the legitimacy of legal authorities and decision making in criminal cases. *Law & Social Inquiry, 38(4)*, 773-802.

Freedman, J. L. (1994). Penalties and verdicts: Keeping the record straight. *Law and Human Behavior, 18(6)*, 699-702.

Freedman, J. L., Krismer, K., MacDonald, J. E., & Cunningham, J. A. (1994). Severity of penalty, seriousness of the charge, and mock jurors' verdicts. *Law and Human Behavior, 18(2)*, 189-202.

Ghetti S. & Redlich, A. D. (2001). Reactions to youth crime: Perceptions of accountability and competency. *Behavioral Sciences and the Law, 19,* 33-52.

Goldstein, N. E., Condie, L. O., Kalbeitzer, R., Osman, D., & Geier, J. L. (2003). Juvenile offenders' Miranda rights comprehension and self-reported likelihood of offering false confessions. *Assessment, 10*, 359-369.

Greene, E. & Evelo, A. J. (2013). Attitudes regarding life sentences for juvenile offenders. *Law and Human Behavior, 37(4)*, 276-289.

Grisso, T. (1981). Juvenile's waiver of rights: Legal and psychological competence. New York: Plenum.

Grisso, T., Steinberg, L., Woolard, J., Cauffman, E., Scott, E., Graham, S. et al. (2003). Juveniles' competence to stand trial: A comparison of adolescents'

and adults' capacities as trial defendants. *Law and Human Behavior*, *27*, 333-363.

Hannaford-Agor, P. & Waters, N. L. (2011). Safe harbors from fair-cross-section challenges? The practical limitations of measuring representation in the jury pool. *Journal of Empirical Legal Studies, 8(4)*, 762-791.

Hasel, L. E. & Kassin, S. M. (2009). On the presumption of evidentiary independence: Can confessions corrupt eyewitness identifications? *Psychological Science, 21,*122-126.

Hawkins, D. F. (1980). Perceptions of punishment for crime. *Deviant Behavior, 1(2)*, 193-215.

Hawkins, D. F. (1981). Causal attribution and punishment for crime. *Deviant Behavior, 2(3)*, 207-230.

Heller, K. J. (2006). The cognitive psychology of circumstantial evidence. *Michigan Law Review, 105*, 241-306.

Henkel, L. A., Coffman, K. A., & Dailey, E. M. (2008). A survey of people's attitudes and beliefs about false confessions. *Behavioral Sciences and the Law* 26:555–584.

Innocence Project (2011). Frank Sterling. Retrieved from http://www.innocenceproject.org/Content/Frank_Sterling.php).

Johnson, S. L. (1984) Cross-Racial identification errors in criminal cases. *Cornell Law Review, 69,* 934–87.

Johnson, B. D. & Kurlychek, M. C. (2012). Transferred juveniles in the era of sentencing guidelines: Examining judicial departures for juvenile offenders in adult criminal court. *Criminology, 50(2)*, 525-564.

Kalven, H., & Zeisel, H. (1966). The American Jury. Chicago: University of Chicago Press.

Kaplan, M. F. (1994a). Setting the record straight (again) on severity of penalty: A comment on Freedman et al. *Law and Human Behavior, 18(6)*, 697-699.

Kaplan, M. F. (1994b). Keeping the record complete. *Law and Human Behavior, 18(6)*, 702-703.

Kassin, S. M., Bogart, D. & Kerner, J. (2012). Confessions that corrupt: Evidence from the DNA exoneration case files. *Psychological Science*, 1-5.

Kassin, S. M., Drizin, S. A., Grisso, T., Gudjonsson, G. H., Leo, R. A., & Redlich, A. D. (2010). Police-induced confessions: Risk factors and recommendations. *Law and Human Behavior, 34*, 3-38.

Kassin, S. M., Dror, I. E., & Kukucka, J. (2013). The forensic confirmation bias: Problems, perspectives, and proposed solutions. *Journal of Applied Research in Memory and Cognition,* 2, 42-52.

Kassin, S. M., & McNall, K. (1991). Police interrogations and confessions: Communicating promises and threats by pragmatic implication. *Law and Human Behavior* 15:233–251

Kassin, S. M., & Neumann, K. (1997). On the power of confession evidence: An experimental test of the fundamental difference hypothesis. *Law and Human Behavior* 21:469–484.

Kassin, S. M., Reddy, M. E., & Tulloch, W. F. (1990). Juror interpretations of ambiguous evidence: The need for cognition, presentation order, and persuasion. *Law and Human Behavior, 14(1),* 43-55.

Kassin, S. M., & Sukel, H. (1997). Coerced confessions and the jury: An experimental test of the "harmless error" rule. *Law and Human Behavior* 21:27–46.

Kassin, S. M., & Wrightsman, L. S. (1980). Prior confessions and mock juror verdicts. *Journal of Applied Social Psychology* 10:133–146.

Kassin, S. M., & Wrightsman, L. S. (1981). Coerced confessions, judicial instruction, and mock juror verdicts. *Journal of Applied Social Psychology* 11:489–506.

Kassin, S. M., & Wrightsman, L. S. (1983). The construction and validation of a juror bias scale. *Journal of Research in Personality, 17,* 423-442.

Kelly, C. E., Miller, J. C., Redlich, A. D., & Kleinman, S. M. (2013). A taxonomy of interrogation methods. *Psychology, Public Policy, and Law, 13*, 1-14.

Kerr, N. L. (1978). Severity of prescribed penalty and mock jurors' verdicts. *Journal of Personality and Social Psychology, 36(12)*, 1431-1442.

Kurlychek, M. C. & Johnson, B. D. (2004). The juvenile penalty: A comparison of juvenile and young adult sentencing outcomes in a criminal court. *Criminology, 42(2)*, 485-515.

Kurlychek, M. C. & Johnson, B. D. (2010). Juvenility and punishment: sentencing juveniles in adult criminal courts. *Criminology, 48(3)*, 725-758.

Leo, R. A. & Drizin, S. A., (2010). The three errors: Pathways to false confession and wrongful conviction. In G. D. Lassiter & C. A. Meissner (Eds.), *Police interrogations and false confessions* (pp. 9-30). Washington, DC: American Psychological Association.

Leo, R. A., & Liu, B. (2009). What do potential jurors know about police interrogation techniques and false confessions? *Behavioral Sciences and the Law* 27:381–399.

Levett, L. M. & Bull Kovera, M. (2008). The effectiveness of opposing expert witnesses for educating jurors about unreliable expert evidence. *Law and Human Behavior, 32(4)*, 363-374.

Martin, M. E., De La Fuente, L., De La Fuente, E. I., & Garcia, J. (2007). The influence of sample type, presentation format and strength of evidence on juror simulation research. *Psychology, Crime & Law, 13(2)*, 139-153.

Martire, K.A., Kemp, R. I., Watkins, I., Sayle, M. A., & Newell, B. R. (2013). The expression and interpretation of uncertain forensic science evidence: Verbal equivalence, evidence strength, and the weak evidence effect. *Law and Human Behavior, 37(3)*, 197-207.

Melendez-Diaz v. Massachusetts, 557 U.S. 305 (2009)

Najdowski, C. J.,Bottoms, B. L., & Vargas, M. C. (2009). Jurors' perception of juvenile defendants: The influence of intellectual disability, abuse history, and confession evidence. *Behavioral Sciences and the Law* 27:401–430.

The National Registry of Exonerations (2013). Exoneration Cases. Retrieved from http://www.law.umich.edu/special/exoneration/.

Niedermeier, K. E., Kerr, N. L., & Messé, L. A., (1999). Jurors' use of naked statistical evidence: Exploring bases and implications of the wells effect. *Journal of Personality and Social Psychology, 76(4)*, 533-542.

Ohio v. Roberts, 448 U.S. 56 (1980)

Paolacci, G., Chandler, J., & Ipeirotis, P. G., (2010). Running experiments on amazon mechanical turk. *Judgment and Decision Making, 5(5),* 411-419.

Park, K. (2011). Estimating juror accuracy, juror ability, and the relationship between them. *Law and Human Behavior, 35(1)*, 288-305.

Pennington, N. & Hastie, R. (1990). Practical implications of psychological research on juror and jury decisionmaking. *Personality and Social Psychology Bulletin, 16,* 90–105.

Peters, C. S., Lampinen, J. M., & Malesky, Jr. L. A. (2013). A trap for the unwary: Jury decision making in cases involving the entrapment defense. *Law and Human Behavior, 37(1),* 45-53.

Pickett, J. T., Mancini, C., & Mears, D. P., (2013). Vulnerable victims, monstrous offenders, and unmanageable risk: Explaining public opinion on the social control of sex crime. *Criminology, 51(3),* 729-759.

Porter, S., ten Brinke, L., & Gustaw, C. (2010). Dangerous decisions: The impact of first impressions of trustworthiness on the evaluation of legal evidence and defendant culpability. *Psychology, Crime & Law, 16(6)*, 477-491.

Randall, R., Woods, J.A. & Martin, R. G. (2008). Racial representativeness of juries: An analysis of source list and administrative effects on the jury pool. *Justice System Journal, 29(1)*, 71-84.

Redlich, A. D., & Goodman, G. S. (2003). Taking responsibility for an act not committed: The influence of age and suggestibility. *Law and Human Behavior* 27:141–156.

Redlich, A. D., Ghetti, S., & Quas, J. A. (2008). Perceptions of children during a police interview: A comparison of suspects and alleged victims. *Journal of Applied Social Psychology, 38,* 705-735.

Redlich, A. D., Quas, J. A., & Ghetti, S. (2008). Perceptions of children during a police interrogation: Guilt, confessions, and interview fairness. *Psychology, Crime, and Law* 14:201–223.

Robertson, C. T. & Yokum, D. V. (2012). The effect of blinded experts on juror verdicts. *Journal of Empirical Legal Studies, 9(4)*, 764-794.

Samuel, W. & Moulds, E. (1986). The effect of crime severity on perceptions of fair punishment: A California case study. *The Journal of Criminal Law & Criminology, 77(3)*, 931-948.

Scherr, K.C., Miller, J.C., & Kassin, S. M. (2014). “Midnight confessions”: The effect of chronotype asynchrony on admissions of wrongdoing. *Basic and Applied Social Psychology, 36(4),* 321-328.

Schmechel, R. S., O’Toole, T. P., Easterly, C., & Loftus, E. F. (2006). Beyond the ken? Testing jurors’ understanding of eyewitness reliability evidence. *Jurismetrics, 46*, 177-214.

Scott, E. S. & Steinberg, L. (2008). *Rethinking Juvenile Justice*. Cambridge, MA: Harvard University Press.

Shifton, J. (2011). The Measurement of Evidence Strength at Trial and its Effect on Juror Perceptions. Paper submitted in completion of comprehensive exam requirements, School of Criminal Justice, University at Albany.

Skolnick, P. & Shaw, J. (1997). The O.J. Simpson criminal trial verdict: Racism or status shield? *Journal of Social Issues, 53,* 503–16.

Sommers, S. (2006). On racial diversity and group decision-making: Identifying multiple effects of racial composition on jury deliberations. *Journal of Personality and Social Psychology, 90*, 597–612.

Taylor, S. T., & Hosch, H. M. (2004). An examination of the jury verdicts for evidence of a similarity-leniency effect, an out-group punitiveness effect or a black sheep effect. *Law and Human Behavior, 28(5),* 587-598.

U.S. Constitution, amendmen VI.

Visher, C. A. (1987). Juror decision making: The importance of evidence. *Law and Human Behavior, 11(1)*, 1-17.

Wallace, D. B. & Kassin, S. M. (2012). Harmless error analysis: How do judges respond to confession errors? *Law and Human Behavior, 36(2)*, 151-157.

Wells, G. L. (1992). Naked statistical evidence of liability: Is subjective probability enough? *Journal of Personality and Social Psychology, 62(5),* 739-752.

Werner, C. M., Strube, M. J., Cole, A. M., & Kagehiro, D. K. (1985). The impact of case characteristics and prior jury experience on jury verdicts. *Journal of Applied Social Psychology, 15(5)*, 409-427.

Williams, J. & Holmes, K. (1981). *The second assault: Rape and public attitudes*. Westport, CT: Greenwood Press.

Williams v. Illinois, 132 S.Ct. 2221 (2012)

Willis Esqueda, C. & Swanson, K. (1997). The influence of alcohol use and crime stereotypicality on culpability assignment for Native Americans and European Americans. *American Indian Culture and Research Journal, 21(2)*, 229-254.

Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication, 10(3).*

York, E. & Cornwell, B. (2006). Status on trial: Social characteristics and influence in the jury room. *Social Forces, 85(1),* 455-477.

TABLES

Table 1.1 – Demographic Information

Demographic Characteristic	All Respondents (N = 183)
Race	
Asian/Pacific Islander	6 (3.3%)
Black	25 (13.7%)
Hispanic	24 (13.1%)
White	123 (67.2%)
Other	3 (1.6%)
Not Specified	2 (1.1%)
Gender	
Male	99 (54.1%)
Female	84 (45.9%)
Age	
18	85 (46.4%)
19	57 (31.1%)
20	28 (15.3%)
21	6 (3.3%)
22+	7 (3.8%)
Not Specified	17 (9.3%)
Education	
Freshman	76 (41.5%)
Sophomore	65 (35.5%)
Junior	30 (16.4%)
Senior	9 (4.9%)
Not Specified	20 (10.9%)
Served on a Jury?	
No	179 (97.8%)
Yes	4 (2.2%)

Table 1.2 – Evidentiary Variables

Variable	N	Mean (S.D.)
Evidence Strength		
Eyewitness	200	3.95 (1.37)
Blood Test	200	4.23 (1.57)
Confession	200	5.09 (1.43)
Overall Case	200	4.63 (1.36)
Confession Details		
False?	200	3.29 (1.46)
Voluntary?	198	4.37 (1.66)
Pressured to confess?	200	3.66 (1.60)
Likelihood of anyone falsely confessing?	199	3.11 (1.54)
Likelihood you would falsely confess?	200	1.74 (1.25)
Verdict	200	0.59 (0.49)
Confidence in verdict	200	5.29 (1.28)

All values except verdict are presented on a 1-7 scale

For Evidence Strength (1 = very weak against the defendant, 7 = very strong against the defendant)
For Confession Details (1 = not at all likely, 7 = very likely)

Verdict responses were coded as either 0 (not guilty), or 1 (guilty)

Table 1.3 – Evidentiary Variable Values - Main Effects by Scenario

Eyewitness	No sig. differences
Blood Test	No sig. differences
Confession	No sig. differences
Case	No sig. differences
False Confession?	No sig. differences
Voluntary Confession?	No sig. differences
Pressured Confession?	Scenario 2 - 4.15 (1.54) Scenario 4 - 2.79 (1.42)
Any Person False Confess?	No sig. differences
You False Confess?	No sig. differences
Verdict	Scenario 4 - 0.79 (0.42) Scenario 5 - 0.36 (0.49)
Confidence	Scenario 1 - 5.65 (1.20) Scenario 2 - 4.54 (1.30) Scenario 2 - 4.54 (1.30) Scenario 7 - 5.64 (0.90)

Mean (S.D.)
Differences are significant at $p < .05$

Scenario 1 is control with 0 situational factors
Scenario 2 contains 1 situational factor, 3 interrogators
Scenario 3 contains 1 situational factor, long interrogation
Scenario 4 contains 1 situational factor, no recent sleep
Scenario 5 contains 2 situational factors, 3 interrogators and long interrogation
Scenario 6 contains 2 situational factors, 3 interrogators and no recent sleep
Scenario 7 contains 2 situational factors, long interrogation and no recent sleep
Scenario 8 contains 3 situational factors, 3 interrogators, long interrogation, and no recent sleep

Evidence Strength (1 = very weak against the defendant, 7 = very strong against the defendant)
Confession Details (1 = not at all likely, 7 = very likely)
Confidence (1 = not at all confident, 7 = very confident)
Verdict (0 = not guilty, 1 = guilty)

Table 1.4 – Evidentiary Variable Values by Scenario – All Values

	1	2	3	4	5	6	7	8
Eyewitness	3.73 (1.40)	3.92 (1.23)	4.18 (1.05)	4.04 (1.37)	3.92 (1.61)	4.16 (1.55)	3.77 (1.37)	3.91 (1.38)
Blood Test	4.15 (1.80)	4.27 (1.19)	4.91 (1.51)	4.07 (1.41)	4.00 (1.71)	4.12 (1.51)	4.39 (1.50)	4.00 (1.88)
Confession	5.27 (1.31)	4.77 (1.45)	5.09 (1.38)	5.61 (0.99)	4.88 (1.56)	5.00 (1.87)	4.96 (1.40)	5.14 (1.36)
Case	4.89 (1.48)	4.31 (1.23)	4.77 (1.38)	4.93 (1.12)	4.40 (1.61)	4.76 (1.33)	4.31 (1.35)	4.68 (1.39)
False Confession?	3.15 (1.29)	3.62 (1.33)	3.55 (1.74)	2.61 (1.03)	3.40 (1.56)	3.08 (1.68)	3.62 (1.36)	3.36 (1.59)
Voluntary Confession?	4.69 (1.29)	4.16 (1.57)	4.05 (1.86)	4.36 (1.99)	4.08 (1.79)	4.44 (1.66)	4.65 (1.55)	4.50 (1.54)
Pressured Confession?	3.31 (1.32)	4.15[a] (1.54)	3.68 (1.76)	2.79 [a] (1.42)	3.88 (1.56)	3.88 (1.79)	3.96 (1.64)	3.68 (1.56)
Any Person False Confess?	3.00 (1.26)	3.15 (1.43)	3.32 (1.89)	3.07 (1.56)	3.64 (1.55)	3.28 (1.70)	2.58 (1.30)	2.82 (1.56)
You False Confess?	1.89 (1.34)	1.65 (1.13)	1.36 (0.49)	1.71 (1.56)	2.12 (1.54)	2.00 (1.32)	1.77 (1.31)	1.27 (0.55)
Verdict	0.69 (0.47)	0.50 (0.51)	0.68 (0.48)	0.79 [a] (0.42)	0.36 [a] (0.49)	0.68 (0.48)	0.40 (0.50)	0.64 (0.49)
Confidence	5.65 [a] (1.20)	4.54 [ab] (1.30)	5.41 (1.22)	5.46 (1.00)	4.96 (1.93)	5.36 (0.91)	5.31 (1.23)	5.64 [b] (0.90)

Mean (S.D.)

[a] and [b] indicate that there are significant differences between the results within the specific variable. For example, for the variable "Pressured Confession?", the [a] notation indicates that the means for scenarios 2 and 4 had significantly different values ($p<.05$).

Scenario 1 is control with 0 situational factors
Scenario 2 contains 1 situational factor, 3 interrogators
Scenario 3 contains 1 situational factor, long interrogation
Scenario 4 contains 1 situational factor, no recent sleep
Scenario 5 contains 2 situational factors, 3 interrogators and long interrogation
Scenario 6 contains 2 situational factors, 3 interrogators and no recent sleep
Scenario 7 contains 2 situational factors, long interrogation and no recent sleep
Scenario 8 contains 3 situational factors, 3 interrogators, long interrogation, and no recent sleep

Evidence Strength (1 = very weak against the defendant, 7 = very strong against the defendant)
Confession Details (1 = not at all likely, 7 = very likely)
Confidence (1 = not at all confident, 7 = very confident)
Verdict (0 = not guilty, 1 = guilty)

Table 1.5 – Evidentiary Variables by Number of Situational Interrogation Factors

	0	1	2	3
Eyewitness	3.73 (1.40)	4.04 (1.23)	3.95 (1.50)	3.91 (1.38)
Blood Test	4.15 (1.80	4.38 (1.40)	4.17 (1.56)	4.00 (1.88)
Confession	5.27 (1.31)	5.17 (1.31)	4.95 (1.60)	5.14 (1.36)
Case	4.89 (1.48)	4.67 (1.25)	4.49 (1.43)	4.68 (1.39)
False Confession?	3.15 (1.29)	3.22 (1.43)	3.37 (1.53)	3.36 (1.59)
Voluntary Confession?	4.69 (1.29)	4.20 (1.80)	4.40 (1.66)	4.50 (1.54)
Pressured Confession?	3.31 (1.32)	3.51 (1.65)	3.91 (1.64)	3.68 (1.56)
Any Person False Confess?	3.00 (1.26)	3.17 (1.60)	3.16 (1.57)	2.82 (1.56)
You False Confess?	1.89 (1.34)	1.59 (1.18)	1.96 (1.38)	1.27 (0.55)
Verdict	0.69 (0.47)	0.66 (0.48)	0.48 (0.50)	0.64 (0.49)
Confidence	5.65 (1.20)	5.13 (1.24)	5.21 (1.41)	5.64 (0.90)

Mean (S.D.)

Scenario 1 had 0 situational interrogation factors
Scenarios 2-4 had 1 situational interrogation factor
Scenarios 5-7 had 2 situational interrogation factors
Scenario 8 had 3 situational interrogation factors

Evidence Strength (1 = very weak against the defendant, 7 = very strong against the defendant)
Confession Details (1 = not at all likely, 7 = very likely)
Confidence (1 = not at all confident, 7 = very confident)
Verdict (0 = not guilty, 1 = guilty)

Table 1.6 – Significant F-test Values

Dependent Variable	Independent Variable(s)	Mean Square	F-value	*p*-value
Pressured to confess	# of interrogators	10.73	4.33	.039
	# of interrogators X length of interrogation	12.70	5.13	.025
Likelihood of false confession	Length of interrogation	6.69	3.19	.076
Verdict confidence	Recent sleep	4.52	2.90	.090
	# of interrogators	5.58	3.57	.060
	Recent sleep X # of interrogators	9.94	6.36	.012

Table 2.1 – Listing of Study 2 Scenarios

Scenario	Number of Interrogators	Interrogation Length	Defendant Recent Sleep	Expert Witness
1	1	1 hour	Just woke up	No
2	3	1 hour	Just woke up	No
3	1	16 hours	Just woke up	No
4	1	1 hour	Worked all night	No
5	3	16 hours	Just woke up	No
6	3	1 hour	Worked all night	No
7	1	16 hours	Worked all night	No
8	3	16 hours	Worked all night	No
9	3	16 hours	Worked all night	Yes

Table 2.2 – Demographic Information

Demographic Characteristic	All Respondents (N = 427)	Accurate Respondents (N = 339)
Race		
American Indian or Alaska Native	8 (1.7%)	5 (1.5%)
Asian/Pacific Islander	8 (1.7%)	5 (1.5%)
Black	10 (2.2%)	6 (1.8%)
Hispanic	15 (3.2%)	8 (2.4%)
White	408 (88.3%)	303 (90.4%)
Other	13 (2.8%)	8 (2.4%)
Not Specified	10 (2.2%)	4 (1.2%)
Gender		
Male	232 (49%)	160 (47%)
Female	238 (51%)	178 (53%)
Age		
18-29	113 (24.0%)	76 (22.5%)
30-44	97 (20.6%)	76 (22.5%)
45-59	156 (33.2%)	108 (32.0%)
60+	104 (22.1%)	78 (23.1%)
Income		
$0-24,999	64 (14.3%)	46 (14.4%)
$25,000-49,999	70 (15.7%)	42 (13.1%)
$50,000-99,999	123 (27.5%)	95 (30.0%)
$100,000-149,999	100 (22.4%)	77 (24.1%)
$150,000+	90 (20.1%)	60 (18.8%)
No Response	25 (5.6%)	19 (5.9%)
Education		
Less than high school	10 (2.1%)	5 (1.5%)
High school	29 (6.2%)	21 (6.2%)
Some college	120 (25.5%)	86 (25.6%)
Associate or bachelor	180 (38.3%)	133 (39.3%)
Graduate school	131 (27.9%)	93 (27.5%)
Location		
New England	36 (7.7%)	26 (7.8%)
Middle Atlantic	67 (14.4%)	49 (14.6%)
East North Central	65 (13.9%)	48 (14.3%)
West North Central	35 (7.5%)	26 (7.8%)
South Atlantic	83 (17.8%)	59 (17.6%)
East South Central	19 (4.1%)	15 (4.5%)
West South Central	40 (8.6%)	28 (8.4%)
Mountain	43 (9.2%)	29 (8.7%)
Pacific	78 (16.7%)	55 (16.4%)

Table 2.3 – Bivariate Correlations (All Respondents)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Eyewitness	.56**	.50**	.67**	-.42**	.33**	.50**	.22**	-.06	.11*	-.11*	.04	.05	-.10*	.00	-.06	-.06	-.11*	-.04
2. Blood Test	1	.52**	.68**	-.45**	.39**	.50**	.10*	.03	.08	-.07	-.04	.01	-.09	.01	-.03	-.06	-.03	.01
3. Confession		1	.78**	-.71**	.54**	.61**	.15**	.02	.13**	-.15**	-.01	.04	-.04	.05	-.11*	-.15**	-.31**	-.09
4. Case			1	-.67**	.52**	.69**	.17**	-.03	.11*	-.18**	.02	.06	-.04	.01	-.09*	-.13**	-.23**	-.10*
5. Eyewitness Reliability				1	-.52**	-.58**	-.12*	-.07	-.10*	.14**	-.04	-.02	.04	-.05	.04	.16**	.27**	.08
6. Blood Test Proves Guilt					1	.47**	.18**	.05	.11*	-.08	-.02	.06	-.07	.00	-.05	-.06	-.26**	-.13**
7. False Confession						1	.28**	-.01	.08	-.12*	-.01	-.06	-.10*	-.02	-.05	-.10*	-.21**	-.05
8. Voluntary Confession							1	.11*	.03	-.11*	.19**	-.04	.03	-.01	.03	.04	-.06	.01
9. Verdict								1	.14**	.03	.07	.07	.07	.07	.08	.03	-.02	.05
10. Verdict Confidence									1	-.01	-.01	.02	-.03	-.06	-.06	-.03	-.03	-.07
11. Jury Eligible										1	-.15**	-.14**	-.05	-.03	.03	.02	.02	.04
12. Race											1	.10*	.32**	.05	.03	-.04	.03	.05
13. Gender												1	.28**	.11*	.03	-.04	.01	-.06
14. Respondent Age													1	-.06	.03	-.02	.00	.03
15. Income														1	-.02	.05	.02	-.04
16. Education															1	.10*	.09*	.32**
17. Location																1	.10*	.32**
18. Length of Interrogation																	1	.32**
19. Expert Witness																		1

* $p < .05$
** $p < .01$

Table 2.4 – MANCOVA Estimated Mean Comparisons

Main Effects

	Interrogation Length		Defendant recent sleep		Number of interrogators		Expert Witness	
	1 hour	16 hours	Recently slept	Worked all night	1	3	No	Yes
Eyewitness	3.71**	3.39	3.62	3.49	3.61	3.49	3.52	3.58
Blood Test	4.25	4.11	4.31	4.06	4.22	4.15	3.99	4.37
Confession	5.39**	4.29	5.11**	4.57	4.67**	5.01	4.50**	5.17
Overall Case	4.41**	3.72	4.25**	3.87	4.16	3.97	4.02	4.11
False Confession	2.98**	3.90	3.17**	3.71	3.41	3.46	3.63	3.25
Voluntary Confession	4.36**	3.45	3.94	3.87	3.94	3.87	4.05	3.76

Main effect comparisons are read across rows.

* $p<.10$

** $p<.05$

Table 2.5 – Logistic Regression Results Predicting Verdict by Model (All Respondents)

	Model 1			Model 2			Model 3		
	Exp(B)	**Exp(B) Lower**	**Exp(B) Upper**	**Exp(B)**	**Exp(B) Lower**	**Exp(B) Upper**	**Exp(B)**	**Exp(B) Lower**	**Exp(B) Upper**
Number of Interrogators	.883	.438	1.782	-	-	-	1.216	.393	3.765
Recent Sleep	.411**	.202	.835	-	-	-	.695	.215	2.250
Interrogation Length	.401**	.199	.809	-	-	-	.747	.241	2.319
Expert Witness	1.289	.567	2.931	-	-	-	.811	.218	3.015
Interrogators by Sleep	1.545	.679	3.514	-	-	-	1.097	.293	4.110
Interrogators by Length	.631	.277	1.437	-	-	-	.815	.221	3.000
Sleep by Length	1.649	.725	3.751	-	-	-	1.658	.440	6.254
Gender	.642**	.436	.947	1.328	.716	2.463	1.306	.701	2.432
Race	1.296*	.965	1.740	.840	.540	1.307	.844	.541	1.317
Eyewitness	-	-	-	1.176	.892	1.550	1.185	.897	1.565
Blood Test	-	-	-	1.175	.926	1.491	1.198	.935	1.534
Confession	-	-	-	1.251	.919	1.703	1.241	.904	1.704
Case	-	-	-	2.739**	1.806	4.155	2.699**	1.772	4.112
False Confession	-	-	-	.639**	.488	.835	.637**	.483	.838
Voluntary Confession	-	-	-	1.246**	1.006	1.544	1.239*	.998	1.540
Chi-square	37.67**			326.29**			327.52**		
Nagelkerke pseudo-R^2	.107			.706			.707		

* $p<.10$
** $p<.05$

Exp(B) Lower and Exp(B) Upper are 95% Confidence Intervals for the odds ratio Exp(B)

Table 3.1 – Listing of Study 3 Scenarios

Scenario	Age of Defendant	Crime Committed	Interrogation Length
1	16	Assault	1 hour
2	22	Assault	1 hour
3	16	Murder	1 hour
4	22	Murder	1 hour
5	16	Assault	16 hours
6	22	Assault	16 hours
7	16	Murder	16 hours
8	22	Murder	16 hours

Table 3.2 – Demographic Information

Demographic Characteristic	All Respondents (N = 523)	Accurate Respondents (N = 427)
Race		
American Indian or Alaska Native	3 (0.6%)	3 (0.7%)
Asian/Pacific Islander	10 (1.9%)	7 (1.6%)
Black	20 (3.8%)	14 (3.3%)
Hispanic	29 (5.5%)	21 (4.9%)
White	444 (84.9%)	367 (85.9%)
Other	8 (1.5%)	7 (1.6%)
Not Specified	9 (1.7%)	8 (1.9%)
Gender		
Male	220 (42%)	172 (41%)
Female	298 (58%)	250 (59%)
Age		
18-29	80 (15.4%)	65 (15.4%)
30-44	112 (21.6%)	89 (21.1%)
45-59	170 (32.8%)	138 (32.7%)
60+	154 (29.7%)	130 (30.8%)
Income		
$0-24,999	41 (7.8%)	34 (8.0%)
$25,000-49,999	78 (14.9%)	61 (14.3%)
$50,000-99,999	170 (32.5%)	140 (32.8%)
$100,000-149,999	80 (15.3%)	67 (15.7%)
$150,000+	142 (27.2%)	113 (26.5%)
No Response	12 (2.3%)	12 (2.8%)
Education		
Less than high school	2 (0.3%)	1 (0.2%)
High school	37 (7.2%)	29 (6.9%)
Some college	153 (29.6%)	127 (30.2%)
Associate or bachelor	177 (34.2%)	143 (34.0%)
Graduate school	148 (28.6%)	121 (28.7%)
Location		
New England	39 (7.6%)	31 (7.4%)
Middle Atlantic	74 (14.4%)	52 (12.4%)
East North Central	80 (15.6%)	74 (17.7%)
West North Central	52 (10.1%)	47 (11.2%)
South Atlantic	77 (15.0%)	66 (15.8%)
East South Central	20 (3.9%)	16 (3.8%)
West South Central	48 (9.4%)	38 (9.1%)
Mountain	47 (9.2%)	34 (8.1%)
Pacific	76 (14.8%)	61 (14.6%)

Table 3.3 – Bivariate Correlations (All Respondents)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Eyewitness	.64**	.55**	.73**	.84**	.58**	-.45**	.47**	.58**	.29**	.00	.08*	-.04	.10**	.09**	-.08*	.02
2. Blood Test	1	.58**	.75**	.64**	.81**	-.46**	.46**	.58**	.24**	.07	.07	-.05	.05	.08*	-.08*	-.01
3. Confession		1	.76**	.56**	.51**	-.67**	.64**	.56**	.22**	.04	.10**	.02	.00	.03	-.13**	-.02
4. Case			1	.74**	.68**	-.61**	.59**	.71**	.26**	.02	.08*	.00	.06	.06	-.11**	-.03
5. Eyewitness Reliability				1	.63**	-.47**	.50**	.59**	.27**	.03	.12**	-.04	.12**	.09*	-.10**	.00
6. Blood Test Proves Guilt					1	-.41**	.41**	.56**	.21**	.06	.05	-.05	.04	.06	-.10**	.01
7. False Confession						1	-.54**	-.57**	-.25**	-.04	-.08*	.00	-.07	-.02	.13**	.05
8. Voluntary Confession							1	.47**	.14**	.01	.01	.00	.07	-.02	-.13**	-.01
9. Verdict								1	.33**	.01	.10**	-.02	.01	.04	-.11**	.01
10. Verdict Confidence									1	.02	.01	-.11**	.09**	.05	-.05	.05
11. Jury Eligible										1	.16**	-.03	-.02	-.03	.05	.06
12. Race											1	-.12**	.08*	.09**	.13**	-.09**
13. Gender												1	-.23**	-.13**	-.11**	.09*
14. Respondent Age													1	.10**	.20**	.01
15. Income														1	.20**	-.04
16. Education															1	.02
17. Location																1

* $p < .10$
** $p < .05$

Table 3.4 – Bivariate Correlations (Accurate Respondents)

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Eyewitness	.63**	.54**	.74**	.85**	.57**	-.49**	.47**	.59**	.27**	.01	.05	-.03	.10**	.07	-.11**	-.01
2. Blood Test	1	.58**	.75**	.63**	.82**	-.51**	.46**	.62**	.23**	.06	.06	-.05	.03	.07	-.12**	-.05
3. Confession		1	.75**	.54**	.52**	-.72**	.64**	.56**	.18**	.02	.08*	.05	-.01	.00	-.17**	-.04
4. Case			1	.73**	.69**	-.66**	.59**	.73**	.23**	.02	.07	.02	.05	.04	-.15**	-.04
5. Eyewitness Reliability				1	.62**	-.52**	.50**	.59**	.23**	.02	.08	-.03	.13**	.09*	-.12**	-.04
6. Blood Test Proves Guilt					1	-.50**	.41**	.58**	.21**	.05	.02	-.04	.05	.05	-.15**	-.04
7. False Confession						1	-.59**	-.61**	-.25**	-.04	-.12**	.00	-.07	-.02	.12**	.04
8. Voluntary Confession							1	.47**	.13**	.03	.01	.01	.10**	-.04	-.16**	-.05
9. Verdict								1	.36**	.07	.05	-.01	.02	.01	-.13**	-.01
10. Verdict Confidence									1	-.03	-.05	-.09*	.08	.05	-.08	.06
11. Jury Eligible										1	.12**	-.03	-.03	.00	.04	.09*
12. Race											1	-.14**	.07	.09*	.11**	-.13**
13. Gender												1	-.23**	-.09*	-.08*	.09*
14. Respondent Age													1	.08	.16**	.00
15. Income														1	.15**	-.06
16. Education															1	-.01
17. Location																1

* $p < .10$
** $p < .05$

Table 3.5 – MANCOVA Estimated Mean Comparisons (All Respondents)

Main Effects

	Age of Defendant		Crime Committed		Length of Interrogation	
	16	22	Assault	Murder	1 hour	16 hours
Eyewitness	4.01	4.06	4.05	4.02	3.90*	4.16
Blood Test	4.41	4.34	4.46	4.28	4.35	4.39
Confession	4.36	4.54	4.47	4.42	4.81**	4.08
Overall Case	4.39	4.35	4.36	4.38	4.44	4.30
Eyewitness reliability	4.36	4.36	4.36	4.37	4.32	4.40
Blood test proves guilt	4.24	4.33	4.30	4.26	4.30	4.26
False Confession	3.58	3.42	3.52	3.48	3.16**	3.84
Voluntary Confession	3.97	4.11	4.15	3.93	4.29**	3.79
Confidence in Verdict	7.63	7.74	7.82	7.54	7.71	7.65

Main effect comparisons are read across rows.

* $p<.10$

** $p<.05$

Evidence strength variables (eyewitness, blood test, confession, overall case) are rated on a scale where 1=very weak toward defendant guilt and 7=very strong toward defendant guilt

Eyewitness reliability, blood test proves guilt, false confession and voluntary confession are rated on a scale where 1=very unlikely and 7=very likely

Verdict confidence is rated on a scale where 1=not at all sure and 10=completely sure

Table 3.6 – MANCOVA Estimated Mean Comparisons (Accurate Respondents)

Main Effects

	Age of Defendant		Crime Committed		Length of Interrogation	
	16	22	Assault	Murder	1 hour	16 hours
Eyewitness	3.94	4.08	3.99	4.03	3.84*	4.17
Blood Test	4.33	4.46	4.47	4.32	4.33	4.46
Confession	4.26**	4.67	4.46	4.47	4.84**	4.08
Overall Case	4.31	4.45	4.33	4.43	4.42	4.34
Eyewitness reliability	4.30	4.44	4.34	4.40	4.32	4.32
Blood test proves guilt	4.13	4.43	4.28	4.28	4.28	4.28
False Confession	3.63	3.39	3.55	3.47	3.15**	3.87
Voluntary Confession	3.89	4.08	4.09	3.87	4.17**	3.80
Confidence in Verdict	7.61	7.85	7.78	7.68	7.76	7.70

Main effect comparisons are read across rows.

* $p<.10$

** $p<.05$

Evidence strength variables (eyewitness, blood test, confession, overall case) are rated on a scale where 1=very weak toward defendant guilt and 7=very strong toward defendant guilt

Eyewitness reliability, blood test proves guilt, false confession and voluntary confession are rated on a scale where 1=very unlikely and 7=very likely

Verdict confidence is rated on a scale where 1=not at all sure and 10=completely sure

Table 3.7 – Logistic Regression Results Predicting Verdict by Model (All Respondents)

	Model 1			Model 2			Model 3		
	Exp(B)	Exp(B) Lower	Exp(B) Upper	Exp(B)	Exp(B) Lower	Exp(B) Upper	Exp(B)	Exp(B) Lower	Exp(B) Upper
Defendant Age	.71	.38	1.35	-	-	-	.36*	.12	1.03
Crime Committed	.53*	.28	1.00	-	-	-	.22**	.07	.64
Interrogation Length	.60	.32	1.12	-	-	-	.54	.19	1.54
Age*Crime	1.21	.57	2.59	-	-	-	3.92**	1.12	13.72
Age*Length	1.70	.81	3.59	-	-	-	1.70	.49	5.86
Crime*Length	1.37	.65	2.87	-	-	-	1.60	.48	5.38
Participant Race	1.43**	1.07	1.92	1.53*	.98	2.39	1.60**	1.02	2.52
Participant Gender	1.06	.74	1.52	1.00	2.39	1.62	1.09	.61	1.97
Participant Education	.76**	.62	.93	.83	.61	1.14	.84	.61	1.15
Eyewitness strength	-	-	-	1.18	.84	1.66	1.24	.87	1.77
Blood test strength	-	-	-	1.03	.75	1.41	.97	.70	1.34
Confession strength	-	-	-	.81	.61	1.08	.77*	.57	1.04
Overall case strength	-	-	-	2.70**	1.78	4.10	2.95**	1.91	4.56
Eyewitness reliability	-	-	-	1.01	.71	1.43	.98	.69	1.41
Blood test guilt	-	-	-	1.50**	1.13	1.99	1.62**	1.20	2.28
False confession	-	-	-	.58**	.44	.76	.56**	.42	.74
Voluntary confession	-	-	-	1.15	.91	1.45	1.14	.90	1.45
Confidence in verdict	-	-	-	1.16**	1.02	1.32	1.14**	1.00	1.30
Chi-square	19.42**			356.64**			366.99**		
Nagelkerke pseudo-R^2	.051			.699			.713		

* $p<.10$ ** $p<.05$

Exp(B) Lower and Exp(B) Upper are 95% Confidence Intervals for the odds ratio Exp(B)

Table 3.8 – Logistic Regression Results Predicting Verdict by Model (Accurate)

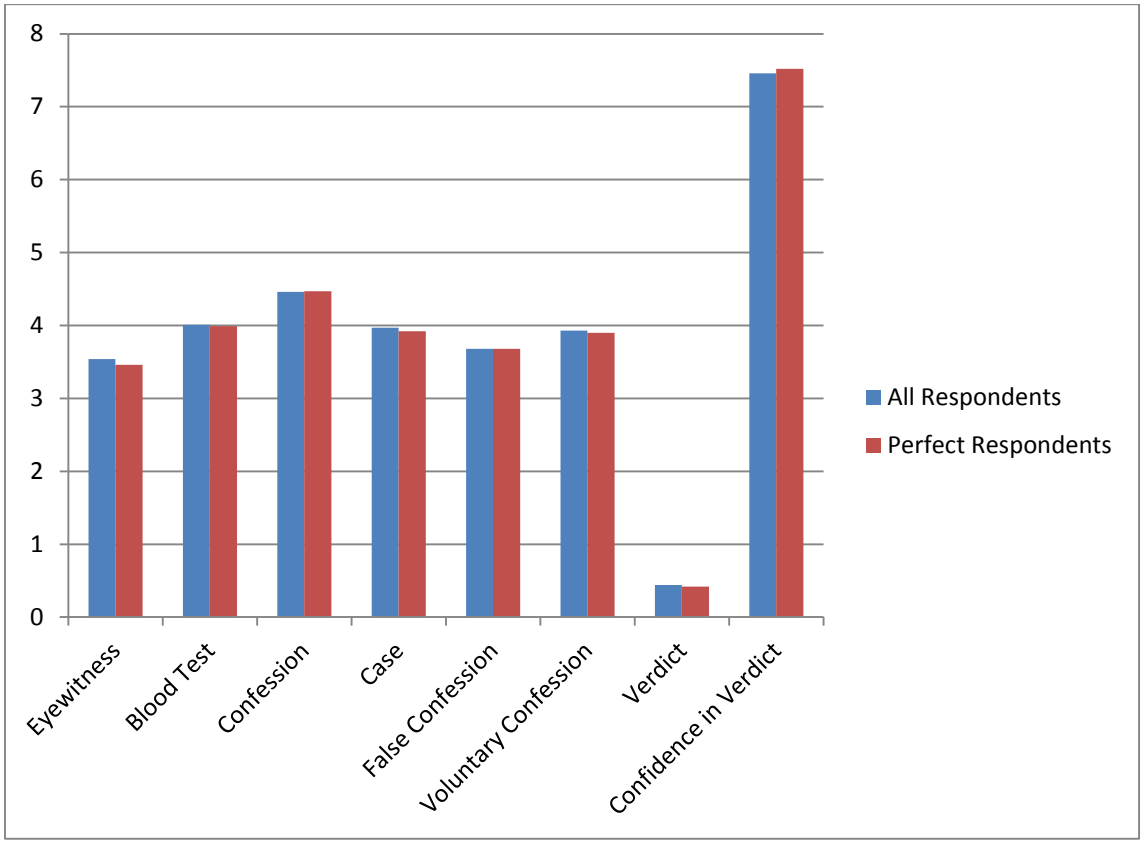
	Model 1			Model 2			Model 3		
	Exp(B)	Exp(B) Lower	Exp(B) Upper	Exp(B)	Exp(B) Lower	Exp(B) Upper	Exp(B)	Exp(B) Lower	Exp(B) Upper
Defendant Age	.71	.35	1.41	-	-	-	20**	.05	.72
Crime Committed	.64	.33	1.26	-	-	-	.15**	.04	.54
Interrogation Length	.63	.32	1.24	-	-	-	.26**	.07	.90
Age*Crime	1.15	.49	2.67	-	-	-	4.21*	.94	18.80
Age*Length	1.90	.84	4.31	-	-	-	2.56	.57	11.51
Crime*Length	.99	.44	2.23	-	-	-	1.78	.41	7.80
Participant Race	1.23	.90	1.68	1.18	.71	1.95	1.25	.72	2.16
Participant Gender	1.06	.71	1.58	1.08	.60	1.95	1.28	.63	2.62
Participant Education	.75**	.60	.94	.84	.57	1.23	.87	.58	.130
Eyewitness strength	-	-	-	.99	.66	1.48	1.08	.71	1.65
Blood test strength	-	-	-	1.34	.92	1.96	1.26	.84	1.91
Confession strength	-	-	-	.72*	.51	1.01	.66**	.46	.95
Overall case strength	-	-	-	3.48**	2.06	5.89	4.28**	2.40	7.62
Eyewitness reliability	-	-	-	1.09	.70	1.68	1.07	.69	1.66
Blood test guilt	-	-	-	1.26	.90	1.75	1.39*	.97	1.99
False confession	-	-	-	.53**	.38	.74	.51**	.36	.73
Voluntary confession	-	-	-	1.08	.83	1.42	1.06	.80	1.40
Confidence in verdict	-	-	-	1.24**	1.06	1.45	1.23**	1.04	1.44
Chi-square	14.96*			326.83**			342.82**		
Nagelkerke pseudo-R^2	.048			.745			.768		

* $p<.10$ ** $p<.05$

Exp(B) Lower and Exp(B) Upper are 95% Confidence Intervals for the odds ratio Exp(B)

FIGURES

Figure 2.1 – Study 2 Comparison of Key Evidentiary Variables by Dataset



Eyewitness, Blood Test, Confession, and Case: 1-7 scale where 1 meant the evidence was "very weak against the defendant" and 7 meant the evidence was "very strong against the defendant."

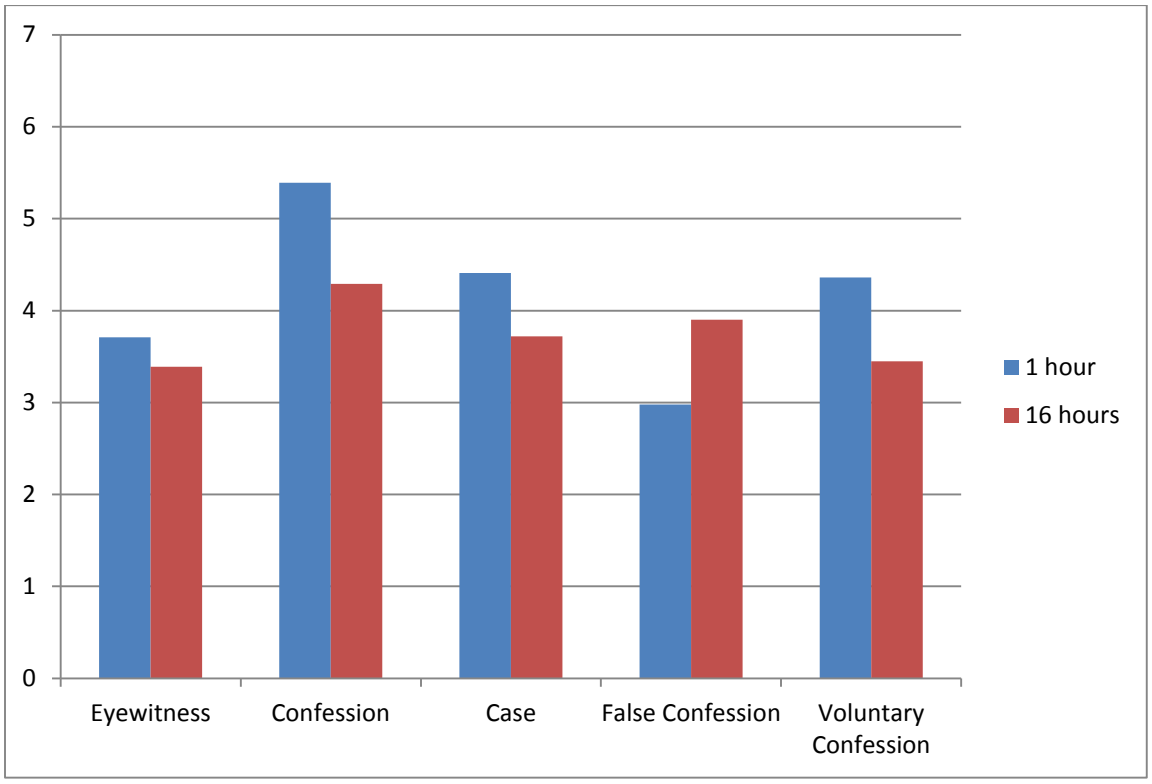
False Confession: 1-7 scale where 1 meant confession was "not at all likely" to be false, and 7 meant confession was "very likely" to be false.

Voluntary Confession: 1-7 scale where 1 meant confession was "not at all likely" to be voluntary, and 7 meant confession was "very likely" to be voluntary.

Verdict: 0-1 scale where 0 meant a vote of "not guilty" and 1 meant a vote of "guilty."

Confidence in Verdict: 1-10 scale where 1 meant respondent was "not at all sure" of their chosen verdict, and 10 meant respondent was "completely sure" of their verdict.

Figure 2.2 – Study 2 Comparison of Significant Differences in MANCOVA Estimated Means Due to Interrogation Length

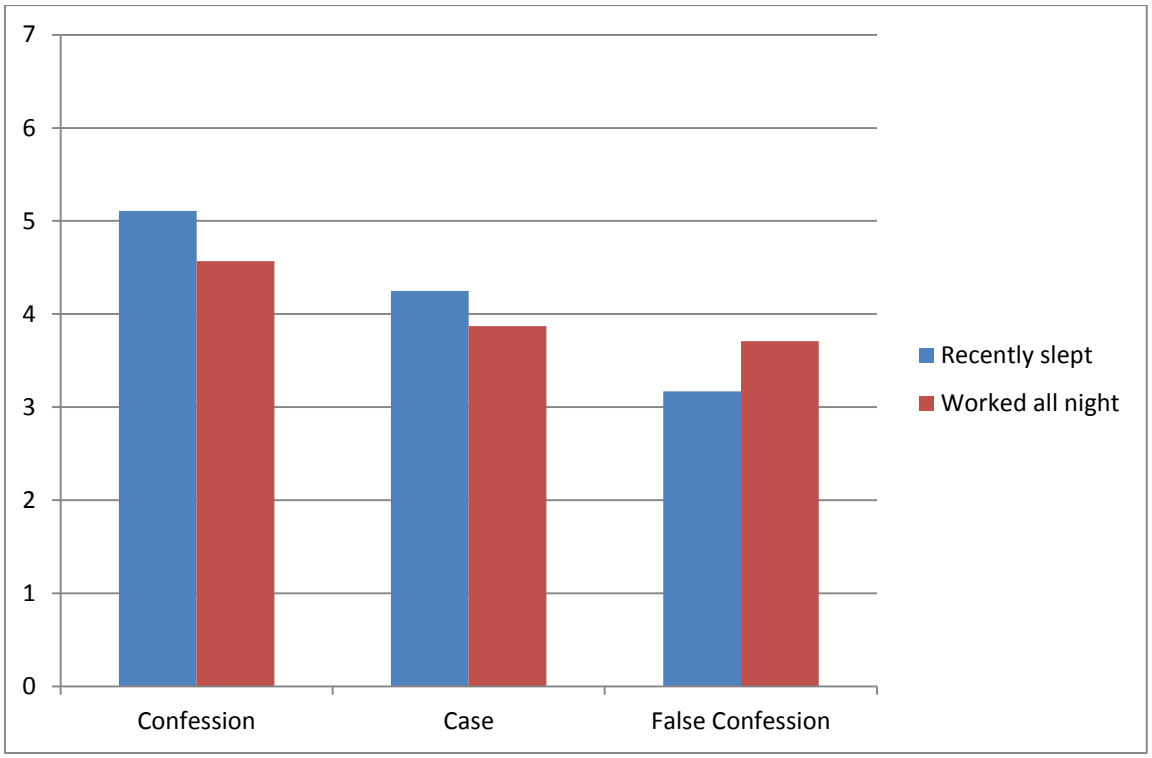


Eyewitness, Blood Test, Confession, and Case: 1-7 scale where 1 meant the evidence was "very weak against the defendant" and 7 meant the evidence was "very strong against the defendant."

False Confession: 1-7 scale where 1 meant confession was "not at all likely" to be false, and 7 meant confession was "very likely" to be false.

Voluntary Confession: 1-7 scale where 1 meant confession was "not at all likely" to be voluntary, and 7 meant confession was "very likely" to be voluntary.

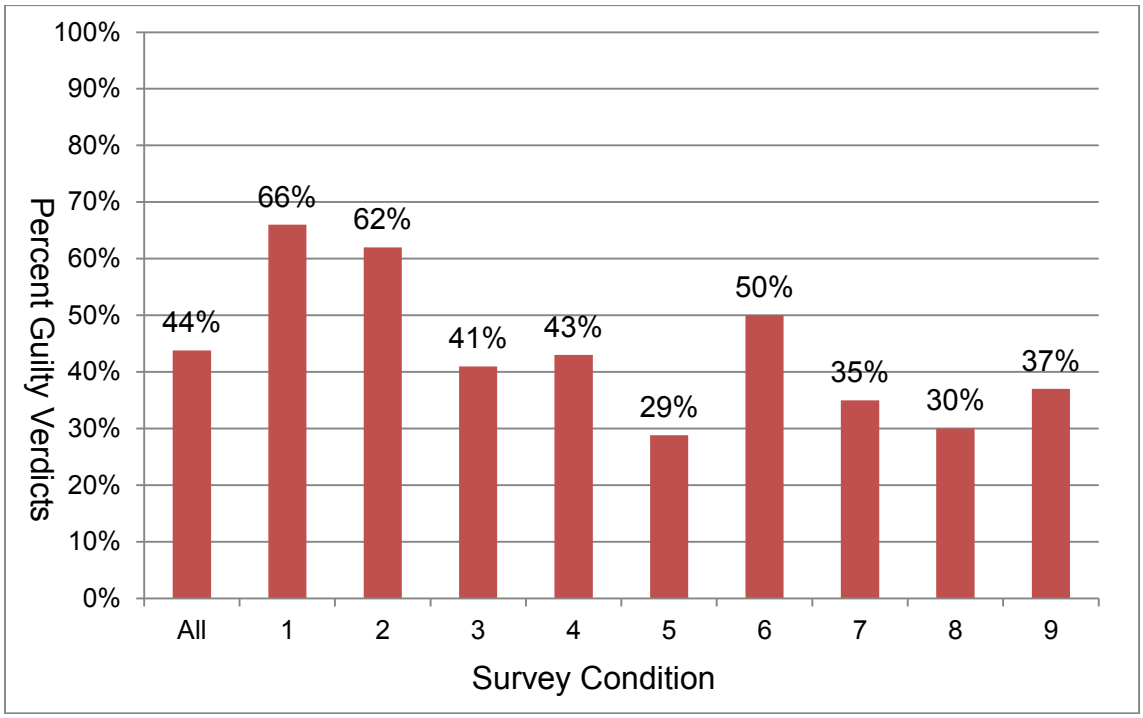
Figure 2.3 – Study 2 Comparison of Significant Differences in MANCOVA Estimated Means Due to How Recently Defendant Slept



Confession and Case: 1-7 scale where 1 meant the evidence was “very weak against the defendant” and 7 meant the evidence was “very strong against the defendant.”

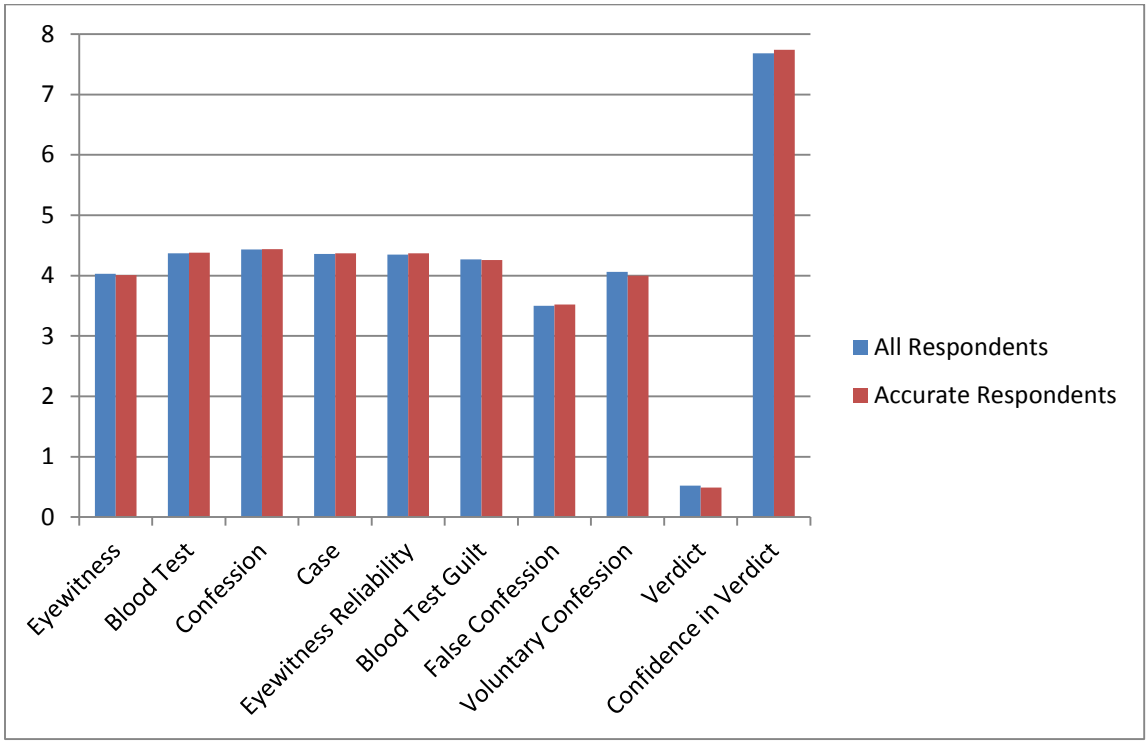
False Confession: 1-7 scale where 1 meant confession was “not at all likely” to be false, and 7 meant confession was “very likely” to be false.

Figure 2.4 – Study 2 Percent Guilty Verdicts by Survey Condition (All Respondents)



Condition 1: 1 interrogator, 1 hour interrogation, defendant recently slept (Control)
Condition 2: 3 interrogators, 1 hour interrogation, defendant recently slept
Condition 3: 1 interrogator, 16 hour interrogation, defendant recently slept
Condition 4: 1 interrogator, 1 hour interrogation, defendant worked all night
Condition 5: 3 interrogators, 16 hour interrogation, defendant recently slept
Condition 6: 3 interrogators, 1 hour interrogation, defendant worked all night
Condition 7: 1 interrogator, 16 hour interrogation, defendant worked all night
Condition 8: 3 interrogators, 16 hour interrogation, defendant worked all night
Condition 9: 3 interrogators, 16 hour interrogation, defendant worked all night, expert witness testimony

Figure 3.1 – Study 3 Comparison of Key Evidentiary Variables by Dataset



Eyewitness, Blood Test, Confession, and Case: 1-7 scale where 1 meant the evidence was "very weak against the defendant" and 7 meant the evidence was "very strong against the defendant."

False Confession: 1-7 scale where 1 meant confession was "not at all likely" to be false, and 7 meant confession was "very likely" to be false.

Voluntary Confession: 1-7 scale where 1 meant confession was "not at all likely" to be voluntary, and 7 meant confession was "very likely" to be voluntary.

Verdict: 0-1 scale where 0 meant a vote of "not guilty" and 1 meant a vote of "guilty."

Confidence in Verdict: 1-10 scale where 1 meant respondent was "not at all sure" of their chosen verdict, and 10 meant respondent was "completely sure" of their verdict.

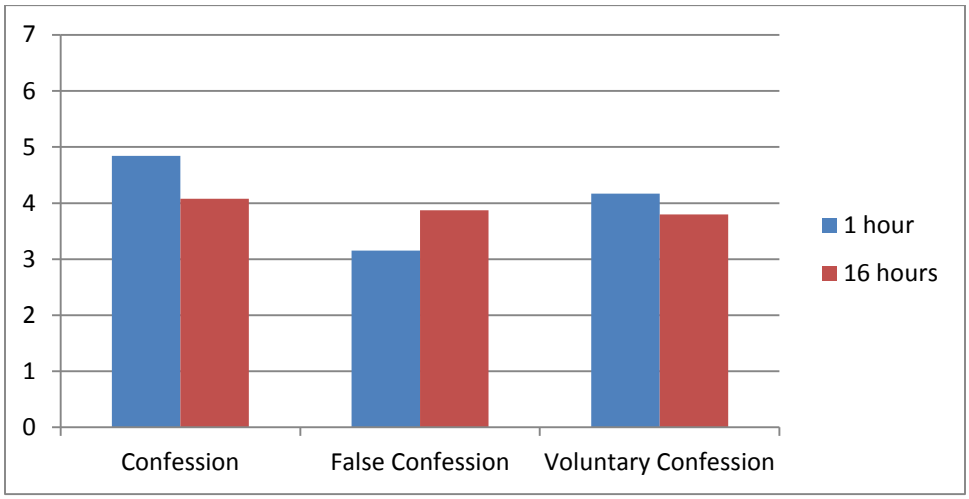
Figure 3.2 – Study 3 Comparison of Significant Differences in MANCOVA Estimated Means Due to Interrogation Length (All Respondents)

Confession: 1-7 scale where 1 meant the evidence was “very weak against the defendant” and 7 meant the evidence was “very strong against the defendant.”

False Confession: 1-7 scale where 1 meant confession was “not at all likely” to be false, and 7 meant confession was “very likely” to be false.

Voluntary Confession: 1-7 scale where 1 meant confession was “not at all likely” to be voluntary, and 7 meant confession was “very likely” to be voluntary.

Figure 3.3 – Study 3 Comparison of Significant Differences in MANCOVA Estimated Means Due to Interrogation Length (Accurate Respondents)

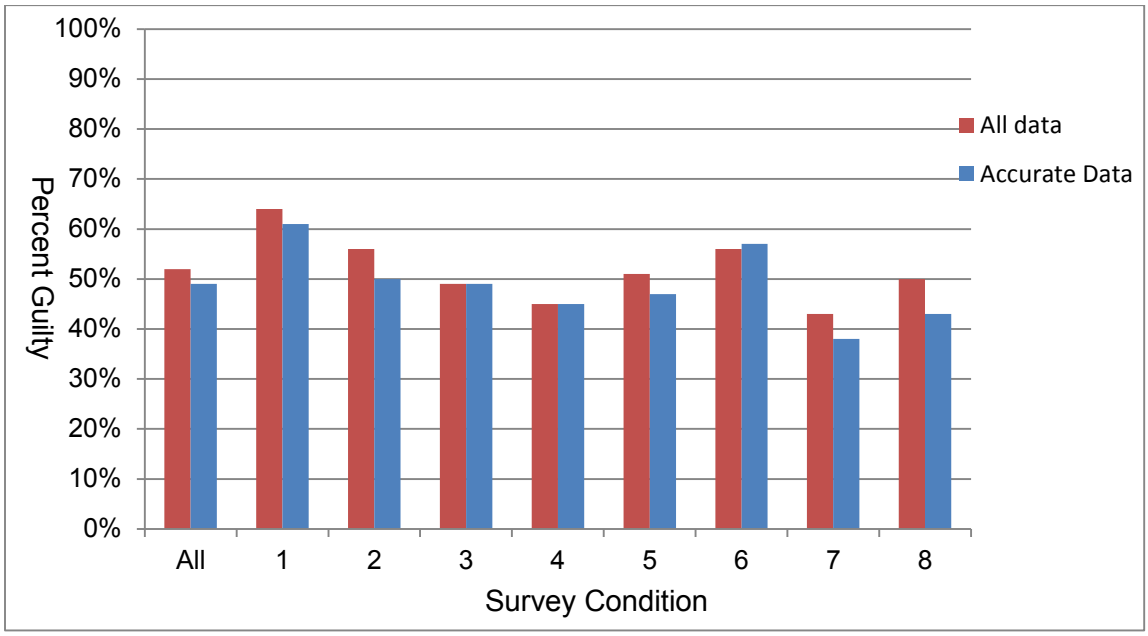


Confession: 1-7 scale where 1 meant the evidence was “very weak against the defendant” and 7 meant the evidence was “very strong against the defendant.”

False Confession: 1-7 scale where 1 meant confession was “not at all likely” to be false, and 7 meant confession was “very likely” to be false.

Voluntary Confession: 1-7 scale where 1 meant confession was “not at all likely” to be voluntary, and 7 meant confession was “very likely” to be voluntary.

Figure 3.4 – Study 3 Percent Guilty Verdicts by Survey Condition (All Respondents Compared to Accurate Respondents)



APPENDICES

Appendix A – Pilot Study Scenario 8

The following passages contain materials from the case of *New York v. James Smith*. You will read some background information about the case, as well as an excerpt of testimony about the case evidence. After you are done reading, you will be asked to **answer questions as if you were a juror**, including questions about the evidence presented and your final verdict. Please remember that this study is voluntary and anonymous.

Facts of the Crime

- On the night of December 21st, a young man, Michael Quail, was beaten by an assailant
- Mr. Quail suffered serious injuries caused by repeated strikes with an unknown object
- Mr. Quail did not know his assailant
- Police arrested a suspect, James Smith, shortly after the crime occurred
- Mr. Smith, the defendant, is charged with one count of aggravated assault

Relevant Statute

The statute that governs aggravated assault for the State of New York is:

Aggravated assault - a criminal assault that is committed with an intent to cause or that causes serious bodily injury especially through the use of a dangerous weapon

Courtroom Testimony

Prosecution: I would like to call my first witness, Mr. Stephen Davis, to the stand.

(Mr. Davis is sworn in and takes his seat on the witness stand)

Prosecution: Mr. Davis, would you please state your name and relationship to the victim for the record?

Mr. Davis: My name is Stephen Davis, I live next door to Michael Quail.

Prosecution: Mr. Davis, you witnessed the attack on the victim, your neighbor Michael Quail, and identified Mr. Smith, the defendant in this case, as the attacker. Can you please describe what you saw?

Mr. Davis: I was standing in my kitchen looking out the window when I saw a stranger approach Michael as he was exiting his car. The attacker took something out of his pocket and hit Michael over the head with the object. I think the attacker was going to steal something from Michael but I think he saw me and ran off. I called the police and then went out to check on Michael.

Prosecution: Two days after the crime, the police called you to come look at a suspect lineup, and you identified Mr. Smith. Was there any hesitation in your mind that the defendant, Mr. Smith, is the attacker.

Mr. Davis: No sir, I'm confident that I chose the correct suspect out of the lineup.

Prosecution: Thank you, Mr. Davis, I have no further questions for you. The defense is now going to ask you some questions.

Defense: Mr. Davis, what time of day did the crime occur?

Mr. Davis: It was around 9:45pm.

Defense: So it was dark out when you witnessed the crime. How could you have seen so well in the dark?

Mr. Davis: It was pretty dark I suppose, but we have a few street lights in the area. And I saw him for at least 15 seconds or so.

Defense: So after this brief glimpse in the dark, you went straight to the police and made an identification before you could forget what you saw, right?

Mr. Davis: Well no, I gave a statement that night, but the police didn't have me come down to the station until 2 days later.

Defense: Mr. Davis, isn't it possible that after seeing the attacker for a total of 15 seconds, in the dark, while he was moving, you weren't able to remember his face clearly enough that when the police called you in 2 days later, you may have made a mistake?

Mr. Davis: I suppose it's possible, but I don't think I made a mistake.

Defense: No further questions your Honor.

(Mr. Davis is excused from the witness stand)

Prosecution: I next call Mr. Patrick Jackson to the stand.

(Mr. Jackson is sworn in and takes his seat on the witness stand)

Prosecution: Mr. Jackson, would you please state your name and occupation for the record?

Mr. Jackson: Patrick Jackson, I work at the New York State Police Headquarters Laboratory in the Forensic Investigation Center in Albany as a laboratory technician.

Prosecution: Mr. Jackson, you analyzed a blood sample found on the defendant in this case. Can you please describe the evidence that you examined?

Mr. Jackson: When the defendant was arrested, he had in his possession a white t-shirt with a drop of blood on it. The shirt was brought into my lab for testing.

Prosecution: And what did your tests show?

Mr. Jackson: The blood on the defendant's shirt was not his own. The defendant's blood type is A+, and the blood type found on his shirt was B+.

Prosecution: What blood type is the victim? Could the blood found on the defendant's shirt have come from the victim?

Mr. Jackson: The victim's blood type is B+, so yes, the blood found on the defendant's shirt matches the blood type of the victim.

Prosecution: Thank you Mr. Jackson, no further questions. The defense will now question you.

Defense: Mr. Jackson, how likely is it that someone would have the same blood type, B+, as the victim?

Mr. Jackson: About 9% of the U.S. population has the blood type B+, according to the latest estimates from the Red Cross.

Defense: So almost 1 in 10 people have the same blood type as the victim. How can we be sure that the blood found on the defendant was from the victim, and not someone else?

Mr. Jackson: We can't be sure. We only know for certain that the blood on the defendant wasn't his own.

Defense: You also tested the blood of the defendant's wife and only child. What did those tests show?

Mr. Jackson: The defendant's wife's blood type does not match the blood found on the defendant. However, the son does have the same B+ blood type as the victim.

Defense: So my client was found with blood on his shirt that, according to the limits of your test, matches both his son and the victim. Don't you think it's more likely that it came from his son, rather than the victim?

Mr. Jackson: I can't answer that. All I know is that the blood type on the shirt matched both the defendant's son, and the victim. How the blood got on the shirt, and from whom, I can't say.

Defense: Mr. Jackson, wouldn't a DNA test be able to conclude where the blood came from? Were you able to compare DNA from the sample to the victim or to the defendant?

Mr. Jackson: Unfortunately the drop was too small to retrieve DNA using current methods. The best I could do was blood typing, which doesn't prove who the blood came from.

Defense: So there is no way to conclusively link the blood found on my client to the crime?

Mr. Jackson: No, I cannot prove that the blood on the defendant came from the victim.

Defense: Thank you, I have no further questions.

(Mr. Jackson is excused from the witness stand)

Prosecution: I next call Officer Bill Stevens.

(Officer Stevens is sworn in and takes his seat on the witness stand)

Prosecution: Mr. Stevens, would you please state your name and occupation for the record?

Officer Stevens: Officer Bill Stevens, New York State Police investigator, Bureau of Criminal Investigation.

Lawyer: Thank you sir. You led the questioning which led to the defendant's confession. Can you please discuss how the interview of the suspect took place?

Officer Stevens: After being arrested, the suspect was brought down to the station for questioning. He was read his *Miranda* rights and he acknowledged that he understood those rights. I then questioned him about his potential involvement in the assault of the victim.

Prosecution: And then he confessed?

Officer Stevens: Within a short time he confessed to assaulting the victim, and also signed a written statement which repeated his confession.

Prosecution: Do you have any concern that the defendant was pressured into confessing?

Officer Stevens: At no time do I feel as though the defendant's rights were violated.

Prosecution: Did the defendant give any indication to you that he didn't commit the crime? Or that he wasn't being completely truthful or honest in his confession?

Officer Stevens: At first he denied committing the crime, but by the end of questioning he confessed.

Prosecution: Thank you Officer, I have no further questions.

Defense: Officer Stevens, can you describe when you picked my client up for questioning?

Officer Stevens: The suspect was picked up at his home at 9am on the morning after the crime occurred. He had just worked the night shift from 12am-8am and was returning home to go to sleep.

Defense: How was the interrogation conducted?

Officer Stevens: Soon after he arrived at the station, he was brought into an interview room where 2 other officers and I questioned him about the assault on the victim. He was questioned for 6 hours before he began offering his confession.

Defense: Officer Stevens, are you aware of cases where a person has confessed to a crime he didn't commit?

Officer Stevens: Yes, I've heard of false confessions.

Defense: And do you think it's possible that under certain stressful conditions, a person might be willing to confess to someone that they didn't do?

Officer Stevens: They might, yes.

Defense: Officer Stevens, my client is claiming that the time he was picked up in the morning, the way he was questioned, and the length of his interrogation all contributed to him feeling pressured to confess to the crime, even though he is innocent. Is it possible that my client felt pressured to confess to a crime that he did not commit?

Officer Stevens: It's possible, but I don't personally believe that the suspect was pressured to confess.

Defense: Thank you Officer Stevens, I have no more questions for you.

END OF TESTIMONY

Closing Arguments

Defense:

Ladies and Gentlemen of the jury, the prosecution believes that they have proven beyond a reasonable doubt that my client committed the crime in question. While I understand that the eyewitness account, blood test, and confession all could point to my client, in no way has the prosecution proven anything beyond a reasonable doubt. The eyewitness only saw the criminal for a short time, in the dark, and then had to wait 2 days before making an identification. By that time, people start to lose details of the crime to the point that the eyewitness' ID of my client is suspect. Similarly, the blood test results merely provide circumstantial evidence that does nothing to prove the case against my client.

Finally, with respect to the confession, Officer Stevens admitted in his testimony that under stresses like those which my client was subjected to, a person might falsely confess. While it seems innocent to those of us who haven't been falsely accused of a crime, the early morning hour that my client was arrested, the manner in which the police conducted the interrogation, and the number of hours my client was interrogated for all add up to a stressful setting where any of us might falsely confess to a crime. The pressure that was put on my client made the confession setting coercive and caused him to involuntarily confess to a crime that he did not commit. I repeat, my client was pressured to confess to a crime that he did not commit.

Prosecution:

The defense's case centers on making it seem as though all of the evidence just happens to accidentally point to the defendant. I hope these arguments are as unconvincing to you as they are to me. The reality of the situation is that the defendant was arrested for his aggravated assault on the victim, and all of the evidence I have presented points to his guilt. James Smith told the police that he committed the crime. Can you, the jury, really believe that because the interrogation setting was stressful, Mr. Smith falsely confessed? I certainly don't.

Once you have finished reading the trial transcript, please turn to the next page for questions about the case. Please **do not return to the trial transcript** once you have turned the page.

Please consider the entirety of the information presented to you and answer the following questions as if you were a member of the jury that is assigned to this case. Be sure to carefully read each instruction for direction on how to answer each question.

Please mark the box that represents your answer for each question.

How many officers interrogated the suspect in this case?

☐1 ☐2 ☐3 ☐4

At roughly what time did the **crime occur**?

☐9:00 am ☐12:00 pm ☐3:30 pm ☐9:45 pm ☐1:00 am

How many hours did the interrogation of the suspect last?

☐1/2 hour ☐1 hour ☐6 hours ☐12 hours ☐16 hours

Does the defendant have the same blood type as the victim?

☐Yes ☐No ☐Unknown

At what time was the defendant picked up by the police for questioning?

☐9:00 am ☐12:00 pm ☐3:30 pm ☐9:45 pm ☐1:00 am

Please answer the following questions using a scale of 1-7, where **1** means **very weak against the defendant** and **7** means **very strong against the defendant**.

How strong do you as a juror view the *eyewitness testimony* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

How strong do you as a juror view the *blood evidence* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

How strong do you as a juror view the *confession* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

How strong do you as a juror view the *entire case* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

Please answer the following questions using a scale of 1-7, where **1** means **not at all likely** and **7** means **very likely**.

How likely is it that the suspect's confession was **false**?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

How likely is it that the suspect **voluntarily** confessed to the crime?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

How likely is it that the suspect **was pressured** into confessing to the crime?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

How likely is it that **anyone** would confess to a crime they did not commit?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

How likely would **you** be to confess to a crime you did not commit?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

As a juror, do you find the defendant not guilty or guilty?

☐ Not Guilty
☐ Guilty

On a scale of 1-7, where **1** indicates that you are **not at all sure of your verdict** and **7** indicates that you are **completely sure of your verdict**, how sure are you about the verdict that you chose?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all sure — Completely Sure

Please read each of the following items carefully and choose the number 1, 2, 3, 4 or 5 which best represents your own beliefs.

1. *Strongly agree*
2. *Somewhat agree*
3. *Agree & disagree equally*
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 only if 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 guilty or innocence, they are just in the 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 file against insurance companies are phony.
___ 15. The defendant is often a victim of his own bad reputation.
___ 16. If a grand jury recommends that a person be brought to trial, then that person 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 evidence—but not all of it—suggests that the defendant committed the crime, then the jury should vote *not guilty*.
___ 21. If someone commits a victimless crime like gambling or possession of marijuana, he should not be convicted.
___ 22. Some laws are made to be broken.

The following questions are for **demographic purposes only**. Please mark the box that best represents you. If you do not wish to answer a question, leave that question blank.

1. How old are you?
   _____ years old

2. What is your gender?
   ☐Male ☐Female

3. What is your race/ethnicity?
   ☐African American ☐Asian ☐Caucasian
   ☐Hispanic ☐Other, please indicate _____

4. How much school have you completed? If you are still in school, what is your year in school?
   ☐ Some high school
   ☐ Completed high school
   ☐ Some college courses
   ☐ 2-year College graduate
   ☐ 4-year College graduate
   ☐ Some graduate school
   ☐ Graduate degree

   ☐Freshman ☐Sophomore ☐Junior ☐Senior ☐Other, _____

5. Have you ever served as a juror in a trial?
   ☐Yes ☐No

THANK YOU FOR YOUR PARTICIPATION.

PLEASE REMOVE YOUR CONSENT FORM AND RETURN THE COMPLETED SURVEY.

Appendix B – In Class Survey Instructions

I am conducting a research study on legal decision-making. If you are interested, your participation includes reading an informed consent form, reading a description of a legal case, and answering questions about the case and about yourself. I estimate that participation will take no more than fifteen minutes. However, you must be 18 years or older to participate.

Participation is completely voluntary and anonymous. If you decide to participate, please do not put your name or any other identifiers on the paper. Participation in this study is unlikely to pose a risk to you and is also unlikely to directly benefit you. You will not receive any extra credit or other compensation for participating. If you decide that you do not wish to participate in this research, please return the blank survey form handed to you. Your class grade will not be affected in any way by your decision to participate or not. Thank you for your time.

Appendix C – Study 2 Control Scenario

The following passages summarize the criminal trial of the defendant James Smith. You will read the facts of the case, a summary of the evidence presented in the case, and the closing arguments given by both lawyers. You will not be able to return to the trial materials, so please read carefully.

Once you have finished reading all materials, you will be asked to **answer questions as if you were a juror**, including questions about the specific evidence presented and your final verdict.

Summary of the Evidence

The prosecution and the defense agreed on several facts about the crime. At roughly 9:45pm on the night of December 21, 2012, a young man named Michael Quail was attacked by an assailant trying to rob him. Though nothing was taken from him, Mr. Quail was hospitalized for several days with serious injuries caused by repeated strikes with a weapon. Mr. Quail was unable to identify the person who attacked him. The morning after the crime occurred, police arrested James Smith, who fit a general description of the suspect. Mr. Smith, who was identified by an eyewitness, was charged with a single count of aggravated assault

The statements above are considered facts that both sides agree on. The remainder of this summary deals with evidence that you, the juror, can interpret as you choose. The first piece of evidence introduced by the prosecution was the testimony of an eyewitness, the victim's neighbor. The eyewitness testified that, while in his home, he saw a man strike the victim on the head with an unknown object. The police arranged a lineup two days later, at which time the neighbor identified the defendant, Mr. Smith, as the perpetrator. The defense argued that this identification should not be believed, because it was too dark to accurately identify the suspect, and the neighbor testified that he only saw the

perpetrator for 15 seconds. The eyewitness admitted that it was possible that he could be wrong about the identification, but stated “I don’t think I am wrong.”

The prosecution’s second piece of evidence was a spot of blood found on the defendant’s shirt. A lab technician testified that the defendant’s blood type is A-positive, and the victim’s blood type is B-positive. The blood found on the defendant’s shirt was type B-positive, the same as the victim. However, the defense pointed out that 9% of the population--including the defendant’s wife and children--have the same blood type as the victim. The technician stated that the blood on the defendant could have come from the victim but also could have come from anyone with the blood type B+, including the defendant’s wife and children. The sample was too small to test for DNA.

The final piece of evidence presented by the prosecution was a confession given by the defendant. The defendant was picked up for questioning by the police and read his *Miranda* rights. After 1 hour of interrogation, he broke down and confessed to the police that he had committed the assault on the victim. The defense argued that the confession was false because the police pressured the defendant to confess. The defendant was questioned by a police interrogator for an hour. The defense stated that the defendant was not capable of handling the interrogation. The police interrogator said that he knew false confessions happened, but did not think that this confession was false.

Defense Closing Arguments

Ladies and gentlemen of the jury, the prosecution believes that they have proven beyond a reasonable doubt that my client committed the crime in question. While I understand that the eyewitness account, blood test, and confession all could point to my client, in no way has the prosecution proven anything *beyond a reasonable doubt*. The eyewitness only saw the criminal for a short time, in the dark, and then had to wait 2 days before making an identification. By that time, people start to lose details of the crime to the point that the identification of my client is not reliable and cannot be trusted. Similarly, the blood test results merely provide circumstantial evidence that does nothing to prove the case against my client.

Finally, with respect to the confession, under stresses like those which my client was subjected to, a person could falsely confess. Though you may be thinking that you would never confess to a crime you did not commit, you have likely never been arrested and accused of a crime you did not commit and then pressured by the police for an hour. My client was placed into this stressful environment, where police assumed he had committed this crime and questioned him until he told them what they wanted to hear. The pressure put on my client caused him to falsely confess to a crime that he did not commit. I repeat, the police pressured my client to falsely confess to a crime that he did not commit. After considering all of the evidence, I ask you to return a verdict of not guilty.

Prosecution Closing Arguments:

Throughout the course of this trial, I have proved beyond a reasonable doubt that the defendant, James Smith, committed the terrible assault on the victim. The defense argues as though all of the evidence just happens to accidentally point to the defendant. I hope these arguments are as unconvincing to you as they are to me. The reality of the situation is that the defendant was arrested and charged

with assaulting the victim because he met the description of an eyewitness. The eyewitness then picked the defendant out of a lineup. The police found blood on the defendant which was not his own, and the lab results stated that the blood could have come from the victim. After questioning, the defendant confessed to committing the crime. James Smith told the police that he committed the crime. Can you, the jury, really believe that Mr. Smith falsely confessed? I certainly don't. All of the evidence points to the defendant having committed this crime beyond any reasonable doubt.

Relevant Statute

According to State Penal Law S120.10, a person is guilty of assault in the first degree when:

> With intent to cause serious physical injury to another person, he causes such injury to such person or to a third person by means of a weapon or a dangerous instrument.

END OF THE TRIAL SUMMARY.

Thank you for your participation so far. Now, you will be asked a series of questions about the case and about yourself.

The following pages contain several questions about the case, including your opinions about the evidence presented to you and your final verdict. Please consider your responses carefully **as if you were a member of the jury** assigned to this case.

How many officers interrogated the suspect in this case?

☐1 ☐2 ☐3 ☐4 ☐5

How many hours did the interrogation of the suspect last?

☐1/2 hour ☐1 hour ☐6 hours ☐12 hours ☐24 hours

What is the defendant's race/ethnicity?

☐African American ☐Asian ☐Caucasian
☐Hispanic ☐Do not know

How old is the defendant?

☐Under 18 ☐18-29 ☐30-44
☐45-59 ☐60 or older ☐Do not know

Please answer the following questions using a scale of 1-7, where **1** means **very weak <u>against the defendant</u>** and **7** means **very strong <u>against the defendant</u>**.

How strong do you as a juror view the *<u>eyewitness testimony</u>* that was presented?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Very Very
Weak Strong

How strong do you as a juror view the *<u>blood evidence</u>* that was presented?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Very Very
Weak Strong

How strong do you as a juror view the *<u>confession</u>* that was presented?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Very Very
Weak Strong

How strong do you as a juror view the *<u>entire case</u>* that was presented?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Very Very
Weak Strong

Please answer the following questions using a scale of 1-7, where **1** means **not at all likely** and **7** means **very likely**.

How likely is it that the suspect's confession was **false**?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

How likely is it that the suspect **voluntarily** confessed to the crime?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7
Not at all Likely — Very Likely

As a juror, do you find the defendant not guilty or guilty of committing aggravated assault in the 1st degree?

☐ Not Guilty
☐ Guilty

On a scale of 1-10, where **1** indicates that you are **not at all sure of your verdict** and 10 indicates that you are **completely sure of your verdict**, how sure are you about the verdict that you chose?

☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 ☐8 ☐9 ☐10
Not at all sure — Completely Sure

The following questions are not related to the trial summary. Please mark the box that best represents your choice. If you do not wish to answer a question, leave that question blank.

What is your race/ethnicity?

☐African American ☐Asian ☐Caucasian
☐Hispanic ☐Other, please indicate _____

Have you ever been called to jury duty?

☐Yes, and I served on a jury
☐Yes, but never served on a jury
☐No

Generally, the police make an arrest only when they are sure about who committed the crime.

☐Strongly agree
☐Somewhat agree
☐Agree and disagree equally
☐Somewhat disagree
☐Strongly disagree

Thank you for your participation. It is greatly appreciated.

Appendix D – Study 3 Murder Scenario

The following passages summarize the criminal trial of the defendant James Smith. You will read:

- Facts about the crime
- Summary of the evidence presented in the case
- Closing arguments given by both lawyers.

You will not be able to return to the trial materials, so please read carefully. Once you have finished reading all materials, you will be asked to answer questions as if you were a juror in the case, including questions about the specific evidence presented and your final verdict.

Facts about the crime

The prosecution and the defense agreed on the following facts about the crime:

- At roughly 9:45pm on the night of December 21, 2013, a young man named Michael Quail was approached by an assailant.
- The assailant demanded Mr. Quail hand over his wallet. When Mr. Quail did not comply, the assailant pulled out a gun and threatened to kill Mr. Quail. The assailant then shot Mr. Quail twice in the chest. Mr. Quail was knocked to the ground and lay motionless. After shooting Mr. Quail, the assailant fled the scene. Mr. Quail ultimately died of his injuries.
- An eyewitness, Mr. Quail's neighbor, heard the assailant demand Mr. Quail's wallet and threatened to kill him, and saw the shooting.
- Based on a general description of the suspect provided by the eyewitness, police arrested James Smith the next morning, a **16 year old (22 year old) male** who was later picked out of a lineup by the eyewitness. Mr. Smith was charged with a single count of Murder in the First Degree.

The statements above are considered facts that both sides agree on. The remainder of this summary deals with evidence that you, the juror, can interpret as you choose.

Summary of the Evidence

Eyewitness for the Prosecution

- The victim's neighbor testified that while in his home, he saw a young man approach his neighbor, Michael Quail.
- From his window, the neighbor heard the young man say “I’m going to shoot you” when Mr. Quail didn’t hand over his wallet
- The perpetrator shot Mr. Quail twice in the chest with a handgun, knocking the victim to the ground
- The perpetrator then ran away
- In the lineup, which occurred two days after the crime, the neighbor identified the defendant, James Smith, as the perpetrator

On cross-examination the defense raised the following points:

- It was too dark out to accurately identify the suspect
- The neighbor claimed he only saw the perpetrator for 15 seconds
- The eyewitness admitted it was possible he was wrong about the identification, but stated "I don't think I am wrong"

Blood Evidence presented by the Prosecution
A state lab technician tested blood found on the defendant's shirt, and testified that:

- The results of a blood test showed that defendant's blood type is A-positive
- The victim's blood type is B-positive
- The blood found on the defendant's shirt was B-positive, same as the victim’s

On cross-examination the defense raised the following points:

- 9% of the population, including the defendant’s family, have the same blood type as the victim
- The lab technician admitted that the blood on the defendant's clothing could have come from anyone with B-positive blood, including the defendant's family
- The testing could not possibly determine when the blood got onto the shirt, so the technician could not say whether the blood stain was recent
- The sample was too small to test for DNA

Confession presented by the Prosecution
The police interrogator testified about a confession given to him by the defendant:

- The defendant was picked up for questioning by police and read his Miranda rights
- The interrogator questioned the defendant about the attack on the victim
- After **1 hour (16 hours)** of interrogation, the defendant broke down and confessed that he committed the crime

On cross-examination the defense raised the following points:

- The confession was false because the police pressured the defendant into confessing
- The defendant was questioned non-stop for **1 hour (16 hours)**
- The defendant immediately attempted to take back his confession on the grounds that it was false, but the police did not allow it
- The defendant said his confession was false because he told the police what they wanted to hear, not because he actually committed the crime
- The police interrogator said he knew false confessions could happen, but did not think this confession was false

Closing Arguments

Defense Closing Arguments:
Ladies and gentlemen of the jury, the prosecution believes that they have proven beyond a reasonable doubt that my client, James Smith, committed Murder in the First Degree. While I understand that the eyewitness account, blood evidence, and confession all *could* point to my client, in no way has the prosecution proven anything beyond a reasonable doubt. The eyewitness only saw the criminal for a short time, in the dark, and then had to wait 2 days before making an identification. By that time, people start to lose details of the crime to the point that the identification of my client is not reliable and cannot be trusted. Similarly, the blood test results merely provide circumstantial evidence that does nothing to prove the case against my client.

Finally, with respect to the confession, under stresses like those which my client was subjected to, a person could falsely confess. Though you may be thinking that you would never confess to a crime you did not commit, you have likely never been arrested and accused of a crime you did not commit and then interrogated non-stop for **1 hour (16 hours)**. My client, only **16 (22)** years old, was placed in this stressful environment, where police assumed he had committed this crime, and questioned him until he told them what they wanted to hear. The pressure put on my client caused him to falsely confess to a crime that he did not commit. I repeat, the police pressured my client to falsely confess to a crime that he did not commit. After considering all of the evidence, I ask you to return a verdict of not guilty.

Prosecution Closing Arguments:
In order to prove Murder in the First Degree, the prosecution has to prove beyond a

reasonable doubt that the defendant intended to cause the death of the victim, and that the defendant attempted to commit another crime during the murder. It is clear that the perpetrator intended to cause Mr. Quail's death since he threatened to shoot him and then shot him in the chest at point-blank range, twice. If you aren't intending to kill someone, you don't shoot them twice in the chest at point-blank range. Before shooting the victim, the perpetrator demanded that the victim hand over his wallet. This constitutes an attempt to commit a robbery. It is clear that a murder took place and that the perpetrator attempted to commit a robbery, so your only question as a juror is to determine whether James Smith committed these crimes.

The defense argues as though all of the evidence just happens to accidentally point to the defendant. I hope these arguments are as unconvincing to you as they are to me. The reality of the situation is that the defendant was arrested because he fit the description of an eyewitness. The eyewitness then picked the defendant out of a lineup. Testing of the blood evidence confirms that the sample could be from the defendant. After questioning, the defendant confessed to committing the crime. James Smith told the police that he committed this awful crime. Can you, the jury, really believe that Mr. Smith falsely confessed? I certainly do not. Throughout the course of this trial, it has been proven beyond a reasonable doubt that the defendant, James Smith, committed Murder in the First Degree.

Relevant Statute

According to State Penal Law S125.25, a person is guilty of Murder in the First Degree when:

With intent to cause the death of another person, he causes the death of such person; AND
The victim was killed while the defendant was in the course of committing or attempting to commit a robbery, burglary, kidnapping, or rape.

END OF THE TRIAL SUMMARY.

Thank you for your participation so far. Now, you will be asked a series of questions about the case. You will not be allowed to return to the case summary.

The following pages contain several questions about the case, including your opinions about the evidence presented to you and your final verdict. Please consider your responses carefully as if you were a member of the jury assigned to this case.

1. How old is the defendant?
16, 18, 22, 30, 45, Do Not Know

2. What crime is the defendant being charged with?
Assault in the Second Degree
Assault in the First Degree
Murder in the First Degree
Menacing in the Third Degree
Robbery in the Second Degree
Do Not Know

3. How many hours did the interrogation of the suspect last?
½ hour, 1 hour, 6 hours, 16 hours, 24 hours, Do Not Know

Please answer the following questions about the evidence you read using the provided scale. "Very weak" means that you find the evidence to be very weak evidence of the defendant's GUILT, and "Very strong" means that you find the evidence to be very strong evidence of the defendant's GUILT.

4. How strongly do you rate the following?

How strong do you as a juror view the *eyewitness testimony* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

How strong do you as a juror view the *blood evidence* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

How strong do you as a juror view the *confession* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

How strong do you as a juror view the *entire case* that was presented?

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Weak						Very Strong

Please answer the following questions using the provided scale, which ranges from very unlikely to very likely.

Please answer how likely you think the following statements are

The eyewitness identification was reliable

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Unlikely						Very Likely

The blood test results indicate the defendant committed the crime

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Unlikely						Very Likely

The suspect's confession was false

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Unlikely						Very Likely

The suspect voluntarily confessed to the crime

☐1	☐2	☐3	☐4	☐5	☐6	☐7
Very Unlikely						Very Likely

6. As a juror, do you find the defendant Not Guilty or Guilty of committing Murder in the First Degree?
Not Guilty
Guilty

Please answer the next question on the provided scale which ranges from Not at all sure of your verdict to Completely sure of your verdict.

7. On a scale of 1-10, where **1** indicates that you are **not at all sure of your verdict** and 10 indicates that you are **completely sure of your verdict**, how sure are you about the verdict that you chose?

☐1	☐2	☐3	☐4	☐5	☐6	☐7	☐8	☐9	☐10
Not at all sure									Completely Sure

The following questions are not related to the trial summary. Please mark the box that best represents your choice. If you do not wish to answer, leave the question blank.

Generally, to be eligible to serve on a jury an individual must:

- be a U.S. citizen
- be at least 18 years old
- be able to fill out forms and understand instructions in English
- never have been convicted of a felony

8. To the best of your knowledge, are you eligible to serve on a jury?
No
Yes

9. Which race/ethnicity best describes you? (Please choose only one.)
American Indian or Alaskan Native
Asian/Pacific Islander
Black or African American
Hispanic American
White/Caucasian
Other (please specify)

Thank you for your participation, it is greatly appreciated!