January 2019

Preventing Internet-Based Juror Misconduct: Investigating The Efficacy Of Prohibitive Jury Instructions

Emily Marie Carstens Namie

PREVENTING INTERNET-BASED JUROR MISCONDUCT: INVESTIGATING THE EFFICACY OF PROHIBITIVE JURY INSTRUCTIONS

By

Emily Marie Carstens Namie

Bachelor of Arts, Washington State University, 2012
Master of Science, Montana State University, 2015

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

December
2019

This dissertation, submitted by Emily M. Carstens Namie in partial fulfilment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

_____
Dr. Andre Kehn, Chairperson

_____
Dr. Joelle Ruthig, Committee Member

_____
Dr. Cheryl Terrance, Committee Member

_____
Dr. Heather Terrell, Committee Member

_____
Dr. Robert Stupnisky, Member-At-Large

This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

_____
Dr. Chris Nelson
Dean of the School of Graduate Studies

_____
Date

PERMISSION

Title Preventing Internet-based Juror Misconduct: Investigating the Efficacy of Prohibitive Jury Instructions

Department Psychology

Degree Doctor of Philosophy

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in his absence, by the Chairperson of the department or the dean of the School of Graduate Studies. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Emily M. Carstens Namie
October 3, 2019

TABLE OF CONTENTS

LIST OF FIGURES

Figure Page

LIST OF TABLES

ACKNOWLEDGEMENTS

I would like to express my most sincere gratitude to my advisor, Dr. Andre Kehn who provided invaluable guidance, support, encouragement, and wisdom that helped me successfully complete this dissertation and navigate the doctoral process. I would also like to thank my dissertation committee: Dr. Joelle Ruthig, Dr. Cheryl Terrence, Dr. Heather Terrell, and Dr. Robert Stupnisky. Your insights and feedback helped me tremendously and was instrumental in the successful completion of my dissertation. I would also like to thank the numerous research assistants for all of their hard work without whom I could not have completed my dissertation study. I would also like to express my appreciation and gratitude to my family whose support and encouragement helped keep me motivated. Last I would like to thank my husband, Shane Namie for his assistance, advice, reassurance and confidence in me when I doubted myself.

To my mother Cheryl.
Thank you for teaching me resilience, fortitude and to always pursue my dreams.
I could not have done this without your love, support and reassurance.

To my children, Nicole, Ryan, and Matthew,
To my grandchildren Owen, Brookley, and Robbie,
To my nephew Cyprian.
You can accomplish anything you set your mind to.
Pursue your dreams and goals relentlessly.

ABSTRACT

To prevent the biasing influence of information obtained outside of the courtroom courts often issue instructions to jurors that limit or prohibit certain activities and the use of information during the trial and when making verdict decisions. (i.e., prohibitive instructions). However, research indicates that mock jurors tend to ignore such instructions. Additionally, advances in mobile technology give today's jurors easier access to potentially biasing information obtained through the internet and digital communication (e.g., social media, blogs, email, and texting). This raises the question not yet addressed by extant research, whether jurors access this information during a case, even when judges issue instructions prohibiting such activities. To investigate this question 208 mock jurors participated in a two-stage mock jury trial. They viewed and listened to narrated transcripts from a real murder case and deliberated as a jury. Mock jurors were given one of three judicial instructions that either prohibited internet-based juror misconduct (IBJM) with reasons and consequences (strong), only prohibited IBJM (weak), or did not mention IBJM (control). The results show that instructions currently recommended in Federal courts (weak) did not prevent IBJM more effectively than those without the admonishment. However, significantly lower rates of IBJM were found among mock jurors administered the strong instructions than the weak or control instructions. Last, the Juror Internet Research Scale (JIRS) did not identify or predict non-compliant mock jurors who engaged in IBJM. Implications of these findings for instruction literature and theory are discussed as well as potential impacts on the court system.

CHAPTER I

INTRODUCTION

Ensuring defendants' 6th Amendment right to an impartial jury is becoming increasingly more challenging in recent years. Advances in computer and mobile technology has made it easier and faster for jurors to engage in internet-based misconduct, (i.e., communicate and conduct research about the case on social media and the internet) exposing them to potentially biasing information (Morrison, 2011; St. Eve, Burns, & Zuckerman, 2014; Zimmerman, 2013). One of the ways courts attempt to reduce juror bias is by issuing jury instructions that prohibit these behaviors, although the efficacy of jury instructions is unclear (Devine, Clayton, Dunford, Seying, & Pryce, 2001; Lieberman & Arndt, 2000; Posner, 2016; St. Eve et al., 2014; St. Eve & Zuckerman, 2012). Field surveys of jurors found that 89% of respondents self-reported compliance with judge's instructions to refrain from communicating on social media (St. Eve et al., 2012, 2014). Conversely, laboratory research shows that limiting instructions are not always effective and can have opposite effects with jurors engaging in prohibited behavior more often (Devine et al., 2001; Lieberman & Arndt, 2000). However, laboratory studies have not yet investigated the effectiveness of jury instructions that explicitly prohibit social media communication and internet research (i.e., internet-based juror misconduct; IBJM).

Another promising means of reducing potential IBJM would be to identify and dismiss those jurors most likely to ignore prohibitive jury instructions prior to the trial (i.e., during voir dire – pretrial questioning and selection of potential jurors). Knutson, Greene, and Durham (2016) developed the Juror Internet Research Scale (JIRS), a self-report measure intended to

predict which individuals will not comply with instructions forbidding internet research. While the JIRS is promising, its predictive validity is yet to be established. These facts illustrate the importance of investigating if prohibitive instructions and the JIRS can help to ensure an impartial jury.

The proposed study aims to 1) test the efficacy of instructions prohibiting social media communication and internet research, and 2) determine if the JIRS (Knutson et al., 2016) can predict compliance with prohibitive instructions.

CHAPTER II

LITERATURE REVIEW

Review of Legal Literature and Cases

Jury Instructions and Technology Use During Trials

Communicating via social media sites and searching for information on the Internet are common practices. According to a recent survey, people spend approximately six (6) hours a day online; with 28% of those hours spent on social media such as Facebook, Instagram, LinkedIn, and 13% of the time micro-blogging on sites like Twitter (Mander, 2015). Additionally, these numbers have increased from 1.7 hours a day in 2014 (Mander, 2015) to 1.8 in 2015 and almost 2 hours per day (1.96 hours) in 2016 (Mander, 2016). A more recent study conducted by the Pew Research Center revealed that 77% of Americans go online each day and 26% report that they go online "almost constantly" (Perrin & Jiang, 2018). This number is even higher among younger Americans, with 39% of 18 – 29 year olds, and 36% of 30 – 49 year olds reporting that they are "almost constantly" online (Perrin & Jiang, 2018). Furthermore, those who have Internet access through their mobile devices (i.e., iPhone, smartphones, tablets) are online more. Thirty-one (31%) of mobile device users (i.e., individuals who access the Internet with mobile devices), but only 5% of non-mobile device users (i.e., individuals who use other means to access the internet) reported going online almost constantly (Perrin & Jiang, 2018). These facts demonstrate the pervasiveness of technology, the Internet, and *going online* in American culture.

Professionals and scholars within the legal system recognize this growing trend and have expressed justifiable concerns about the influence of internet-based misconduct on juror

decisions (Aaronson & Patterson, 2013; Artigliere, 2010; Morrison, 2011; Posner, 2016; Simpler, 2012; St. Eve et al., 2012, 2014; Zimmerman, 2013). A primary concern is that social media communication and online research can have a biasing effect by making potentially irrelevant or inaccurate information available to an individual juror that is not known or available to others involved in the case (Morrison, 2011; Posner, 2016; Simpler, 2012). In turn, this prevents validation and cross-examination of the information (i.e., evidence) by court, which violates the Sixth Amendment rules of evidence and due process. Another concern is that if jurors leak information about a case on social media it could reduce public faith in the justice system. In turn, detrimentally affecting the parties involved in the case by increasing the risk of mistrials or conviction of innocent persons (Simpler, 2012; Zimmerman, 2013).

Financial consequences of jurors communicating and seeking information online are yet another concern. When it is discovered that a juror commits IBJM the court is obliged to investigate and determine whether or not the actions or information gained has biased the juror and the jury. If the court determines that the juror's or jury's impartiality has been compromised a mistrial is called for and a new trial is required. This is an addition time and financial expense on the courts and taxpayers thus impeding defendants' Sixth Amendment right to a speedy trial by an impartial jury (Aaronson & Patterson, 2013). According to a 2017 study it costs approximately $25,800 to $51,700 (adjusted for 2019 dollars; Inflation Rate between 2010-2019, 2019) to prosecute a homicide (Hunt, Anderson, & Saunders, 2017) and it could cost even more for high profile cases. For example, in the first-degree murder trial of Victor Diaz a juror, Phillip Elliot, conducted online research and communicated on social media with another juror. Elliot was subsequently found guilty of contempt of court and sentenced to serve eight days in jail. A mistrial was declared thus the guilty verdict was vacated and a new trial ordered. During her

reprimand of Elliot in court, Justice Marx estimated that taxpayers had already paid hundreds of thousands of dollars to prosecute Diaz whose conviction was put in jeopardy by his (Elliot's) misconduct (Freeman, 2016). Arguably, taxpayers ended up paying tens if not hundreds of thousands of dollars more for the new trial based on the cost of the original trial.

Internet-Based Juror Misconduct and Potential Remedies

Several court cases have been impacted by jurors communicating on social media or conducting internet research. An investigation by Reuters Legal found that between 1999 and 2009 jurors' internet-based misconduct lead to the challenging of 90 verdicts nationwide; resulting in new trials or overturned verdicts in 28 criminal and civil trials (Grow, 2010). To further verify that internet-based misconduct among jurors is not just anecdotal, Hoffmeister (2012) conducted a survey of federal judges, prosecuting attorneys, and public defenders. The survey asked about jurors conducting internet research as well as recommendations for remedies and reforms. About 10% of the respondents reported personal knowledge of instances of internet-based juror misconduct showing it is a problem experienced in some federal courts.

Sequestration and monitoring remedies. Historically the courts have attempted to prevent juror bias in high profile cases by sequestering the jury. Sequestration involves keeping jurors away from the biasing influence of the media by requiring them to stay in court provided accommodations, away from family, friends and the media, for the duration of the trial. Sequestration is expensive, requiring the court to pay for food and lodging for the jurors in addition to paying their daily compensation, therefore it is usually reserved for high-profile cases. Sequestering the jury to prevent jurors from committing internet-based juror misconduct would require the sequestration of all juries in all trials which would greatly increase the cost of prosecuting jury trials. Furthermore, sequestration of the jury often increases the length of a trial

putting the defendants' rights to a speedy trial in jeopardy. In addition, it is likely that total sequestration of jurors might increase individuals' attempts to avoid serving jury duty (Morrison, 2011). The high cost of sequestering the jury, the potential of a lengthy trial, as well as the inconvenience to the jurors of being sequestered make sequestration impractical for preventing internet-based juror misconduct (Morrison, 2011).

Another potential remedy is monitoring jurors' use of electronic devices and the Internet. On the surface monitoring jurors' online activities appears as a logical and effective solution, reducing or maybe even preventing internet-based juror misconduct. However, such monitoring infringes on jurors' fourth amendment right to privacy and unwarranted searches. The American Bar Association (ABA) addressed this issue ruling that attorneys can view jurors' social media activity but can only view electronic media (e.g., social media, blogs, and websites) that are available to the general public. Attorneys cannot request access to jurors' private online presence meaning that attorneys cannot 'friend' or 'follow' jurors to gain access to their private profiles (ABA formal opinion, 2014). Even if such monitoring was allowed by the ABA it would likely be labor intensive and expensive which would likely limit its use.

Although most courts use various forms of sequestration and monitoring that are within the rules of the ABA such as restricting jurors' possession and/or use of electronic devices and searching social media during the trial and deliberations (Hoffmeister, 2015; Morrison, 2011), it is clearly not enough to prevent internet-based juror misconduct. Internet-based juror misconduct can occur for a multitude of reasons, both intentional and unintentional. Thus, different remedies are needed to address numerous reasons internet-based juror misconduct occurs. Hoffmeister's (2012) survey revealed three remedies supported by the participants from the court; 1) juror penalties, 2) improving judicial instructions, and 3) investigating jurors.

Juror penalties. While it is plausible that instances of juror misconduct occur unintentionally, due to a lack of understanding or misunderstanding the prohibitive instructions. Nonetheless, not all incidents are readily dismissed as misunderstandings. The jurors in Tennessee v. Smith (2013) were instructed that it would be improper to conduct online research or communicate with anyone about the case in person, on cell phones or via text, due to such activities being problematic. However, jurors were not explicitly prohibited from communicating on social media provided or given a detailed explanation why such actions are a problem. Despite the prohibitive instructions one juror contacted the State's medical expert witness via Facebook. The state medical expert informed the juror that the contact could lead to a mistrial and the juror indicated he already knew and understood the risk. Although the judge did not explicitly admonish the jury from communicating via social media or other electronic communication, this juror admitted knowing that such communication was forbidden and could lead to a mistrial. This type of juror misconduct is clearly intentional and in violation of the judge's instructions. This juror engaged in the misconduct knowing it was in violation of the court rules. To address these direct and purposeful misconduct some legal scholars and professionals (e.g., Aaronson & Patterson, 2013; Hoffmeister, 2012; Simpler, 2012) suggest that a potentially effective remedy would be implementing penalties on non-compliant jurors.

Respondents of Hoffmeister's (2012) survey and other legal scholars (Aaronson & Patterson, 2013; Simpler, 2012) support imposing penalties on jurors who engage in internet-based juror misconduct. Although not common, some courts have begun implementing this remedy. For instance, in United States v. Juror Number One (2011), despite a general admonishment against communicating with other jurors during a criminal trial, Juror Number One sent emails to fellow jurors about the case after being excused from service due to employer

issues. One of the jurors, Juror Number Eight, responded saying she agreed with Juror Number One and would forward the message to the rest of the jury. This action resulted in the dismissal of Juror Number Eight. Subsequently the court referred the matter to the US Eastern District Court of Pennsylvania who filed charges against Juror Number One, finding her guilty of contempt of court and issuing a $1,000 fine.

Even when admonishment of internet-based juror misconduct (IBJM) is specific, it still occurs. Courts in Palm Beach County, FL have also begun charging jurors who engage internet-based misconduct with contempt of court with potential penalties that include jail time. In 2010, Florida courts began using judicial instructions that specifically forbid internet communication and research. Yet, Alexander Sutton, a juror on an automobile negligence case, did not comply and faced up to six months in jail for making posts on Facebook that indicated he was not impartial (Musgrave, 2014). Though Sutton was escorted from the courtroom in handcuffs when charged with contempt, he was let go with a warning (Freeman, 2014). Philip Elliott, a juror on a high-profile murder trial, also faced jail time for conducting research online and sharing it with other jurors as well as communicating in private messages on Facebook with another juror (Freeman, 2016). Elliot was lectured by the judge at a two-hour hearing when he was convicted and sentenced to eight days in jail for contempt of court (Musgrave, 2016).

Though imposing penalties on jurors is favorable to some judges and attorneys (e.g., Aaronson & Patterson, 2013; Hoffmeister, 2012; Simpler, 2012), Morrison (2011) contends that such action could be more detrimental than helpful by increasing mistrust and resentment in jurors. Another drawback is the potential discouragement of people engaging in jury duty. Many individuals already have reservations about serving jury duty considering it takes time away from other aspects of their lives (i.e., work and family). Serving jury duty can also cost them

financially through the loss of wages or paying for day care (Bornstein & Greene, 2017; Diamond, 1993; King, 1993; Losh, Wasserman, & Wasserman, 2000). These drawbacks often influence such individuals to make efforts to avoid serving jury duty by failing to appear or petitioning the court to postpone or excuse/exempt service (Losh et al., 2000). Adding the threat of severe penalties for engaging activities that might habitual (i.e., researching and communicating online) could make it more difficult to find willing, unbiased jurors. Although there are good arguments for and against penalizing jurors for IBJM, such behavior is a violation of the law and is currently being penalized in some courts. Thus, it could be beneficial to inform jurors of the potential ramifications of engaging in IBJM if there can be a balance between penalties that are strong enough to deter the misconduct but not so strong so as to deter people from jury service.

Judicial instructions. One of the more utilized means of preventing juror misconduct is the use of limiting instructions that prohibit specific activities (Aaronson & Patterson, 2013; Artigliere, 2010; Posner, 2016; St. Eve et al., 2014; Simpler, 2012; Zimmerman, 2013). Instructions from the judge inform jurors about the rules of law and their responsibilities in interpreting and applying them. Instructions also inform jurors which evidence they can consider and restrict or prohibit specific behaviors. Therefore, it is important that jurors receive clear, understandable instruction. A lack of proper and clear instruction explicitly prohibiting online communication and research could contribute to increased instances of IBJM.

In some instances, jurors engaged in online communication and/or research when there was no specific prohibition of IBJM from the court. Instances of IBJM could be unintentional if jurors only received a general admonishment against communicating or researching about the case. Which could be the case in the appeal trial Chambers v. Georgia (2013). During

deliberations, a juror conducted internet research on Georgia law seeking the meaning of legal terms, subsequently sharing it with the other jurors. Shortly after rendering a guilty verdict the juror admitted to conducting research. She claimed the purpose of her research was to clearly understand the legal terms and share that information with fellow jurors. It was determined that part of the jury decided the case based upon the legal definition provided by juror instead of the one provided by the court. Although the juror claimed to have good intentions of rendering an appropriate verdict, the fact remains that she clearly violated the defendant's Sixth Amendment rights of due process. The court did not specify how the jury was instructed, hence, at the minimum the jury likely received a standard instruction prohibiting outside research, but not a specific admonishment of IBJM. It is possible the juror was unaware that her actions violated the defendant's rights. She may not have realized her research was in violation of standard instructions because of a lack of specific admonishment of internet research.

When IBJM occurs without a specific admonishment from the judge, penalizing jurors with the costs of a new trial or serving jail time might be considered excessive and counterproductive. A potentially more effective remedy would be to ensure that instructions to the jury include a clear and specific admonishment of IBJM and warn jurors of potential consequences. Courts have begun administering juror instructions specifically prohibiting jurors from engaging in IBJM (Simpler, 2012). However, the content and administration of such instructions varies across jurisdictions which can impact their effectiveness (Posner, 2016). Judges are not required to use any particular instructions. Some use instructions drafted by committees of judges and attorneys (e.g., pattern, standardized or model instructions) such as the proposed model jury instructions prepared in 2012 by the Judicial Conference Committee on Court Administration and Case Management (CACM) that include specific admonishment of

IBJM (see Appendix A for the CACM model instructions). Whereas other judges might write and use their own instructions that may or may not include specific prohibition of IBJM. Such discrepancies in content could increase the likelihood of the variability in the efficacy of instructions in preventing or reducing IBJM. Perhaps courtrooms which administer instructions that specifically prohibit online communication and research are more likely to have fewer instances of IBJM than those that do not. For example, in a sexual assault case, Vermont v. Abdi (2012), a juror conducted internet research about Somali culture and shared the information with fellow jurors. On appeal, the Supreme Court of Vermont ruled that the information obtained online had the capacity to prejudice the jurors' verdict and played a significant role in the trial. In the court's ruling, Justice Johnson noted that the IBJM might have been prevented if Vermont used revised instructions that included specific restrictions on internet-based research or social media use. Furthermore, to improve the effectiveness of instructions and prevent or reduce future instances of IBJM, Justice Johnson suggested the state of Vermont consider using revised instructions like those used by the state of Colorado that include specific admonishment of technology-based research and communication (Vermont v. Abdi, 2012).

Morrison (2011), Justice Posner (2016), and others (e.g., Aaronson & Patterson, 2013; Simpler, 2012; Zimmerman, 2013) advocate for early and repetitive instruction of jurors and recommend informing jurors of the reasons for the admonishment. For instance, they suggest informing jurors that internet research of the case can make jurors aware of information that other jurors, attorneys and the judge may not know or is irrelevant to the case thus inhibiting due process (Aaronson & Patterson, 2013; Morrison, 2011; Posner, 2016; Simpler, 2012; Zimmerman, 2013). Posner (2016) attests to the effectiveness of informing jurors of the reasons for the limitations from experience in his own courtroom. Yet, IBJM occurs even when

instructions are clear, given early and repeated often as in the capital murder and aggravated assault case of Dimas-Martinez v. Arkansas (2011). The Supreme Court reversed the conviction and death sentence of Dimas-Martinez and remanded the case for a new trial due to internet-based juror misconduct. At the beginning of the trial, the judge instructed the jury to never discuss the case with anyone, specifically admonishing the use of Twitter to communicate (i.e., tweet through a micro-blog) about the case. The judge also informed the jury of a prior case that was compromised as a reason for his instruction. In addition to the opening instructions, jurors were also given the prohibitive instructions at every break. Even with the early and repeated warnings against tweeting the court discovered that Juror 2 tweeted throughout the trial. The court questioned the juror, who admitted the indiscretion, informing him that such actions were in direct violation of the judge's instructions. Despite the personal warning the juror ignored the judge's instructions and continued to tweet, even during deliberation. This is a clear demonstration that IBJM can occur even when instructions include due process reasons for the instruction with early and frequent administration.

Juror comprehension of instructions. As illustrated, administering jury instructions early and often, with reasons for the admonishment of online communication and research does not always prevent IBJM. This points to yet another problem with jury instructions, they are difficult for jurors to understand (Bartels & Lee, 2013; Lieberman & Sales, 1997; Morrison, 2011; Posner, 2016). Without a clear comprehension of instructions, it is difficult for jurors to comply (Baguley, McKimmie, & Masser, 2017; Lieberman & Sales, 1997). Therefore, it is conceivable that making instructions easier for jurors to comprehend might increase their efficacy in reducing IBJM. Posner (2016) notes that many judges use pattern instructions composed by committees of legal professionals who use complicated legal jargon instead of

plain language that is more easily understood by jurors. Empirical research supports Posner's critique of standardized instructions. Typically, mock jurors have trouble understanding key aspects and only comprehend 50% to 70% of the instructions given (Baguley, et al., 2017). Though Posner (2016) and others (e.g., Aaronson & Patterson, 2013; Bartels & Lee, 2013) advocate for more simple wording, that is not necessarily enough to increase jurors' understanding of the instructions. Research shows that merely simplifying the wording (i.e., linguistic complexity) of instructions does not always increase juror comprehension and compliance, instead simplifying conceptual complexity is necessary (Baguley et al., 2017).

Baguley and colleagues (2017) conducted a systematic review of 121 independent instructions from 75 studies on the influence of simplifying aspects of complexity on juror comprehension and application (i.e., compliance) of instructions. They coded the studies for linguistic complexity (i.e., simplification of sentence structure and use of familiar/common words to enhance readability), conceptual complexity (i.e., simplification of legal concepts and use of factual examples of legal concepts), amount of information (i.e., total amount of words in instruction), presentation format (i.e., providing jurors with written instructions with or after oral and/or decision-aids like pictorial flow charts or question-trial), and proportion of supplementary information (i.e., number of words used to convey information that is key to the principles of the instruction vs. non-key information). Then they measured how each aspect of complexity affects jurors' application of the instruction. Baguley and colleagues (2017) found that jurors applied the instructions more often (i.e., complied) when conceptual complexity was simplified, and the proportion of supplementary information was reduced, but not when linguistic complexity was simplified.

These results could explain why IBJM occurs despite adding specific admonishment of online communication and research, reasons for the admonishment, and the early and repetitive administration of instructions. Furthermore, these results might explain Posner's (2016) personal experience of increased compliance with the use of his simply worded instruction. It could be that when the simplifying linguistic complexity of his instructions, Posner also simplified the conceptual complexity by transforming complex legal concepts into language and terms that are easier for jurors to understand. These results provide apparent evidence that jurors' comprehension and application of instructions can be increased by simplifying legal concepts and reducing supplemental, unnecessary, information; thus, improving the efficacy of instructions. Nonetheless, it is possible that no matter the quality and clarity of the instructions, or how they are administered, jurors will not be deterred from seeking information or communicating online. Perhaps another viable remedy for this type of misconduct would be identification and removal of potentially non-compliant jurors during voir dire.

Investigating jurors during voir dire. One of the potential remedies presented by Hoffmeister (2012) is to investigate jurors' online activities prior to the trial and monitor them throughout the trial. Though investigating jurors was a remedy widely supported by judges and attorneys who took the survey, it would require more time and resources to accomplish in addition to the potential issues of juror privacy. An easier and less expensive means of investigating jurors prior to trial would be through voir dire questioning. Voir dire is the preliminary questioning of jurors and witnesses by the judge or attorneys to identify whether individuals are suitable to serve on the jury. Jurors are often excused from jury service for various reasons including those who are likely to be biased or otherwise deemed unable to adequately fulfil their duties. Attorneys are beginning to use voir dire to identify those who may

be more likely to commit internet-based misconduct by questioning potential jurors about their social media and internet use (Simpler, 2012). However, if voir dire questioning is not systematic a type of selection bias could occur that dismisses jurors who are tech savvy or highly familiar with social networks, thereby putting the diversity of juries at risk (Bartels & Lee, 2013). Voir dire questioning of potential jurors may be a viable aid in reducing IBJM if conducted in a systematic, consistent and objective manner, especially if used in conjunction with limiting instructions. This would require a tool that accurately and reliably identifies people who are most likely to engage in IBJM.

Knutson, Greene, and Durham (2016) have taken the first steps toward the realization of such a tool, the Juror Internet Research Scale (JIRS). The JIRS is a self-report measure developed to predict individuals who are more likely to ignore instructions forbidding internet research (Knutson et al., 2016). Knutson and colleagues (2016) theorized that because jurors vary in their level of obligation to obey the law it is likely that this level of compliance with authority can predict who will violate judicial instructions that prohibit internet research. The scale was administered to college students and Amazon's Mechanical Turk participants in two studies establishing convergent validity and theoretical support with measures of self-control and perceived obligation to obey the law. The final JIRS consists of 10 items that appear to be a promising, valid, and reliable measure. However, the predictive validity of the JIRS scale has not yet been established.

Review of Empirical Literature: Efficacy of Instructions

Field Research of Juror Compliance with Instructions

Professionals and scholars in the legal system recognize that limiting instructions are sometimes ignored and actively seek ways to increase the effectiveness of instructions. In 2011

the Federal Judicial Committee (FJC) conducted a survey at the request of the Committee on Court Administration and Case Management (CACM) to investigate jurors' use of social media during trials and to identify effective means of reducing this behavior (Dunn, 2011). The FJC surveyed federal district judges finding that 94% used prohibitive instructions explicitly prohibiting social media use. Only 6% of judges reported known instances of jurors using social media during a trial and only 0.3% personally witnessed the misconduct, but whether these judges administered social media specific instructions was not reported (Dunn, 2011).

To evaluate the effectiveness of issuing instructions specifically prohibiting jurors from engaging in social media communication, two federal judges, St. Eve and Zimmerman (2012), conducted their own survey. The two judges issued CACM recommended model instructions that prohibit social media communication about the case. The CACM instructions were issued during opening and closing of trials in both federal criminal and civil courts as well as each time the court broke for the day on multiday trials. After each trial, jurors were sent a survey that asked two questions 1) whether he or she was tempted to engage in social media communication and 2) why he/she not engage in the prohibited behavior. Of the jurors who responded anonymously to the survey (N = 140), 92% reported no temptation and only 1% of jurors admitted being tempted to violate the judges' instructions reporting they ultimately refrained because of the admonishment.

St. Eve, Burns, and Zimmerman (2014) continued St. Eve and Zimmerman's (2012) survey of jurors, utilizing the same instructions, administration of the instructions and survey questions. The survey responses were combined and analyzed with those obtained by St. Eve and Zimmerman (2012) finding that 89% of the jurors that responded to the surveys (N = 583) reported they were not tempted to engage in social media communication. Eight percent (8%)

admitted they were tempted but did not violate the judges' admonishment, again citing the instructions as the primary reason for restraint. Based on these results the justices offered three recommendations for reducing IBJM: 1) use instructions that specifically prohibit the use of social media communication, 2) issue the instructions early (e.g., as part of the judge's opening instructions) and often (e.g., when the court breaks for the day and as a part of the judge's closing instructions before deliberation), and 3) ensure the content of instructions is effective by using broad enough language to include all potential social media and digital communications, including a meaningful explanation for the instruction, reminding jurors of their oath and its importance, and including the basics such as prohibition of conducting outside research.

Mock Juror Compliance with Jury Instructions

In contrast to the results found by St. Eve and colleagues (2012, 2014), empirical research shows that jury instructions are not always effective and can even have opposite effects with jurors engaging in prohibited behavior more often (Devine, Clayton, Dunford, Seying, & Pryce, 2001; Lieberman & Arndt, 2000). In their review of research investigating biasing effects of pretrial publicity and inadmissible evidence, Lieberman and Arndt (2000) examined the effectiveness and boundaries of remedies the court uses to reduce the impact of potentially biasing information, most relevant being limiting instructions and voir dire. They revealed that the literature converges on the finding that jurors are unable or unwilling to comply with judge's instructions admonishing the use of prohibited information. Although initial research found that juror instructions were effective, the methodologies were questionable with small sample sizes, no control conditions and potential demand characteristics making the results difficult to interpret (Lieberman & Arndt, 2000). Conversely, more recent research consistently illustrates that jurors were not able (or willing) to ignore biasing information when making verdict

decisions even when jury instructions were issued (Lieberman & Arndt, 2000). Lieberman and Arndt's (2000) examination of voir dire research repeatedly found that even though jurors claimed to be unbiased when questioned during voir dire, attorneys were not able to successfully identify those who were biased by the information. Due to the self-report nature of voir dire it is likely that jurors are unable (or unwilling) to acknowledge influential effects from biasing information.

A review of 45 years of jury decision-making research mirrors the findings of Lieberman and Arndt (2000) deeming limiting instructions ineffective. Devine, Clayton, Dunford, Seying, and Pryce (2001) completed a comprehensive review of research on jury decision-making published between 1955 and 1999, totaling 206 studies. An emergent theme strongly supported in the literature is that regardless of the law and the issuance of prohibitive instructions, jurors will not, or possibly cannot, ignore information they deem relevant to the case (Devine et al., 2001).

Kramer, Kerr, and Carroll (1990) provide further support that jurors take prohibited information into consideration when making verdict judgements despite instructions to ignore it. Participants engaged in a mock jury trial in which they were first exposed to pretrial information then were given either limiting instructions to disregard any pretrial information (instructed group) or standard closing instructions only (uninstructed group) before deliberating and rendering verdicts. The results revealed that verdicts were the same regardless of the instruction jurors received (Kramer et al., 1990). Furthermore, counter-intuitively, limiting instructions had an opposite effect on jurors' evaluation of the defendant, which was more negative in response to factual information but only when they were instructed to ignore any pretrial publicity. These

results clearly demonstrate that limiting instructions are ineffective and can potentially lead to even more biased views.

Selective compliance with instructions. Although research shows that jurors seem to ignore limiting instructions some research reveals that jurors do not entirely disregard the judge but selectively comply with limiting instructions. Fein, McCloskey, and Tomlinson (1997) examined whether jurors comply with instructions to disregard pretrial publicity if they are suspicious about the motives behind the release of the incriminating information. Despite the judge's instructions to ignore any inadmissible information when making verdict judgements, mock jurors who were exposed to incriminating but inadmissible information (incriminating condition) about the defendant were biased. Mock jurors in the incriminating condition reported significantly more guilty verdicts than those in the control condition who received no such information. Yet, jurors who were exposed to information that raised suspicions about the motives (suspicious condition) behind the introduction of the incriminating information were no more likely to render guilty verdicts than those in the control condition. Furthermore, they were less likely to render guilty verdicts than those in the incriminating information condition (Fein et al., 1997). These findings indicate that jurors comply with the judge's limiting instructions when they are given a compelling reason to do so, such as the information may be biased, false or misleading thus having the potential to bias the juror. These results support legal scholars' suggestions to administer instructions that not only instruct jurors to refrain from social media communication and internet research (i.e., internet-based misconduct) but also include reasons for the admonishment. Strong jury instructions (i.e. instructions with empirically supported reasons for the admonishment) should clearly inform jurors that compliance is essential because

information they obtain through internet-based misconduct could be false, inaccurate, misleading or outright biased, which could bias them and influence their verdict decisions.

Kassin and Sommers (1997) provide further empirical support for the use of strong instructions as a means of increasing the effectiveness of limiting instructions, finding that juror compliance was moderated by the reasoning behind the admonishment. Mock jurors selectively complied with instructions to disregard inadmissible evidence but only when it was deemed unreliable but not when it was inadmissible because of due process violations. Mock jurors who were given an instruction to disregard inadmissible information because it was unreliable chose to convict the defendant less often (24%) than those who were given a due process reason for the admonishment (55%), and those who were told the information was admissible (79%; Kassin & Sommers, 1997). These findings, coupled with those of Fein et al. (1997), provide strong evidence that limiting instructions can be more effective if jurors are informed that compliance protects against the influence of potentially biasing information thus ensuring a just outcome.

Limitations

The empirical literature appears to converge on the conclusion that overall, jurors tend to ignore judicial instructions, especially when the prohibited information or behavior is relevant to making a good decision. This seems to conflict with the results of St. Eve and colleagues' (2014) field research which found that 90% of jurors surveyed reported compliance with judge's limiting instructions. However, St. Eve and colleagues' (2014) findings would be in line with the results of selective compliance found by Fein and colleagues (1997), as well as Kassin and Sommers (1997), if the limiting instructions they used provided jurors with sufficient explanation for the instruction. Yet, St. Eve and colleagues (2014) used the Committee on Court Administration and Case Management (CACM) model social media instructions that only offer

jurors an explanation for the admonishment of social media communication in the post-trial instructions administered just before deliberation. Furthermore, the reasons given are very brief and limited, only informing jurors that internet-based misconduct could impede due process and the information is not vetted by the courts, so it may be inaccurate. Neither of these reasons are empirically shown to improve compliance with the instructions.

There are a few other possible explanations for the conflicting findings. To begin, St. Eve and colleagues' (2012, 2014) surveys were conducted in the field where the consequences of jurors' decisions are higher. Real jurors make decisions that impact the lives of others, in contrast to in the laboratory whereas the decisions of mock jurors are inconsequential. Second, there is a possibility that St. Eve and colleagues' (2012, 2014) findings are subject to response biases such as, non-response or social desirability. The survey was given to all jurors but participation in the survey was not required, leaving room for the possibility of non-response bias. Selection effects pose another potential problem. It is possible that only those jurors who complied with the instruction responded to the survey. Those who did not respond may not have wanted to admit to violating the judge's instructions because it is not socially desirable or may have legal consequences. A third possible reason St. Eve and colleagues' (2012, 2014) prohibitive instructions appear to be more effective than in empirical research is they were specific to social media communication, whereas empirical research has not yet examined the effectiveness of prohibitive instructions that specifically admonish internet-based misconduct.

Jury Deliberation, Social Influence, and Use of Confederates

An important component of a jury trial is the deliberation of the jurors in deciding the verdict of a case. During the jury deliberation phase, jurors are cloistered from other people while tasked with evaluating the evidence presented during the trial and reaching a verdict

decision. They are to converse only with other jurors about the case at the end of the trial and no one else besides the jurors are allowed in the jury room during deliberation (Diamond & Casper, 1992; Jury deliberation, 2008). The seclusion of the jury during deliberation is imperative with the purpose of ensuring that jurors are not unduly influenced by extraneous information and people. Jurors' verdict decisions need to be based only on the evidence presented in the courtroom that has been vetted by the court (Courselle, 2005; Hoffmeister, 2012; Morrison, 2011; Patterson v. Colorado, 1907; Sheppard v. Maxwell, 1966). Moreover, the isolation and privacy of the jury during deliberation allows for free debate and discussion of the case, without fear of judgement, condemnation, or persecution of others (Bartels & Lee, 2013; Clark v. United States, 1933; Courselle, 2005; Morrison, 2011).

Though efforts are made to ensure jurors are not subjected to potentially biasing influences when making verdict decisions, some aspects of the jury and deliberation itself can influence the final outcome, such as the size of the jury (e.g., Davis, Hulbert, Au, Chen, & Zarnoth, 1997; Horowitz, & Bordens, 2002), foreperson characteristics (e.g. Diamond & Casper, 1992; Foley & Pigott, 1997), and initial verdict preference (e.g., Tanford & Cox, 1988; Tanford & Penrod, 1986), to name a few (Devine et al, 2001). Jury decision-making research shows that six-person (vs. 12-person) juries are hung less often, recall less case information, have less accurate discussions about trial information, take less time to deliberate, award larger damages in civil cases and their verdicts are more variable (Bornstein & Greene, 2017; Davis et al., 1997; Devine et al., 2001; Horowitz, & Bordens, 2002; Saks & Marti, 1997). The characteristics of the foreperson is another aspect of deliberation that can impact the final verdict. Jury forepersons tends to be more confident, higher status, better educated, have jury duty experience, speak/participate more and are often more influential than other jurors (Diamond & Casper,

1992; Devine et al., 2001; Foley & Pigott, 1997). Lastly, jury decision-making research indicates that initial verdict preferences tend to predict final verdicts. More precisely, when the majority of jurors' initial (individual) preference favors a particular verdict (guilty/not guilty), the final (group) verdict matches most of the time (Devine et al., 2001; MacCoun, 1989; MacCoun & Kerr, 1989; Tanford & Penrod, 1986). However, this is only seen when a strong majority of at least two-thirds of jurors' initial verdict preferences are the same. If less than two-thirds of jurors vote to convict initially (i.e., more than one-third of the jurors dissent from the majority) the jury tends to split, are hung or vote to acquit (Devine et al., 2001; Tanford & Penrod, 1986), herein referred to as majority persuasion effects (Tanford & Cox, 1988). These majority persuasion effects are even more influential when the majority favors acquittal. When the jury's initial vote results in a split of 8 to 4 (or 4 to 2 in 6-person juries) for acquittal, the final verdict matches more often than the same initial vote ratio in favor of conviction (Devine et al., 2001; MacCoun, 1989; MacCoun & Kerr, 1989).

These aspects of deliberations have a highly influential factor in common, the impact of social influence. Social influence is the process in which a person's cognitions, opinions, attitudes, beliefs, behavior and judgements are changed by another individual or group (Asch, 1956; Cialdini & Griskevicius, 2010; Harkins & Williams, 2015; Tanford & Penrod, 1984). Social influence is often exacted through conformity in which individuals change their views to be more in-line with others in a group (e.g., Asch 1955; 1956), and through compliance in which they change at the request of another (e.g., Cialdini & Griskevicius, 2010). Early foundational research demonstrated conformity and group influence effects in the judgement of the length of lines (Asch's 1955; 1956). Each participant was grouped with five to six confederates, (e.g., individuals who are trained to pretend to be participants in a study and respond in a predisposed

manner) to judge the length of lines. One at a time, in the order seated, each confederate provided an incorrect answer ending with the participants who were the last to vocalize an answer. When all confederates provided an incorrect answer, the participants tended to go along with the judgment of the group over 63% of the time. Yet when one confederate in the group dissented participants only agreed with the group 25% of the time (Asch 1955). Thus, conformity was reduced by over half (25% vs 63%).

Asch's (1955, 1956) research demonstrates that people will conform to the judgement of a group majority, even when the majority is clearly incorrect and/or biased. However, these results also show that sometimes individuals will adhere to their own correct judgement in the face of an incorrect majority. It only took one single dissenter from the group to influence participants to report his/her accurate judgement of the line. Though often individuals tend to go with the majority, a single ally can provide enough support for them to resist being swayed by the rest of group.

Social influence and the use of confederates in research. As occurred in Asch's (1955, 1956) studies, social influence or more specifically conformity, is often utilized in psychological research by using confederates who are trained to act and respond in pre-specified ways, usually following a script. Confederates usually encourage a specific response or judgement from the participant though the exertion of pressures to conform to the judgement, opinion, and/or behaviors of the group, as demonstrated in Asch's (1955, 1956) studies. Confederates have been used in past research to elicit false memories (e.g., Herndon, Myers, Mitchell, Kehn, & Henry, 2014), false confessions (e.g., Kassin & Kiechel, 1996; Russano, Meissner, Narchet, & Kassin, 2005), and jury decision-making (e.g., Goodwin, 1978; Snortum, Klein, & Sherman, 1976) for example. Researchers used higher confederate to participant ratios to exert strong influence on

individuals to investigate conditions that contribute to the creation of false memories and false confessions (e.g., Herdon et al., 2014; Kassin & Kiechel, 1996; Russano et al., 2005). Likewise, they used lower ratios to exert weak influence to investigate the influence of a divergent minority on group decisions and dynamics (e.g., Goodwin, 1978; Kaplan & Atkins, 1982; Snortum et al., 1976).

Herndon, Myers, Mitchell, Kehn, and Henry (2014) used a 3:1 ratio to exert strong influence on research participants. In groups of four (three confederates and one participant) confederates falsely claimed to remember experiencing a painful and traumatic medical procedure in early childhood to investigate group influence on the individual memory of the participant. Of the participants exposed to group influence, 41% succumbed to the strong social influence and reported false memories of experiencing the medical procedure. Strong social influence effects are also found even when confederate to participant ratios are lower, 1:1 as seen in false confession research. Kassin and Kiechel (1996) used a 1:1 ratio to investigate whether participants will falsely confess to crashing a computer by hitting the ALT key when a confederate falsely claimed to witness the action. Faced with false evidence of guilt provided by the confederate, 69% of participants signed false confessions. Russano, Meissner, Narchet, & Kassin (2005) used confederates in a 1:1 ratio to incite participants to cheat in an experimental paradigm investigating true and false confessions. The confederate and participant were asked to solve a problem individually and in teams on indicated problems. When the researcher left the room, the confederate asked the participant for help on one of the individual problems. Though helping on the individual problems was a prohibited behavior and was considered cheating, an overwhelming 94% of the participants complied with the request for help.

Research on jury decision-making and group dynamics have used smaller confederate to participant ratios (thus exerting weak social influence) to examine the impact of persuasive, assertive, and aggressive jurors on group verdict decisions. Kaplan and Atkins (1982), investigated jury groups of 9-12 mock jurors. Half of the mock juries were composed of two biased confederates and 7 to 10 participants and the other half had no confederates. During deliberation, the confederates tried to persuade the other mock jurors to vote guilty. The persuasion was effective such that 56% of the participants in the mock juries with two confederates were in favor of a guilty verdict. In contrast, only 29% of participants in the control condition (i.e., jury groups that had no confederates) were in favor of a guilty verdict. These results show that even weak influence exerted in groups with a 2:7-10 confederate to participant ratio can persuade mock jurors to align their verdicts with a vocal minority.

Other research shows that a minority of one can also be persuasive. Snortum, Klein, and Sherman (1976) investigated the influence of a single assertive juror in 6- and 12-person juries (i.e., 1:5 vs. 1:11 confederate to participant ratio). One assertive confederate trained to argue forcefully for a guilty verdict during deliberation of an ambiguous case was inserted in each mock jury group with either 5 or 11 participants. In both, the 6- and 12-person juries, participants exposed to the assertive juror were more likely to vote for guilty than mock juries without the confederate. However, it was in the smaller groups that the confederate exerted the greatest influence, a larger proportion of the mock jurors rendered a final verdict of guilty in the 6-person juries (72%) than in the 12-person juries (45%).

Goodwin (1978) also used a 1:5 confederate to participant ratio to probe the influence of a single jury member by using an aggressive instead of a merely assertive juror (confederate). A confederate posing as a biased juror was trained to advocate for a guilty verdict in either an

aggressive or non-aggressive manner during mock jury deliberations. The biased confederate was most persuasive when acting aggressively. The mock jury voted guilty 75% of the time when the confederate acted aggressively but only 25% of the time when non-aggressive. These results demonstrate that, in addition to the confederate to participant ratio, the manner in which the confederate behaves also influences the voting behavior of other jury members. Taken together the results of research using confederates show that even a minority of one confederate can exert influence on other individuals to respond or behave in specific ways.

Social influence and conformity in jury deliberation. Jurors are subject to two specific types of social influences during deliberation. More precisely, jurors can face normative pressures to conform to the judgements of the majority, and informational influences to accept or believe information and arguments from others as truthful evidence about reality (MacCoun, 1989; Tanford & Cox, 1988; Tanford & Penrod, 1986). When normative and informational influences are exacted on jurors, their verdict decisions can be swayed in favor of or against the defendant (MacCoun, 1989; Tanford & Cox, 1988; Tanford & Penrod, 1986). This is potentially detrimental to the administration of justice (i.e., resulting in a wrongfully convicting an innocent or acquitting a guilty defendant) if the information purported by the majority or their opinions are prejudiced or biased (Kaplan & Atkins, 1982; Snortum et al, 1976; Tanford & Cox, 1988).

Jury decision-making research shows that pressure to conform to the group can be stronger than judicial instructions to disregard inadmissible evidence (Kaplan & Atkins, 1982; Tanford & Cox, 1988). Tanford and Cox (1988) conducted two civil mock jury trials in which the authors tested the influence of impeachment evidence (prior convictions and character evidence) on juror decisions as well as the effects of deliberation. Jurors were either exposed to impeachment evidence consisting prior conviction and character evidence or not. Those exposed

to the impeachment evidence and in the instruction condition were directed to only use the evidence to assess the defendant's credibility but not to assign blame or determine liability. However, in both studies, regardless of instruction condition, mock jurors given knowledge of the defendant's prior conviction and evidence of dishonesty rated the defendant as less credible and more likely to have a propensity for negligence. Though jurors correctly used the impeachment evidence to assess the defendant's character they also appeared to be unlawfully prejudiced by it, thus only partially complying with the judicial instructions. Additionally, the researchers found majority persuasion effects such that the majority of mock jurors' individual pre-deliberation and final verdict decisions matched. Furthermore, Tanford and Cox (1988) found that deliberation increased individual bias. Post-deliberation ratings of the defendant revealed that jurors made prejudicial propensity and character inferences after deliberation, indicating increased individual bias. These results demonstrate that although individual bias against the defendant increased deliberation, the influence of the majority proved to be stronger than individual biases.

In contrast, other research shows that sometimes a dissenting minority can sway the majority during deliberations. In some instances, normative and informational influences of the dissenting minority that occur during deliberation can reduce the influence of inadmissible evidence thus reduce bias but does not necessarily nullify majority persuasion effects (London & Nunez, 2000). In two mock jury trial experiments, participants read case summaries that either included incriminating information about the defendant (or no such information) which the judge ruled as either admissible, inadmissible. Next, jurors indicated pre-deliberation verdict preferences followed by jury deliberation and verdict decisions.

In both experiments, London and Nunez (2000) found that jurors who received the inadmissible instruction demonstrated less bias rendering fewer guilty verdicts (28% and 23%, respectively) than those in the admissible condition (100% and 98%) but more than those who were not exposed to the incriminating information (17% in both experiments). Furthermore, deliberation and an inadmissible instruction seemed to reduce initial bias. Guilty verdicts went from 60% and 55% at pre-deliberation to 28% and 23% at post-deliberation verdict. In contrast, the guilty verdicts (i.e., bias) of those in the admissible condition increased slightly going from 96% to 100% in experiment 1 and 94% to 96% in experiment 2. Ultimately, in the inadmissible conditions of both experiments jury opinions changed from a majority of jurors favoring a guilty verdict at initial individual vote to a majority favoring a not-guilty verdict after deliberation.

On the surface these results seem to conflict with the literature that demonstrates majority persuasion effects (e.g., Devine et al, 2001; MacCoun, 1989; Tanford & Cox, 1988; Tanford & Penrod, 1986), in that a majority of mock jurors favored a guilty verdict at pre-deliberation vote and a not-guilty verdict after deliberation. However, in both experiments, the actual pre-verdict guilty percentages provide support for majority persuasion effects. Jury decision-making research repeatedly reveals that a two-thirds majority (66.66%) is necessary for conformity pressures to predict final verdicts (Devine et al., 2001; Tanford & Penrod, 1986). The two-thirds (66.66%) threshold which was not achieved in either of London and Nunez's (2000) experiments (60% and 55% respectively). These results support the findings of Asch's conformity studies (1955, 1956) and jury decision-making research (Devine et al, 2001; Tanford & Penrod, 1986), that the more dissenters in a group, the more likely those who disagree will resist the pressure to conform. In juries, this often results in a split or hung jury and/or they vote to acquit.

Social influence and compliance. As the literature demonstrates, social influence can affect jury level decisions through conformity (e.g., Kaplan & Atkins, 1982; London & Nunez, 2000; Snortum et al, 1976; Tanford & Cox, 1988; Tanford & Penrod, 1986) but at the individual level, social influence is likely to manifest in the form of compliance (Cialdini & Griskevicius, 2010). Where conformity is influence of a group on an individual, compliance is the influence of individuals on an individual (Cialdini & Griskevicius, 2010). Therefore, though jurors (or mock jurors) are often faced with pressures to conform to the group majority during deliberations, they are also faced with pressures to comply with the requests of influential individuals throughout the entirety of the trial. Six principles influence individual compliance resulting in changes of behavior, judgements and decisions (Cialdini & Griskevicius, 2010), three of which are most likely to affect jurors' decisions to comply with judicial instructions; authority, liking, and social validation.

Judicial instructions are likely to exert pressure on jurors to comply through the principle of authority which is to obey or comply with the directives of an authority figure. When the judge is present and salient in the courtroom the likelihood of juror compliance with instructions is likely increased. However, when the judge is not present, such as during court breaks or deliberation, the absence of a salient authority might increase the probability of jurors succumbing to competing sources of influence (such as, personal prejudice and biases, extra-legal information, or other individuals) resulting in failure to comply with judicial instructions. This is reflected in research that shows that jurors often do not comply with judicial instructions to disregard inadmissible information (Devine et al., 2001; Lieberman & Arndt, 2000). It is possible that when jurors disregard judicial instructions they are persuaded by other influential jurors who themselves are biased, prejudiced or otherwise influenced by competing sources of

influence. These influential others may be the foreperson (i.e., a perceived authority), other people/jurors whom the juror likes (i.e., liking), or deems as similar to him or herself (i.e., social validation; Cialdini & Griskevicius, 2010).

Compliance has often been examined in relation to obedience of authority (Burger, 2009; Dambrun & Vatine, 2010; Milgram, 1963, 1965; Richardson & Kelly, 2002), interrogative suggestibility and false confessions (Gudjonsson, 1989; 1991). Milgram (1963, 1965) conducted foundational research on obedience to authority in a series of studies. In Milgram's (1963; 1965) classic studies he told participants the experiment was about teaching and learning. Then participants were assigned to be the teacher and a confederate (who was pretending to be another participant) was assigned to be the learner and were sent into separate rooms. The participant (i.e., teacher) asked the confederate (i.e., learner) a question over an intercom and administered shocks when the learner gave the wrong answer, though the learner did not really receive any shocks. When the participants shocked the confederate, a recording of the learner's responses was played over the intercom to make the participants think the responses were genuine. Participants were instructed to increase the intensity of the shocks with each incorrect answer. As the shocks increased in intensity the learner expressed extreme pain, protested against receiving the shocks and demanded to be released from the experiment claiming he had a heart condition. Near the top of the shock intensity the learner finally went silent. An experimenter was in the room with the teacher insisting the participant continue the shocks no matter how the learner responded. Across all the studies, an average of 65% of participants complied with the experimenter's requests to administer shocks to the top intensity despite visible anguish displayed by the participants at continuing the shocks.

These striking results reveal the strength of authority on individual obedience. These results are not localized to Milgram's well-known experiments, but have been replicated in experiments (e.g., Burger 2009; Dambrun & Vatine, 2010). Evidence of obedience to authority is also found in real life with such events such as the Holocaust during World War II Germany which inspired Milgram's experiments (1963; 1965). Another example from history are the events that took place at Abu Ghraib prison during the second Iraq War. United States soldiers committed horrific, inhumane acts of torture and mistreatment of prisoners at the bequest of higher ranking officers. Research on obedience to authority in relation to the legal system, has primarily revolved around interrogation and false confessions of crime suspects instead of jury decision-making. It is likely that the reason for this is because jury decision-making involves group dynamics which is more likely to be influenced by normative social influence and conformity, than compliance or obedience which are influences exerted by individuals. However, a group of researchers have recently proposed that obedience to authority may play a role in jurors' compliance with judicial instructions.

The Juror Internet Research Scale. The Juror Internet Research Scale (JIRS; Knutson, Green, & Durham, 2016) was developed with the idea that jurors vary in their level of obligation to obey the law and this level of compliance with authority can predict who will violate judicial instructions that prohibit internet research. The scale was found to be negatively correlated with measures of obedience to authority and self-control; specifically, those who scored high on the JIRS were low in obedience to authority and self-control. Though the predictive ability of the JIRS has not yet been tested with a true experiment, from a theoretical standpoint, it is likely that it would be predictive of who will use the internet for information gathering during a trial because of its inverse relationship with obedience to authority.

The Gudjonsson Compliance Scale. The Gudjonsson Compliance Scale (GCS; Gudjonsson, 1989) is a measure of compliance with authority that captures a concept more similar to Milgram's construct of obedience to authority than to Asch's conformity to group pressure. It has been tested on a variety of individuals including; university undergraduates, nursing students, university staff, criminal suspects, convicted criminals who made incriminating confessions and those who did not. The GCS was found to correlate strongly with social conformity, interrogative suggestibility, and social desirably.

Subsequent research indicates that the GCS reliably predicts who will obey authority in false confession research (e.g., Gudjonsson, 1991, Gudjonsson & MacKeith, 1990). In a case study, Gudjonsson and MacKeith (1990) interviewed a 17-year-old young man who falsely confessed to the rape and murder of two elderly women. About a year after the young man's acquittal the authors administered the GCS to him. They young man's parents also completed the GCS about him. According to the young man's self-report and the report of his parents he was high in compliance. Gudjonsson (1991) provides further support that the GCS accurately measures obedience to authority in interrogations. The GCS was administered to two groups of individuals charged with crimes who either claimed they falsely confessed or persistently denied any involvement. Those who claimed to have falsely confessed had significantly higher compliance scores on the GCS than those who vehemently denied any involvement in the crime.

In addition, the GCS has also been shown to reliably correlate with compliant behavior of incarcerated adolescents. Richardson and Kelly, (2004) administered the GCS to a group of adolescent males who had a history of criminal and delinquent behavior and resided in a facility for children with difficult behaviors. The social workers who worked with the children observed and recorded the participants' behaviors and interactions daily. A strong positive correlation was

found. Specifically, those who scored higher on the GCS demonstrated more compliant behavior and obedience to authority. The research suggests that GCS is a good indicator of those most likely to demonstrate compliant behavior. As such it is possible that jurors who are more compliant will be more likely to follow judicial instructions prohibiting social media communication and internet research.

The Current Study: Improving and Testing Instruction Efficacy

It is not surprising that the legal system is experiencing increased internet-based juror misconduct considering the growing prevalence of technology and the internet in individuals' lives as well as their propensity to go online almost habitually. Although dealing with the biasing influences of the media (e.g., television, movies, and news reports) is not new for U.S. courts, internet-based misconduct is potentially more detrimental due to its interactivity and personal nature (Zimmerman, 2013). Since individuals' use of social media and the Internet continues to increase (Mander, 2015, 2016) and people are likely unaware that they are biased by internet-based misconduct (Nisbett & Wilson, 1977), it is imperative that jury instructions prohibiting such behavior are the most effective possible. However, the efficacy of such instructions is in question. As discussed above, laboratory research repeatedly shows that jurors often disregard judicial instructions (Devine, 2001; Lieberman & Arndt, 2000), though extant empirical studies have not specifically addressed prohibition of IBJM. In contrast, field research that specifically prohibits IBJM (St. Eve et al., 2012; 2014) indicates that jurors do comply with prohibitive instructions. The conflicting results of laboratory and field research illuminates the need to expand upon the existing judicial instruction literature, specifically investigating the efficacy of instructions aimed at reducing IBJM.

Objectives and Hypotheses. The primary goal of the current study is to empirically test the efficacy of prohibitive instructions admonishing IBJM, (i.e., social media communication and internet research) and if efficacy can be increased. A secondary goal is to investigate the predictive ability of the Juror Internet Research Scale (JIR; Knutson et al., 2016) to identify those who do not comply with prohibitive instructions. Further validation of the JIRS was provided by comparing its results with those of the Gudjonsson Compliance Scale (GCS; Gudjonsson, 1989). The GCS measures the degree to which people obey authority and instructions, thus should identify jurors who are likely to comply with prohibitive instructions to refrain from IBJM and should negatively correlate with the JIRS. The combination of using more effective judicial instructions and JIRS may help reduce instances of IBJM. There are two primary objectives of this project.

Objective 1: Empirically test the efficacy of prohibitive instructions intended to reduce online communication and research. To validate the efficacy of jury instructions that prohibit social media communication and internet research (i.e., internet-based juror misconduct; IBJM), comparisons were made among jurors in three instruction conditions, (control vs. weak vs. strong). The field and empirical research conflict about the efficacy of limiting instructions. Limited field research supports the prediction that instructed jurors will comply with instructions prohibiting IBJM (i.e., prohibitive instructions; Dunn, 2011; St. Eve et al., 2012, 2014). Although laboratory research fails to support a prediction that prohibitive instructions will moderate juror misconduct (Devine et al., 2001; Lieberman & Arndt, 2000); it does show that jurors will comply when given specific reasons for the instruction (Diamond & Casper, 1992; Fein et al., 1997; Kassin & Sommers, 1997). This supports a prediction that jurors are significantly more likely to comply with prohibitive instructions in which empirically supported

reasoning for the admonishment of IBJM has been added (i.e., strong instruction), than one with only the admonishment of IBJM but no empirically supported reasoning (i.e., weak instruction) or instructions with no admonishment of IBJM (i.e., control instructions). As such, it is reasonable to make the following predictions:

Hypothesis 1a: There will be fewer self-reports of social media communication and internet research about the case (i.e., internet-based juror misconduct; IBJM) among jurors who receive the strong prohibitive instructions than those who receive weak or control instructions.

Hypothesis 1b: There will be fewer self-reports of IBJM among jurors who receive the weak prohibitive instructions than those who receive control instructions.

Hypothesis 1c: There will be fewer admissions of IBJM during deliberation among jurors who receive the strong prohibitive instructions than those who receive weak or control instructions.

Hypothesis 1d: There will be fewer admissions of IBJM during deliberation among jurors who receive the weak prohibitive instructions than those who receive control instructions.

Hypothesis 1e: Jurors who receive the strong prohibitive instructions will demonstrate less outside knowledge about the case, i.e. knowledge that could only be obtained by engaging in IBJM than those who received weak or control instructions.

Hypothesis 1f: Jurors who receive the weak prohibitive instructions will demonstrate less outside knowledge about the case, i.e. knowledge that could only be obtained by engaging in IBJM than those who received control instructions.

Objective 2: Investigate whether the Juror Internet Research Scale (JIRS; Knutson et al., 2016) predicts those who will not comply with prohibitive instructions that admonish internet-based misconduct, i.e., online communication and research. To validate the predictive ability of the JIRS (Knutson et al., 2016) the scores on the JIRS were compared to the dependent measures of social media communication and internet research. Higher scores on the JIRS indicate that participants are more likely to engage in internet-based juror misconduct thus violating prohibitive instructions. The JIRS scores were also compared to scores on the Gudjonsson Compliance Scale (GCS; Gudjonsson, 1989) for additional support by assessing compliant behavior which is predicted to be negatively related to the JIRS.

Hypothesis 2a: Scores on the JIRS will positively correlate with self-reports of engaging in IBJM.

Hypothesis 2b: Scores on the JIRS will positively correlate with the Case Knowledge Questionnaire that measures outside knowledge about the case, i.e. knowledge that could only be obtained by engaging in IBJM.

Hypothesis 2c: Scores on the JIRS will positively correlate with the admissions of IBJM made during deliberation.

Hypothesis 2d: The JIRS and GCS will be negatively related such that jurors with high scores on the JIRS will have low scores on the GCS.

CHAPTER III

METHOD

A common methodology used in the jury instruction literature manipulates extra-legal information such as pretrial publicity or the introduction of inadmissible evidence such that some participants receive the extra-legal information, and some do not. Then, participants read or watch a trial summary that has been pretested to be neutral, i.e., eliciting equal amounts of guilty and not guilty verdicts. The current experiment utilized a similar methodology. However, this experiment did not manipulate mock jurors' exposure to extra-legal information. Instead this experiment sought to create a realistic temptation for mock jurors to engage in internet-based misconduct (IBJM; i.e., seek extra-legal information though communicating on social media and conducting internet research) that is commensurate with the allure faced by jurors in real trials. Instead of manipulating exposure to extra-legal information, the current experiment manipulated jury instructions to determine if changing the wording would improve the likelihood of mock juror compliance. Because of the lack of control over mock juror's exposure to extra-legal information, verdict decisions are not a reliable measure of exposure to the information so other dependent measures were used in the current experiment and are detailed below.

Participants

For the current study an a priori power analysis conducted with G*Power 3.1.9 (Faul, Erdfelder, Buchner, & Lang, 2009) determined that at least 156 mock jurors (52 per condition) were needed to detect a small to medium sized effect. A total of 216 (M_{age} = 19.43, SD = 2.45; 61.57% female) undergraduate psychology students at the University of North Dakota who

received class credit for their participation were recruited as participants for the current study. Data from eight of the participants was excluded from the analysis due to not being United States citizens and therefore not eligible to serve jury duty.

The final sample for analyses was comprised of 208 jury-eligible participants (M_{age} = 19.45, SD = 2.48; 62.50% female; see Table 1 for full demographic information). Eighty-one mock juries were comprised of 1-6 participants plus one confederate ($M_{JurySizeAll}$ = 3.69, SD = 1.64). After removing non-US citizen and the confederates from the mock jury groups 80 mock juries remained ($M_{JurySize}$ = 2.59, SD = 1.60; see Table 2 for jury size descriptive statistics). Each mock jury was randomly assigned to one of three instruction conditions, (control vs. weak instruction vs. strong instruction). The current experiment did not make jury-level comparisons because the role of confederates during deliberation could impact jury-level verdicts. However, to increase external validity and realism, participants engaged in a two-stage mock jury trial, in the laboratory, that included deliberation and rendering of jury-level verdict decisions.

Table 1

Participant Demographics

Variable	Mean/Frequency (SD/%)
Age (18-46)	19.45 (2.48)
Gender (% women)	130 (62.5%)
Strength of Religious Beliefs (1-7)	4.28 (1.86)
Political Orientation (1-7)	3.85 (1.47)
Served on a Jury? (% Yes)	5 (2.40%)
Been a Victim of a Crime? (% Yes)	19 (9.10%)
Witnessed a Crime? (% Yes)	37 (17.80%)

Table 2

Jury Size Descriptive Statistics

Jury Size	Frequency (%)
1	26 (32.50%)
2	19 (23.75%)
3	11 (13.75%)
4	13 (16.25%)
5	5 (6.2%)
6	6 (7.4%)

Note – Jury size frequencies are reported for mock jurors only. Confederates and non-US citizens have been removed.

Trial Stimulus

Extant research has not examined the influence of limiting instructions on IBJM so there are no previously tested trial stimuli. In addition, the current study attempted to present mock jurors with a realistic temptation and opportunity to seek additional information and communicate about the case on social media or engage IBJM. Therefore, the trial stimuli for current experiment required the use of a notorious real-life trial that has information which is easily found online. The case of Georgia v. Harris was used.

In September of 2014, Justin Ross Harris was charged with the malicious murder (premeditated) of his 2-year old son and other crimes against female minors from whom he solicited sexual relationships. On June 18, 2014, Harris left his son strapped in a car seat in the family vehicle for about eight hours in 92-degree weather. Harris's son died of hyperthermia and dehydration from being left in a hot car on one of the hottest days of the summer. The prosecution claimed that Harris planned and executed the murder of his son to get out of his unhappy marriage and the responsibilities of family life so that he could pursue sexual relationships with other women and underage girls. The defense claimed that the death was just a

mistake made due to automated responses and memory errors. According to the defense, Harris simply forgot to drop his son off at day care and did not realize the boy was still in the car seat when Harris arrived at work, thus leaving the 2-year old in the car. In November of 2017, Harris was convicted on all counts and the case is now under appeal. This case received an abundance of local media attention. Georgia v. Harris received so much local media coverage that the trial had to be relocated to another county. Yet, the case got minimal national attention suggesting that Georgia v. Harris has an ideal balance of easily accessible online information without being so well-known that participants outside of Georgia would have knowledge of the case.

Videos of the 23-day Georgia v. Harris trial were transcribed, edited and pilot tested in a similar manner employed by Kramer and colleagues (1990). Kramer et al. (1990) created a neutral trial stimulus video that elicited nearly equal numbers of guilty vs. not guilty verdicts. In the current experiment however, the trial stimulus is summarized in written transcript form because it is not feasible to produce a suitable video from the actual trial videos due to; 1) length of the trial (23 days), and 2) the fact that the instructions will be manipulated. The final trial transcript included jury instructions (based on randomized condition), attorneys' and judge's opening statements, a summary of witnesses' testimony and case facts, edited and shortened testimony and cross-examination of one key witness for the prosecution (the lead detective) and the defense (memory expert witness) and the attorneys' closing statements (see Appendix B for the trial transcript).

The transcripts were narrated by a Text To Speech (TTS) software called Balabolka (http://www.cross-plus-a.com/balabolka.htm). Balabolka allows the text to be read by various male and female voices at varying speed (-10 to 10) and pitch (-10 to 10). The trial transcripts were narrated using the male voice of Paul (VW Paul [English (United States)]) at a

speed of two (2) and pitch of zero (0). This voice, speed and pitch was used because it produced the most natural sounding voice of those available according to three independent raters. Each rater listened to the first five pages of the transcript narrated by each of the free voices (David, Mary, Michael, Michelle, Mike, Paul, and Zira) at a speed and pitch of zero (0) and ranked them from most to least natural sounding. All raters chose Paul as the most natural sounding voice. Next, the raters listened to the first five pages of the transcript narrated by Paul in pitches ranging from -3 to 3 and ranked them from most to least natural sounding. All raters ranked the middle pitch of zero (0) as the most natural sounding pitch of Paul's voice. Last, the raters listened to the first five pages of the transcript narrated by Paul with a pitch of zero (0) at speeds ranging from -3 to 3 and ranked them from most to least natural sounding. All raters ranked the speed of two (0) as the most natural sounding speed of Paul's voice.

The narrated transcript for Part 1 of the trial without the instruction condition added was 41.5 minutes long. When the instructions were added the narrated Part 1 transcripts range in length according to the instruction condition, (control = 44.92 minutes, weak = 44.28 minutes, and strong = 46.5 minutes). The narrated transcript for Part 2 of the trial without the instruction condition added was 16.57 minutes long. When the instructions were added the narrated Part 2 transcripts range in length according to the instruction condition, (control = 19.57 minutes, weak = 19.52 minutes, and strong = 20.28 minutes).

Pilot Testing Trial Transcript. To ensure the neutrality and balance of the trial transcript, a sample of (136) participants (M_{age} = 37.36, SD = 13.51, 27.2% female) were recruited and compensated one dollar ($1.00) through Amazon's Mechanical Turk to pilot test the trial transcript. The data from 101 individuals was removed because it was either incomplete (n = 61), participants failed the attention check question (n = 39) or took an excessive amount of

time to complete (n = 1) leaving a final sample of 35 participants (M_{age} = 40, SD = 15.69, 54.3% female).

First, the participants read the trial transcripts without the judicial instructions. Then they completed the following verdict preference questions: “Please indicate your verdict in the present case against the defendant for the charge of malice murder.” (-1 = *Not Guilty*, 1 = *Guilty*); “Using the scale below, how confident are you in your verdict?” (1 = *Not at all confident*, 7 = *Completely confident*); and “Using the scale below, how guilty do you believe the defendant is?” (1 = *Not at all guilty*, 7 = *Completely guilty*). Then participants answered the following questions about the strength of the case: “Using the scale below, how strong was the prosecution’s case?” (1 = *Very Weak*, 7 = *Very Strong*); and “Using the scale below, how strong was the defense’s case?” (1 = *Very Weak*, 7 = *Very Strong*). Next, the participants completed the Case Knowledge Questionnaire to ensure that specific case information was successfully omitted from the transcript. Last, participants completed a basic demographic questionnaire that asked their age, gender, citizenship status, ethnicity, strength of religious beliefs, political orientation, if they ever served on a jury, if they have ever been a victim of a crime, and if they have ever witnessed a crime.

This procedure was repeated twice until a trial transcript was produced that was sufficiently neutral and balanced such that participants would not be able to clearly determine if the defendant is guilty or not. It was expected that when combined with the motivation incentive in the cover story (detailed below), mock jurors’ temptation to commit internet-based misconduct might more-realistically approximate that of real jurors’. Neutrality and balance of the final transcript was determined by analyzing participants’ verdict preferences, confidence in their verdict, and measure of likelihood of guilt. Furthermore, participants’ verdict preferences

and confidence in their verdicts were combined to create a verdict score to more accurately gauge participants' true verdict decisions. Verdict scores were created by dummy coding participants' verdict preferences (1 = guilty, -1 = not guilty) and multiplying that number by their level of confidence in their verdicts. For instance, a guilty verdict (1) and a confidence score of 4 would produce a verdict score of 4; and a not guilty verdict preference (-1) and confidence score of 6 would produce a verdict score of -6, and so on.

The final transcript elicited an acceptable level of guilty (60%) and not guilty (40%) verdicts. Single-sample t-tests were used to analyze the continuous item scores against their mid-points. Participants seemed to be confident in their verdict decisions as indicated by their confidence scores (M = 5.26, SD = 1.50) which significantly differed from the midpoint of four (4), $t(34) = 4.95$, $p < .001$. However, once combined with verdict preferences participant verdict scores (M = 1.54, SD = 5.32) did not significantly differ from the midpoint of zero (0), $t(34) = 1.71$, $p = .095$. Furthermore, analysis of the likelihood of guilt item provides more evidence that participants were not convinced of the defendant's guilt. Participants' likelihood of guilt scores (M = 4.66, SD = 2.04) did not significantly differ from the midpoint of four (4), $t(34) = 1.90$, $p = .07$. Thus, indicating that though the transcript elicited a higher percentage of guilty verdicts, overall participants were not exactly convinced of the defendant's guilt.

The final transcript also achieved a balance between the strength of the cases presented by the prosecution and defense. Participants indicated that they believed the prosecution's case was strong with the mean score (M = 4.86, SD = 1.70) barely above but significantly different from the midpoint of four (4), $t(34) = 2.98$, $p < .005$. In contrast, participants rated the defense's case as neutral with the mean score (M = 3.91, SD = 1.56) falling just below, but not significantly different from the midpoint of four (4), $t(34) = -.33$, $p = .747$. Although a perfect

balance was not achieved, a paired samples t-test revealed that the prosecution's case (M = 4.86, SD = 1.70) and defense's case (M = 3.91, SD = 1.56) do not significantly differ from each other, $t(34) = 1.94$, $p = .06$. Thus, indicating that the goal of a balance between the strength of the cases was achieved.

Realistic Temptation & Motivation

The proposed study involved a mock jury trial rather than a real one, therefore the level of temptation to communicate on social media or conduct internet research was likely to be lower for mock jurors than real jurors. In addition, the consequences of one's decisions during a real trial are much higher than during a mock jury trial because individuals' lives are impacted by jurors' verdict decisions which could potentially reduce mock jurors' motivation to render a just or accurate verdict in comparison to real jurors. These issues were addressed in two ways. First, to create a realistic temptation and opportunity to engage in IBJM, the study used an actual criminal trial. The criteria for the stimuli trial was one that received heavy media attention locally or statewide, that had plentiful information available online but was not nationally publicized. As mentioned, and detailed above, the case chosen for the current study was Georgia vs. Harris.

To create a realistic temptation the researcher conducting the research session informed mock jurors that the trial and verdict was controversial and gained considerable local media attention and was a trending topic on local social media networks. Mock jurors were then asked if they had any knowledge about the trial, those who did were dismissed. No mock jurors admitted to having any knowledge of the Harris trial or the verdict reached so none were dismissed. To provide mock jurors a realistic opportunity to engage in IBJM, the current study

was conducted in two stages with 18- to 73-hours between presentation of the trial stimuli in the first stage and deliberation of the mock juries in the second stage.

Second, to increase the motivation to come to a just verdict and thus the temptation to go online, the mock jurors were given a cover story and offered an incentive for arriving at a "correct" verdict (i.e., a verdict that matches the real one; see Appendix C for the cover story). Motivation literature shows that performance is enhanced when people have both a goal and monetary incentive if the goal (e.g., a "correct" verdict) is at least moderately difficult to achieve and when the monetary incentive is a combination of a piece/base rate and a bonus (Bonner & Sprinkle, 2002; Campbell, 1984; Mowen, Middlemist, & Luther, 1981). The mock jurors were informed that if their jury verdict matches that of the original jury they would be entered into a drawing to win one of several gift cards in addition to receiving the standard class credit. However, all participants that complete the study were entered into the drawing regardless of their verdict.

Independent Variable

Instruction conditions and manipulation. Mock juries were randomly assigned to one of three instruction conditions (control instructions vs. weak instructions vs. strong instructions; see Table 3 for instruction condition descriptive statistics). Instructions in all conditions (control vs. weak vs. strong) were administered as recommended by the CACM (Committee on Court Administration and Case Management); at the beginning of the trial, at the end of the day (part 1), at the beginning of the day (part 2), and at the close of the trial before deliberations (part 2).

Table 3

Descriptive Statistics for Instruction Conditions

Variable	N	Frequency (%)
Participants	208	
Control Instructions		67 (32.21%)
Female (%)		47 (70.15%)
Weak Instructions		62 (29.81%)
Female (%)		38 (61.29%)
Strong Instructions		79 (37.98%)
Female (%)		45 (56.96%)
Juries	80	
Control Instructions		27 (33.75%)
Weak Instructions		24 (30.0%)
Strong Instructions		29 (36.25%)

CACM Model Instructions. Jury instructions vary from courtroom to courtroom because judges can write and use his or her own or pattern instructions. This study will use the model social media instructions created by the Committee on Court Administration and Case Management (CACM) that were used by St. Eve and colleagues (2012, 2014) as a base of reference to create and compare the instruction conditions. The CACM model jury instructions have two sections. The first section is a pre-trial instruction, given to the jury before the trial begins and whenever court breaks for lunch or goes home at the end of the day. The second section is a post-trial instruction given after closing arguments, before deliberation. Each section of the CACM model jury instructions were evaluated for grade level readability with an online calculator (http://www.readabilityformulas.com/free-readability-formula-tests.php, n.d.) that determines the grade level of the text according to the Flesch-Kincaid Grade Level Readability Test (Flesch, 1979). The Flesch-Kincaid Readability Test uses a formula to determine a score of the minimal grade level that is required for people to read and understand the text in question.

The pre-trial instructions were determined to be at a 12th grade reading level (17-18 years of age). The post-trial instructions were determined to be at a college reading level (21-22 years of age). Both sections of the CACM model jury instructions were edited to create pre-trial and post-trial instructions for each condition (control instruction vs. weak instruction vs. strong instruction).

Control Instruction Condition. In the *control instruction condition* juries received a version of the CACM model instructions in which the specific prohibition of IBJM and reasons for the admonishment were removed. The control instructions were carefully edited with the objective of being as similar as possible to the CACM model instructions in length and readability with the only differences being the removal and replacement of the IBJM admonishment. Therefore, the *control instructions* prohibit traditional juror misconduct such as independent research, consultation of media or reference materials, and communicating with any other people except other jurors during deliberation. In addition, the control instructions do not give reasons for the admonishment of traditional juror misconduct (see Appendix D for control instructions).

The pre-trial and post-trial sections of the control instructions were evaluated for grade level readability using the Flesch-Kincaid Grade Level Readability Test (Flesch, 1979) described above. Readability of the control instructions was assessed to ensure that they are at the same grade level as the amended CACM instructions used in the weak instruction condition described below. This helps to ensure that any differences in IBJM between the control and weak conditions are due to the prohibitive instruction and not differences in readability. Differences in readability could affect jurors' comprehension and application of the instructions (Baguley et al., 2017). The pre-trial control instructions were determined to be at the same 12th grade reading

level (17-18 years of age) as the CACM model instructions and weak instructions. The post-trial control instructions were determined to be at the same college reading level (21-22 years of age) as the CACM model instructions and weak instructions.

Weak Instruction Condition. In the *weak instruction condition* juries received an updated version of the CACM model instructions utilized by St. Eve and colleagues (2012, 2014). The CACM model instructions refer to outdated technology and websites that are no longer used or popular (i.e., Blackberries and Myspace) so have been removed and replaced with technologies and websites that are more current and popular (i.e., smart phones, iPhones, and Facebook). Therefore, in addition to containing traditional admonishment against traditional juror misconduct, the *weak instructions* specifically prohibit IBJM described as: the use of electronic tools and devices to engage in internet-based research and communication; consultation of internet-based media or reference materials; and communicating on social media about the case. Furthermore, the weak instructions give specific examples of prohibited technology and means of communication (e.g., the telephone, a cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website) as well as prohibited social media websites (e.g., Facebook, Reddit, Instagram, LinkedIn, or YouTube). Lastly, the weak instructions include two brief reasons for the admonishment of IBJM in the post-trial instruction given just before jury deliberates; 1) that the information might be wrong, incomplete, or inaccurate, and 2) that the information would not be known to other jurors or parties in the case, and thus could unfairly and adversely impact the judicial process (e.g. due-process, fair treatment; see Appendix E for weak instructions).

After editing pre-trial and post-trial sections of the weak instructions they were evaluated for grade level readability using the Flesch-Kincaid Grade Level Readability Test (Flesch, 1979) described above. The pre-trial weak instructions were determined to be at the same 12th grade reading level (17-18 years of age) as the CACM model instructions and control instructions. The post-trial weak instructions were determined to be at the same college reading level (21-22 years of age) as the CACM model instructions and control instructions.

Strong Instruction Condition. In the *strong instruction condition* the juries received amended and updated CACM instructions that prohibit IBJM with simplified language and legal concepts, as well as specific examples of prohibited technology and activities. The amended and updated strong instruction also give empirically supported reasons for the instruction including the potential consequences of violating the admonishment. Research shows that the easier instructions are for jurors to understand the more likely it is that they will comply (Baguley et al., 2017). Therefore, the language and legal concepts in the CACM model instructions were simplified for the strong instruction condition. Legal terms were replaced with common words or explained for the jurors in non-legal language. Also, more examples of prohibited activities, technologies, devices and websites were added as recommended by research and legal scholars alike (Baguley et al., 2017; Posner, 2016).

The CACM model instructions include two brief and limited reasons for prohibiting IBJM, 1) that the information might be wrong, incomplete, or inaccurate, and 2) that the information would not be known to other jurors or parties in the case so could unfairly and adversely impact the judicial process. These reasons are only in the post-trial instruction given right before deliberation, not every time the instructions are given (e.g., before the trial and when the jury goes home for the day). Therefore, empirically supported reasoning was added to the

strong instructions given at the beginning of the trial, at the end of part 1 of the experiment - before jurors break for 24-48 hours (i.e., after witness testimony), and at the close of a case (i.e., before jurors deliberate). Empirically supported reasons are defined herein as reasons for the admonishment that empirical research (Fein et al., 1997; Kassin & Sommers, 1997) indicates are likely to increase the likelihood of juror compliance. These empirically based reasons include informing jurors that information obtained online might be unreliable, false, incomplete or biased (Kassin & Sommers, 1997), and there might be ulterior motives behind its publication such as a desire to bias public opinion (Fein et al., 1997).

In addition, legal scholars (Aaronson & Patterson, 2013; Hoffmeister, 2012; Simpler, 2012), recommend informing jurors of potential consequences of IBJM. Therefore, the strong instructions also inform jurors that if they violate the instructions; 1) it could lead to a mistrial which would require a new trial; 2) a mistrial would be expensive to the parties, the court, and taxpayers; and 3) the juror could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared (see Appendix F for strong instructions).

To ensure that the objectives of creating strong instructions that are less complex and easier for jurors to read, understand, and follow as recommended by research (Baguley et al., 2017) were achieved the pre-trial and post-trial sections were evaluated for grade level readability using the Flesch-Kincaid Grade Level Readability Test (Flesch, 1979) described above. Less complex instructions should result in lower readability scores meaning that they should be easier for jurors to read, comprehend, and apply. Therefore, the strong instructions were edited to be less complex and have lower readability levels than the control instructions and weak instructions. The lower the minimal grade level of the instructions means the information is

easier for people to read and understand. The pre-trial strong instructions were determined to be at an 11th grade reading level (15-17 years of age), one grade level lower than the other instructions (CACM model instructions, control instructions, and weak instructions), indicating that they are easier to read and understand. The post-trial control instructions were determined to be at a 12th grade reading level (17-18 years of age), two grade levels lower than the other instructions (CACM model instructions, control instructions, and weak instructions), also indicating that they are easier to read and understand.

Instruction content validity. To ensure the content validity (i.e., accurate operationalization) of the control, weak, and strong instructions, a sample of 173 participants (M_{age} = 33.32, SD = 12.34, 32.4% female) were recruited and compensated one dollar ($1.00) through Amazon's Mechanical Turk to categorize each set (pre- and post-trial instructions) into one of the three operational definitions. Forty-nine incomplete responses were removed from the data. The responses from 64 participants were removed for failing the attention check question. The data from another 29 participants was removed for completing the survey too quickly (15 minutes or less) thus indicating that they did not take ample time to thoroughly read and classify the instructions. The final sample consisted of 31 participants (M_{age} = 35, SD = 12.736, 54.8% female) who took between 15.06 minutes and 52.1 minutes ($M_{minutes}$ = 26.31, SD = 9.59) to complete the survey.

First, participants read each set of instructions (control, weak, and strong) and then were instructed to choose one of three operational definitions that best matches the instruction set. More participants (35.5%) correctly classified the *control instructions* to the correct operational definition than to the weak instruction operational definition (25.8%) and the strong instruction operational definition (19.4%). Furthermore, 19.4% claimed there was no operational definition

that matched. When classifying the weak instructions the majority of the participants (58.1%) correctly classified the *weak instructions* to the correct operational definition. Sixteen percent (16.1%) incorrectly classified the weak instructions to the control instruction operational definition, 25.8% to the Strong instruction operational definition, and no participants (0%) said the operational definition was not there. The majority of the participants (54.8%) also correctly classified the strong instructions to the correct operational definition. Only 9.7% of the participants incorrectly classified the strong instructions to the control instructions operational definition, 29% to the weak instructions operational definition, and 6.5% said there was no operational definition that matched.

Typically, content validity is completed by a panel of experts in the field who judge how well or if item content matches operational definitions of the construct using formalized processes and criteria (Haynes, Richard, & Kubany, 1995). However, researchers and legal scholars agree that part of the problem with jury instructions and why jurors do not follow them is that they are written by legal experts who use technical legal terms that people outside of the legal realm have difficulty understanding and applying (Baguley, et al., 2017; Posner, 2016; Morrison, 2011). Because the current study aimed to make instructions easier for lay people, (i.e., non-experts) to understand and follow, a sample from the general population was used and the judging process was simplified (matching instructions to operational definitions). The content validity of the instruction for each condition was determined to be acceptable if the correct operational definition was chosen by more participants than the other definitions, and if that percentage was 10% above chance (25%). Each instruction condition had four answer options with a 25% chance of being chosen by each participant so the minimum percentage criterion for acceptable content validity was 35%. All instructions (control, weak, and strong) met the

classification criteria having been correctly classified by 35% or more of the participants and the correct operational definition chosen more than other answer options (see Appendix G for jury instruction pilot test materials).

Predictor Variables

Propensity to conduct internet research. In a prescreen survey administered online through Sona Systems before the experiment, participants completed the Juror Internet Research Scale (JIRS; Knutson, et al. 2016), a self-report measure of individuals' tendency to violate judicial instructions prohibiting internet research (α = .95). The 10 items of the JIRS are measured using a 6-point scale of agreement (1 = *strongly disagree*, 6 = *strongly agree*) that are added together to form an overall composite score ranging from 10 – 60. Higher scores indicate higher likelihood of engaging in online research, i.e., violating prohibitive instructions (see Appendix H for JIRS items and Table 4 for JIRS descriptive statistics).

Compliant behavior. During the same prescreen survey, participants also completed the Gudjonsson Compliance Scale (GCS; Gudjonsson, 1989) that identifies compliant individuals who are more likely to obey authority (α = .71). The scale consists of 20 true/false statements, with 17 items coded such that "True" answers indicate a compliance response and three (3) are reverse scored such that "False" answers indicate a compliance response. Compliant responses are given a score of one (1) then added together to form an overall composite score ranging from 0-20, with higher scores indicating higher likelihood of compliant behavior (see Appendix I for GCS items and Table 4 for GCS descriptive statistics).

Table 4

Descriptive Statistics for JIRS and GCS

Variable	N	Mean (SD)
JIRS (10-60)	155	35.86 (9.77)
Control Instructions	48	36.44 (8.61)
Weak Instructions	60	35.31 (10.17)
Strong Instructions	47	35.98 (10.49)
GCS (0-20)	161	10.01 (3.54)
Control Instructions	48	10.38 (3.56)
Weak Instructions	60	10.28 (3.64)
Strong Instructions	47	9.36 (3.49)

Dependent Variables

Internet-based juror misconduct: Confederate reports. Admitting to violations of the judge's instructions is likely to be socially undesirable therefore mock jurors may under report their own misconduct on self-report measures. To overcome socially desirable responding each mock jury included one trained confederate who, during deliberation in Part 2, admitted to engaging in the prohibited activities. Three male confederates were extensively trained to casually engage mock jurors in conversation that centered on the topic of going online to conduct research and/or communicate about the case, admit to searching online for additional information including the real verdict, and then evaluate and report mock jurors' responses. More precisely, the confederates were trained to get other mock jurors to admit they went online and/or demonstrate knowledge or details about the case that were not presented in the trial transcript, by first admitting he (the confederate) went online and allowing the mock jurors to respond. If mock jurors did not confess the confederates would then ask the group if anyone else went online to try to elicit a conversation in which details of the case were discussed. After the deliberation participants completed questionnaire packets in which the confederate reported which mock

jurors, if any, admitted to going online (coded as "1"), or demonstrated knowledge (guilty knowledge) about the case (coded as "2") that could have only been known if they engaged in internet-based juror misconduct. Confederate reports of mock jurors' deliberation behavior were coded as "0" if there was no evidence (admissions or guilty knowledge) of IBJM. An overall measure of confederate reports of IBJM was created (IBJM-CR) in which all mock jurors who were reported to have conducted IBJM through either admissions or guilty knowledge were dummy coded as "1" and mock jurors who were not were coded as "0" (see Table 5 for IBJM-CR descriptive statistics).

Table 5

Descriptive Statistics for IBJM-CR

Variable	n	Frequency (%)
IBJM-CR	208	
None		195 (93.80%)
Admissions		6 (2.90%)
Guilty Knowledge		7 (3.40%)
IBJM-CR events by condition	13	13 (0.06%)
Control (% of reported IBJM)		6 (46.15%)
Weak (% of reported IBJM)		6 (46.15%)
Strong (% of reported IBJM)		1 (7.00%)

A ratio of one confederate admission in a group of 4-6 participants was set as a goal ratio because social influence research indicates that a ratio (1:4-6) should change the group dynamic making it more socially acceptable for participants to confess to engaging in IBJM (Tanford & Penrod, 1994). This ratio of confederates to participants was predicted to create a sufficient level of social influence to create an atmosphere in which it is more socially acceptable for participants to admit to engaging in IBJM without being too influential as to induce false admissions. The goal ratio was not always achieved ($M_{\text{Particpants-per-Jury}}$ = 2.63, SD = 1.577; $M_{\text{Conf-}}$

to-MockJurorRatio = 1:2.63) with 32.1% (*n* = 26) of the mock juries containing one confederate and only one participant (1:1); 23.5% (*n* = 19) containing one confederate and two participants (1:2); and 14.8% (*n* = 12) containing one confederate and three participants (1:3). The goal ratio of one confederate to 4-6 mock jurors was achieved in 29.6% (*n* = 24) of the mock juries. In anticipation of smaller than desired mock juries, confederates were trained to be sensitive to eliciting false confessions when the jury groups were smaller. Therefore, the confederates were trained to be less assertive when mock juries had fewer than four participants, engaging in discussion of the case details and mentioning they went online but not directly asking the other mock jurors for confessions if they did not offer one.

Internet-based juror misconduct: Case knowledge questionnaire. After completing deliberations mock jurors completed a Case Knowledge Questionnaire (CKQ) that they were told is a test of their memory for facts about the case. Research indicates that individuals often confuse the source of their memories, making source monitoring errors in which they mistakenly attribute information they remember to the wrong source (Johnson, Hashtroudi, & Lindsay, 1993; Lindsey, 1994; Ruva, McEvoy, & Bryant, 2007). In addition, Ruva et al., (2007) found that mock jurors confuse the sources of information presented in pretrial publicity as evidence present in court subsequently using it in verdict decisions. As such it is probable that participants who seek information about the case online will confuse the source of their memory, failing to remember whether they saw it in the trial transcript or online. Memory research shows that memory for facts and events deteriorate over time so the chances of mock jurors committing source monitoring errors were also increased by the 17- to 73-hour delay between part 1 and part 2 of this experiment (Ebbinghaus, 1885; Murre & Dros, 2015; Schacter. 1999). Therefore, to determine whether participants complied with prohibitive instructions admonishing social media

communication and internet research the Case Knowledge Questionnaire included questions about the case that were excluded from the trial summary, thus mock jurors could only know this information if they engaged in IBJM.

The Case Knowledge Questionnaire (CKQ) consisted of 20 True/False items, 10 target items and 10 memory items. To create the items for the CKQ, eight (8) volunteers were recruited through Facebook and conducted 20 searches of the case using four popular Internet search engines, Google Chrome, Yahoo, Firefox, and Bing/Microsoft Edge. The volunteers searched the terms, "*Georgia v. Justin Ross Harris*", "*Justin Ross Harris verdict*", "*Justin Ross Harris*", and "*Cooper Harris*" and reported the information found in the sources on the first page of the search results. The 10 target items for the CKQ were created from the information found in at least 70% of the searches (range: 70% - 100%). The 10 memory items were created using information that is in the trial testimony and was found in at least 65% of the internet searches (range: 65% - 100]. Then, the trial transcript summary was edited to ensure that it contained the case facts from the 10 memory items but none of the information from the 10 target items (see Appendix J for CKQ items).

The 10 target items of the CKQ (CKQ-IBJM; 1 – 10) were scored as follows, "True" responses were given a score of one (1) and "False" responses were scored zero (0). Then the scores were added together to form an overall composite score that will range from 0-10. The information in the 10 target items has been left out of the trial summary stimulus so more 'True' answers resulted in a higher overall score thus indicating that the individual likely obtained information online (i.e., more "True" answers the higher the score and the more likely the individual engaged in IBJM).

The 10 memory items of the CKQ (CKQ-Memory; 11 – 20) were also scored such that "True" responses were given a score of one (1) and "False" responses were scored zero (0). Then the scores were added to form an overall composite score of memory for the case information that ranged from 0-10. The information in the 10 distractor items were facts taken from the final trial transcript summary so more 'True' answers resulted in a higher overall score and higher scores indicated better memory for the facts of the case (see Table 6 for CKQ-IBJM and CKQ-Memory descriptive statistics).

Table 6

Descriptive Statistics for CKQ-IBJM and CKQ-Memory

Variable	n	Mean (SD)
CKQ-IBJM (0-10)	193	2.12 (1.45)
Control	61	2.03 (1.39)
Weak	54	2.09 (1.36)
Strong	78	2.21 (1.56)
CKQ-Memory (0-10)	202	9.36 (0.85)
Control	65	9.42 (0.77)
Weak	59	9.59 (0.65)
Strong	78	9.13 (1.00)

CKQ pilot test. The CKQ was pilot tested with the trial transcript summary to establish a base for memory errors and to test reliability of the 10 target items. A sample of (136) participants M_{age} = 37.36, SD = 13.51, 27.2% female) were recruited and compensated one dollar ($1.00) through Amazon's Mechanical Turk. The data from 101 individuals was removed because it was either incomplete (61), the participant failed the attention check question (39) or took an excessive amount of time to complete (1) leaving a final sample of 35 participants (M_{age} = 40, SD = 15.69, 54.3% female). First, participants read the trial transcript summary, then they recorded their verdicts on the trial verdict form and then they completed the CKQ.

Scores on the CKQ target items ranged from 0 to 9 (M = 3.71, SD = 2.88). The 10 target items were highly reliable, α = .80. It is presumed that participants did not have time to conduct internet research about the case during the pilot test. Therefore, participants should not have had knowledge of the 10 target items and should have marked them as "False". The mean score of CKQ target items could be indicative of memory errors. This supposition seems to be supported by the fact that the mean score of the distractor items of the CKQ (M = 8.71, SD = 1.637) is not 10 which would indicate perfect memory for the case. The 10 memory items scores ranged from 5 to 10 and were moderately reliable, α = .641. When considering the means of the CKQ memory item mean of 8.71 and the mode of 10 (n = 17, 48.6%) it appears that overall, participants seemed to have a fairly good memory for the facts of the case.

Another possible reason for the CKQ target items mean of 3.713 instead of zero, could be that some participants failed to take the time to thoroughly read and understand the transcript. Correlation analysis of the CKQ target item scores and the time taken to complete the survey reveal a small to medium negative relationship (though not significant), r = -.225, p = .195. This pattern is repeated in the results of a correlation analysis of the CKQ memory items and time taken to complete the survey that reveal a small positive relationship (though not significant), r = .156, p = .370. These patterns indicate that the longer participants' took to read and complete the survey the lower they scored on the CKQ target items and the higher they scored on the distractor items, thus were more accurate in their knowledge about the case. The final transcripts were narrated and presented to the participants of the current study such that all took the same amount of time to listen to (and read) parts 1 and 2 of the trial transcript, which was longer (M_{minutes} = 58.07) than the average time of the pilot test participants (M_{minutes} = 46.52). Therefore,

is likely that participants of the current study are may have more complete and accurate knowledge of the Harris case than the pilot test participants.

Internet-based juror misconduct: Self-reports. After completing the Case Knowledge Questionnaire participants completed the Internet-based Juror Misconduct Questionnaire (IBJMQ), a self-report measure of social media communication and internet research. The IBJMQ was developed by expanding upon the items used by St. Eve et al. (2012, 2013) that asked jurors; 1) "*Were you tempted to communicate about the case through any social networks, such as Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube?*", and 2) "*If so, what prevented you from doing so?*". These items were amended to better capture the constructs of interest; social media communication, general internet-based research, internet-based legal research and general communication (discussing the case with others). Two items were created for each of the four constructs of interest for a total of 8 items asking about participants' social media communication (items 1 and 2), general internet-based research (items 3 and 4), internet-based legal research (items 5 and 6) and general communication (discussing the case with others; items 7 and 8) about the case (see Appendix K for IBJMQ items).

The first question was amended from a dichotomous response option that asks about being tempted to communicate on social media to a continuous response measured using a 7-point scale (1 = *Not at all tempted*, 7 = *Very tempted*) that asks "*How tempted were you to communicate about the case through any social networks, such as Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube?*"

The second question asks participants outright if they engaged in the prohibited behavior, "*Did you communicate about the case through any social networks, such as Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube?*", measured with a dichotomous "Yes" or

"No" response with follow up questions. The follow up questions ask, "*If yes, why?*"; and "*If no, what prevented you from doing so?*", measured with four forced choice (and one open ended choice, "*other*") answer options that were reported by St. Eve et al., (2012; 2014) as the most common reasons participants stated for adhering the judicial instructions: "*I did not want to violate the Judge's instructions.*"; 2) "*I did not want to take the time.*"; 3) "*I did not want to be biased.*"; and 4) "*It would not be right or legal.*".

IBJMQ variables: Internet-based and traditional juror misconduct temptation.

Internet-based juror misconduct temptation (IBJM-tempt). The answers to the continuous items asking about participants' level of temptation to communicate on social media (item 1), conduct general internet-based research (item 3), and internet-based legal research (item 5) were averaged together to form a variable (IBJM-tempt) measuring participants' overall temptation to engage in internet-based juror misconduct (IBJM) on a 7-point scale (1 = *Not at all tempted*, 7 = *Very tempted*).

Traditional juror misconduct temptation. The continuous item asking about participants level of temptation to engage in general communication (discussing the case with others; item 7) was interpreted as a measure of participants' overall temptation to engage in traditional juror misconduct (TJM-tempt) on a 7-point scale (1 = *Not at all tempted*, 7 = *Very tempted*).

Juror misconduct temptation (JM-tempt). A continuous variable of participants' overall temptation to engage in juror misconduct (JM-tempt) was created from self-reports of levels of temptation to engage in internet-based (IBJM-tempt, items 1, 3, and 5) and traditional misconduct (TJM-tempt, item 7) on a 7-point scale (1 = *Not at all tempted*, 7 = *Very tempted*; see Table 7 for IBJM-tempt, TJM-tempt, and JM-tempt descriptive statistics).

Table 7

Descriptive Statistics for IBJMQ-Temptation Variables

Variable	n	Mean (SD)
IBJMQ-1 (1-7) – *Temptation to communicate on Social Media*	208	2.21 (1.67)
Control	67	2.60 (1.90)
Weak	62	2.13 (1.54)
Strong	79	1.94 (1.51)
IBJMQ-3 (1-7) – *Temptation to conduct Internet research*	208	3.25 (2.00)
Control	67	3.81 (1.95)
Weak	62	2.85 (1.92)
Strong	79	3.08 (2.02)
IBJMQ-5 (1-7) – *Temptation to conduct Internet research*	208	2.04 (1.50)
Control	67	2.24 (1.72)
Weak	62	1.73 (1.10)
Strong	79	2.03 (1.53)
IBJM-tempt (1-7) – *Temptation to engage in IBJM*	208	2.50 (1.44)
Control	67	2.92 (1.54)
Weak	62	2.24 (1.29)
Strong	79	2.35 (1.41)
IBJMQ-7 / TJM-tempt (1-7) *Temptation to communicate about the case (engage in TJM)*	208	2.66 (1.94)
Control	67	2.75 (2.04)
Weak	62	2.35 (1.56)
Strong	79	2.84 (2.10)
JM-tempt (1-7) – *Temptation to engage in JM*	208	2.55 (1.44)
Control	67	2.87 (1.51)
Weak	62	2.27 (1.28)
Strong	79	2.47 (1.47)

IBJMQ variables: Internet-based and traditional juror misconduct self-reports.

Internet-based juror misconduct self-reports (IBJM-SR). The answers to the dichotomous items asking about social media communication (item 2), general internet-based research (item

4), and internet-based legal research (item 6) were scored such that "Yes" answers were dummy coded as one (1) and "No" answers as zero (0) and summed to form a composite variable of self-reported internet-based juror misconduct (IBJM-SR) potentially ranging from 0 to 3. However, no participants self-reported more than one type of IBJM so this variable (IBJM-SR) was analyzed as a dichotomous variable. The IBJM-SR variable was dummy coded such that self-reports of IBJM ("Yes" answers) were coded as one (1) and "No" answers as zero (0) (see Table 4 of IBJM-SR descriptive statistics).

Internet-based juror misconduct (IBJM): Combined confederate and self-reports. A dichotomous composite variable of overall internet-based juror misconduct (IBJM) was created from confederate reports and self-reports of going online to communicate or research the case (IBJM-CR and IBJM-SR). Internet-based juror misconduct (IBJM) was determined to have occurred and was coded as a one (1) if participants answered "Yes" to self-reports and/or if confederate reports indicated that the participant admitted to the misconduct or demonstrated knowledge about the case. Responses were coded as zero (0) if there were no self-reports or confederate reports of IBJM (see Table 4 for IBJM descriptive statics).

Traditional juror misconduct (TJM). The dichotomous item asking about general communication (discussing the case with others; item 8) was also dummy coded such that "Yes" answers were coded as one (1) and "No" answers as zero (0) and was interpreted as a measure of traditional juror misconduct (TJM; see Table 4 for TJM descriptive statistics).

Juror misconduct (JM). A dichotomous composite variable of overall juror misconduct (JM) was created from confederate reports and self-reports of internet-based (IBJM) and traditional misconduct (TJM). Internet-based juror misconduct was determined to have occurred and was coded as a one (1) if participants answered "Yes" to self-reports and/or if confederate

reports indicated that the participant admitted to the misconduct or demonstrated knowledge about the case. Responses were coded as zero (0) if there were no self-reports or confederate reports of IBJM. Traditional juror misconduct (TJM) was determined to have occurred and was coded as one (1) if participants answered "Yes" to self-reports of communicating about the case. Responses were coded as zero (0) if there were no self-reports of communicating about the case. Juror misconduct (JM) was determined to have occurred and was coded as one (1) if participants engaged in either IBJM or the TJM and were coded as zero (0) if participants did not engage in IBJM or the TJM. All participants who engaged in JM only engaged in one type of JM, either IBJM or TJM, except for one participant who engaged both (see Table 8 for JM and all IBJMQ self-report variable descriptive statistics).

Table 8

Descriptive Statistics for IBJMQ Self-report Juror Misconduct Variables

Variable	n	Frequency Yes (% Yes)
IBJMQ-2 – *Social Media*	208	0 (0.00%)
Control	67	0 (0.00%)
Weak	62	0 (0.00%)
Strong	79	0 (0.00%)
IBJMQ-4 –*Internet research*	208	4 (1.92%)
Control	67	3 (4.48%)
Weak	62	1 (1.61%)
Strong	79	0 (0.00%)
IBJMQ-6 – *Legal research*	208	2 (0.96%)
Control	67	1 (1.49%)
Weak	62	0 (0.00%)
Strong	79	1 (1.27%)
IBJM-SR – *Self-report of IBJM*	208	6 (2.89%)
Control	67	4 (5.97%)
Weak	62	1 (1.61%)
Strong	79	1 (1.27%)
IBJM – *Engaged in IBJM*	208	15 (7.21%)
Control	67	7 (10.45%)

Weak	62	6 (9.68%)
Strong	79	2 (2.53%)
IBJMQ-8 (TJM) – *Communication about the case*	208	9 (4.33%)
Control	67	4 (5.97%)
Weak	62	1 (1.61%)
Strong	79	4 (5.06%)
JM – *Engaged in JM* [a]	208	23 (11.06%)
Control	67	10 (14.93%)
Weak	62	7 (11.29%)
Strong	79	6 (7.59%)

[a] : One participant engaged in both IBJM and TJM in the control condition.

Possible Covariates

Need for cognition. To further verify participants' understanding of the trial transcript and judicial instructions a short form measure of need for cognition (NFC-SF; Cacioppo, Petty, & Kao, 1984) was added to the current study. The need for cognition (NFC) is defined as "an individual's tendency to engage in and enjoy effortful cognitive endeavors" (Cacioppo, Petty, Feinstein, & Jarvis, 1996, p. 1). Cacioppo et al.'s (1996) review of need for cognition research shows that individuals high in NFC are more likely than those low in NFC to be able to focus attention solely on an on-going cognitive task; develop complex attributions; base their beliefs and judgements on empirical evidence and logic; and tend to search for and critically evaluate relevant information for use in making decisions and solving problems. Furthermore, those high in NFC are also able to recall more information, especially when the information is complex and relevant to the task (Cacioppo et al., 1996).

The Need for Cognition – Short Form (NFC; Cacioppo et al., 1996), consists of 18 statements related to thinking and problem solving such as, "I would prefer complex to simple problems.", and "I only think as hard as I have to." The 18 items of the NFC-SF are measured using a 5-point scale of how characteristic each statement is of the individual (1 = *Extremely*

Uncharacteristic, 5 = *Extremely Characteristic*) and 9 of those items are reverse scored. The scores each item are added together to form an overall NFC score that ranges from 18 - 90. Higher scores indicate higher levels of need for cognition (see Appendix L for NFC items).

Individual differences in these tendencies and the NFC are likely to influence participants' engagement in the mock jury task and whether they exert enough cognitive effort to fully understand the transcripts and judicial instructions. More specifically, those who are high in NFC are more likely to pay closer attention to the trial transcript and judicial instructions by reading the text as well as listening to the narration. Thus, higher scores on the NFC-SF should indicate greater understanding of the transcripts and judicial instructions (see Table 9 for NFC descriptive statistics).

Table 9

Descriptive Statistics for Covariates: NFC

Variable	n	Mean (SD)
NFC (18-90)	208	62.87 (9.26)
Control	67	62.01 (8.76)
Weak	62	64.45 (9.40)
Strong	79	62.35 (9.52)

Daily social media and internet use. It is possible that the prevalence and content of social media, internet, and technology use could exert a biasing influence on jurors' decision-making by influencing one's social constructs of reality. According to the Social Cognitive Theory of Mass Communication (SCTMC; Bandura, 2009) people construct their reality through what they perceive in their social realm. Media (and arguably social media and the internet) is an important component of one's social realm. Furthermore, SCTMC states that the content of media viewing is more influential than the number of hours viewed, and people are more apt to

adopt new ideas from brief contacts with casual acquaintances than intensive contact with close associates. Research on media influences on jury verdicts indicates that more media exposure biases jurors against defendants with jurors issuing more guilty verdicts and being more punitive in sentencing even when the media is not related to the case (Greene, 1990). Although to date research has not looked at the influence of social and internet-based media on juror decisions, it is likely the same principles of influence apply. Whereas traditional media (TV, radio, newspapers, etc.) is one sided and often presents limited viewpoints it is possible that social and internet media may be even more biasing on jurors due to its interactive nature and the potential to expose the user to multiple people and viewpoints (Zimmerman, 2012).

Because individuals' social realm (via media exposure) can influence juror decision-making, specifically verdict decisions, it is conceivable that exposure to media through social media communication or internet research might also influence other juror decisions such as whether or not to comply with prohibitive instructions. Research shows that increased exposure to biasing media results in more biased verdict decisions (Greene, 1990). As such, it could be the more individuals use tools of technology (e.g., smart phones, iPhones, tables, computers) to engage in internet-based research, obtain information and news online, or communicate with people electronically (e.g., email, text, social media), the more likely their construct of reality (SCTMC; Bandura, 2009) might differ. Thus, they might perceive such activities as normal, and therefore justified. In turn such altered perspectives could make it more likely for those individuals to violate prohibitive instructions.

To account for the possibility that jurors' decision to comply prohibitive instructions could be influenced by their use of social media, technology and the Internet, participants completed the Media and Technology Usage and Attitudes Scale (MTUAS; Rosen, Whaling,

Carrier, Cheever, & Rokkum, 2013) a 60-item measure of media and technology involvement (see Appendix M for MTUAS items).

The MTUAS measures media and technology use with 44 items that create 11 subscales: smartphone usage (9 items), general social media usage (9 items), internet searching (4 items), e-mailing (4 items), media sharing (4 items), text messaging (4 items), video gaming (3 items), online friendships (2 items), Facebook friendships (2 items), phone calling (2 items) and TV viewing (2 items). Items 1–40 are measured on a 10-point frequency scale for items (with scoring in parentheses): "*Never (1), Once a month (2), Several times a month (3), Once a week (4), Several times a week (5), Once a day (6), Several times a day (7), Once an hour (8), Several times an hour (9), All the time (10)*". Answers on the items for each of these sub-scales are averaged together to create an average use score that ranges from 1-10 with higher numbers indicating more use of media and technology (see Table 10 for MTUAS media and technology use subscale descriptive statistics).

Table 10

Descriptive Statistics for Covariates: MTUAS Technology and Media Use Subscales

Variable	n	Mean (SD)
MTUAS Email Subscale (1-10)	207	6.07 (1.16)
Control	67	6.01 (1.02)
Weak	62	6.16 (1.16)
Strong	78	6.04 (1.27)
MTUAS Phone Use Subscale (1-10)	207	5.60 (1.62)
Control	66	5.62 (1.61)
Weak	62	5.56 (1.77)
Strong	79	5.27 (1.52)
MTUAS Texting Subscale (1-10)	207	7.93 (1.42)
Control	67	8.02 (1.43)
Weak	62	7.78 (1.56)
Strong	78	7.96 (1.28)

MTUAS Smartphone Use Subscale (1-10)	203	6.56 (1.31)
Control	66	6.53 (1.51)
Weak	62	6.40 (1.32)
Strong	75	6.72 (1.11)
MTUAS TV Viewing Subscale (1-10)	207	4.75 (2.18)
Control	67	4.53 (2.17)
Weak	62	4.59 (2.19)
Strong	78	5.08 (2.17)
MTUAS Media Sharing Subscale (1-10)	204	3.97 (1.63)
Control	66	3.63 (1.58)
Weak	62	3.98 (1.64)
Strong	76	4.24 (1.64)
MTUAS Internet Searching Subscale (1-10)	206	5.59 (1.84)
Control	67	5.32 (1.51)
Weak	61	5.73 (2.00)
Strong	78	5.71 (1.97)
MTUAS Social Media Use Subscale (1-10)	179	5.26 (1.34)
Control	59	5.24 (1.44)
Weak	54	5.14 (1.41)
Strong	66	5.37 (1.20)

Items 41 – 44 are measured on a 9-point scale indicating number ranges of online and social media friends (with scoring in parentheses): "*0 (1), 1–50 (2), 51–100 (3), 101–175 (4), 176–250 (5), 251–375 (6), 376–500 (7), 501–750 (8), 751 or more (9)*". Answers on the items for each of these sub-scales are averaged together to create an average number range of online and social media friends that ranges from 1-9 with higher numbers indicating more online and social media friends (see Table 11 for MTUAS social media and online friends descriptive statistics).

Table 11

Descriptive Statistics for Covariates: MTUAS Facebook and Online Friends Subscales

Variable	n	Mean (SD)
MTUAS Facebook Friends Subscale (1-9)	201	6.16 (1.71)
Control	65	6.05 (1.70)
Weak	58	6.25 (1.74)
Strong	78	6.18 (1.71)
MTUAS Online Friends Subscale (1-9)	197	2.04 (1.03)
Control	63	2.14 (0.97)
Weak	58	1.81 (0.89)
Strong	76	2.14 (1.17)

The MTUAS also measures individuals' attitudes about media and technology with 16 items that create four subscales: positive attitudes toward technology (6 items), anxiety about being without technology or dependence on technology (3 items), negative attitudes toward technology (3 items) and preference for task switching (4 items). Items 45-60 are measured on a 5-point Likert scale for all items (with scoring in parentheses): "*Strongly agree (5), Agree (4), Neither agree nor disagree (3), Disagree (2), Strongly disagree (1)*". Answers on the items for each of these sub-scales are averaged together to create an average attitude score that ranges from 1-5 with higher numbers indicating more agreement with the sub-scale (see Table 12 for MTUAS attitudes subscale descriptive statistics).

The Video Gaming and Task Switching subscales of the MTUAS are not relevant to the current investigation so were not analyzed. All other subscales of the MTUAS were examined as potential covariates.

Table 12

Descriptive Statistics for Covariates: MTUAS Attitudes Subscales

Variable	n	Mean (SD)
MTUAS Positive Attitude Subscale (1-5)	184	3.79 (0.63)
Control	61	3.70 (0.65)
Weak	55	3.89 (0.65)
Strong	68	3.78 (0.60)
MTUAS Anxiety/Dependence on Technology Subscale (1-5)	183	2.98 (0.93)
Control	60	3.13 (0.88)
Weak	55	2.94 (0.96)
Strong	68	2.88 (0.95)
MTUAS Negative Attitude Subscale (1-5)	183	3.19 (0.90)
Control	60	3.12 (0.79)
Weak	55	2.89 (0.95)
Strong	68	3.50 (0.87)

Procedure

The current study was a two-part mock jury trial in which 208 participants (M_{age} = 19.45, *SD* = 2.482; 62.5% female) were grouped into 80 mock juries of 1-6, plus one confederate ($M_{JurySize}$ = 2.59, SD = 1.60, and randomly assigned to one of three instruction type conditions (control vs. weak vs. strong). Participants completed the JIRS and GCS during the departmental prescreen at least one week prior to participating in the mock jury trial. In part one, participants were initially asked if they had any knowledge of the Georgia v. Harris case or the verdict reached. No participants claimed to know about the Harris case. If any participants had admitted prior knowledge of the case, they would have been dismissed. After completing and signing informed consent and unique identification forms, participants received a cover story and bonus incentive (e.g., entry in a drawing to win one of ten $50 Amazon gift cards) intended to create a realistic temptation to engage in online communication and research about the case (Campbell,

1984; Mowen, Middlemist, & Luther, 1981). Next, participants listened to and read the narrated trial transcript of the Georgia v. Harris murder. The transcript began with opening instructions (per random assignment), followed by the prosecutor's and defense's opening statements and then the witness testimony. The session ended with the randomly assigned pre-trial instruction.

In part two, after an 18- to 73-hour delay (M_{hours} = 44.43, *SD* = 9.98), the session began with randomly assigned judicial instruction, additional witness testimony followed by the prosecutor's and defense's closing arguments. The trial transcript ended with the randomly assigned final post-trial instruction (control vs. weak vs. strong). Once the trial transcript summary concluded, the juries were instructed that juror #1 was pre-selected to be the foreperson whose duties were to oversee deliberation. The foreperson was to conduct an initial vote of juror's individual pre-deliberation verdict preferences. Then open the floor for deliberation. The juries were asked to deliberate for 20 minutes or until all jurors agreed they were ready for the final vote. Mock juries (*n* = 80) deliberated from 2 to 20 minutes (M_{Delib_Mins}) = 8.78, SD = 4.92).

The foreperson then conducted a second vote of juror's verdict preferences and reported the group's verdict (guilty, not guilty or hung) to the researcher conducting the experimental session. Each mock jury included one confederate who, during deliberation, admitted to engaging in the prohibited behavior and tried to elicit confessions from participants (Tanford & Penrod, 1984). Although jury verdicts were not compared across the three instruction conditions, rendering a group verdict was included in this experiment to realistically simulate a real trial scenario. Last, the participants completed a questionnaire packet that included the case knowledge questionnaire (CKQ), self-report of internet-based misconduct (IBJM-SR), MTUAS, NFC, and a post-trial questionnaire that collected demographic information (i.e., age, gender, ethnicity/race, strength of religious beliefs, political orientation, prior jury service, prior crime

victimization, prior crime witness, and comments). The confederates completed their report of internet-based juror misconduct on the last page of the post-trial questionnaire. Last, participants were fully debriefed about the true purpose of the study and the addition of a confederate in the mock jury groups. Then they were thanked for their participation and excused.

CHAPTER IV

RESULTS

Preliminary Analyses

Preliminary analysis of the data was conducted prior to hypotheses testing to ensure the accuracy of the data, that the data met model assumptions, that the demographic variables did not have a meaningful impact on the dependent variables, and that the correlations among the covariates and the dependent variables were at acceptable levels. Preliminary analysis was conducted in accordance to recommended procedures outlined in Field (2013), and Tabachnick and Fidell (2001). The statistical program Statistical Package for the Social Sciences (IBM SPSS version 26) was used for all preliminary analyses.

Data transfer and accuracy. First, participant responses were transferred from paper to electronic spreadsheet and triple checked for accuracy. Then, measure items were combined, and variables created as detailed above to create scores for analysis. Next, the data were screened for impossible values and response sets. Any impossible values were double checked against the paper measure and corrected.

Missing values. The data was examined for missing values according to procedures outlined in Field (2013) and Tabachnick and Fidell (2001).

Missing data due to technical/experimenter errors. The data from 47 participants (22.6%) was missing from Juror Internet Research Scale (JIRS; Knutson, et al. 2016) and the Gudjonsson Compliance Scale (GCS; Gudjonsson, 1989) because they did not complete the prescreen survey that included these items and therefore were excluded from analyses of these

scales using pairwise deletion. Data from another seven participants (3.37%) were missing from the MTUAS Social Media Use, MUTAS Facebook Friends, and MTUAS Online Friends subscales because they do not have social media accounts and therefore were excluded from analyses of these subscales using pairwise deletion. In addition, 17 responses (8.17%) to MTUAS item 36, and thus the MTUAS Social Media Use subscale, were missing due to an error on the paper questionnaire and were replaced with expectation maximization (EM) values derived using SPSS Missing Values Analysis (SPSS MVA).

Missing values analysis and treatment. SPSS Missing Value Analysis (SPSS MVA) was conducted on all variables. After accounting for data missing because of technical/experimenter errors, missing data were minimal. All variables were missing less than 5% of the data except the CKQ-IBJM, $n = 15$, 7.20%. Little's MCAR (1988) analysis of variables showed that data was missing completely at random (MCAR), $\chi^2 = 789.74$, $df = 818$, $p = .76$. Any participant who completed at least one item on each of questionnaires was included and missing values were treated at item level. Missing data on continuous items of the JIRS and MTUAS questionnaires were replaced using expectation maximization (EM) method with SPSS MVA. Missing data on dichotomous items of the GCS and CKQ questionnaires were assumed to be the modal response, CKQ-IBJM, $Mo = 0$, CKQ-Memory, $Mo = 1$. Completely missing values (i.e., no items completed on the questionnaire) were excluded from analyses using pairwise deletion, including the items from the JIRS and GCS missing due to the incomplete prescreen data; JIRS, $n_{missing} = 6$; MTUAS Smartphone Use, $n_{missing} = 1$; MTUAS TV Viewing, $n_{missing} = 1$; MTUAS Media Sharing, $n_{missing} = 1$; MTUAS Internet Searching, $n_{missing} = 1$; MTUAS Positive Attitude, $n_{missing} = 2$; MTUAS Positive Attitudes, $n_{missing} = 2$; MTUAS Anxiety/Dependence, $n_{missing} = 2$; and MTUAS Negative Attitudes, $n_{missing} = 2$.

Outliers. All continuous variables were analyzed for univariate outliers using z-score statistics with a cut-off point of z = ± 3.29, histograms, and boxplots (Field, 2013; Tabachnick & Fidell, 2001). One dependent variable and four covariate (MTUAS) subscales had extreme outliers (i.e., z > ± 3.29), the CKQ-IBJM, $n_{outliers}$ = 1, 0.5%; MTUAS Emailing, $n_{outliers}$ = 3, 1.44%; MTUAS Smartphone Use, $n_{outliers}$ = 1, 0.5%; MTUAS Social Media Use, $n_{outliers}$ = 1, 0.5%; and MTUAS Positive Attitudes, $n_{outliers}$ = 1, 0.5%. Outliers were transformed using Winsorization (Field, 2013).

Normality. ***Skewness and kurtosis.*** The distributions of all continuous predictor, dependent and potential covariate variables were screened for normality by assessing skewness and kurtosis statistics and visually analyzing histograms and probability plots. All variable skewness and kurtosis statistics were converted to z-scores for analysis and those with skewness or kurtosis z-scores over ± 2.58, p = .01 (n = 7) were considered significantly skewed (Field, 2013; Tabachnick & Fidell, 2001). All non-normal variables were subjected to log 10, reciprocal and square root transformations to find the best fitting solution to bring the all skewed variables into normal range.

Three variables were negatively skewed thus underwent reverse score transformation before log 10, reciprocal and square root transformations to find the best fitting solution: the JIRS, Z_{skew} = -3.95, $Z_{kurtosis}$ = 1.74; MTUAS Texting Subscales, Z_{skew} = -3.12, $Z_{kurtosis}$ = -0.13; and MTUAS Social Media Use Subscale, Z_{skew} = -5.76, $Z_{kurtosis}$ = 0.97. No solution resolved both skewness and kurtosis to normal levels but square root transformation provided the best solution to resolving skewness, thus providing the most normal distribution of the JIRS, Z_{skew} = -1.10, $Z_{kurtosis}$ = 2.20 and MTUAS Texting subscale, Z_{skew} = 0.21, $Z_{kurtosis}$ = -2.04 and the most improved distribution of the MTUAS Social Medial Use Subscale, Z_{skew} = -2.74, $Z_{kurtosis}$ = 4.16.

Four variables were positively skewed thus underwent log 10, reciprocal and square root transformations to find the best fitting solution: CKQ-IBJM, Z_{skew} = 3.44, $Z_{kurtosis}$ = 0.90; MTUAS Email, Z_{skew} = 3.56, $Z_{kurtosis}$ = 4.14; MTUAS TV Viewing, Z_{skew} = 2.63, $Z_{kurtosis}$ = 0.18; and MTUAS Online Friends, Z_{skew} =10.14, $Z_{kurtosis}$ = 9.83. No solution resolved both skewness and kurtosis to normal levels on all variables but square root transformation provided the best solution to resolving skewness, thus providing the most normal distribution of the CKQ-IBJM, Z_{skew} = -0.12, $Z_{kurtosis}$ = -1.08; MTUAS Email Subscales, Z_{skew} = -1.10, $Z_{kurtosis}$ = 2.16; and MTUAS TV Viewing, Z_{skew} = -1.40, $Z_{kurtosis}$ = 0.33. Reciprocal transformation provided the best fitting solution, resolving both skewness and kurtosis and thus providing the most normal distribution of the MTUAS Online Friends, Z_{skew} =1.99, $Z_{kurtosis}$ = -1.58.

Linearity. Bivariate scatter plots were used to visually assess the linearity of all continuous variables as recommended by Field (2013) and Tabachnick and Fidell (2001). All scatter plots looked normal after transformation; hence linearity is assumed.

Homogeneity of Variance. Homogeneity of variances of continuous predictor, dependent and potential covariate variables was assessed using Levene's test. The variances of all variables (except one) were equal among conditions: $F_{JIRS}(2, 152) = .60$, $p = .550$; $F_{GCS}(2, 158) = .31$, $p = .74$; $F_{CKQ\text{-}ibjm}(2, 205) = .90$, $p = .74$; $F_{NFC}(2. 205) = .49$, $p = .62$; $F_{MTUASemail}(2, 205) = 1.22$, $p = .30$; $F_{MTUASphoneUse}(2, 205) = .78$, $p = .46$; $F_{MTUAStexting}(2, 205) = .96$, $p = .38$; $F_{MTUASsmartphone}(2, 204) = 1.94$, $p = .15$; $F_{MTUAStv}(2, 204) = 0.09$, $p = .92$; $F_{MTUASmediasharing}(2, 204) = .11$, $p = .90$; $F_{MTUASinternetseraching}(2, 204) = 1.80$, $p = .17$; $F_{MTUASsocialmediause}(2, 198) = .14$, $p = .87$; $F_{MTUAS\text{-}FBfriends}(2, 198) = .05$, $p = .95$; $F_{MTUASpositiveattitude}(2, 203) = 1.52$, $p = .22$; $F_{MTUASanxiety/dependency}(2, 203) = .59$, $p = .55$; $F_{MTUASnegativeatitude}(2, 203) = 1.26$, $p = .29$.

Evidence of heterogeneity of variance was found for the MTUAS online friends subscale, $F_{\text{MTUASonlineFriends}}(2, 198) = 4.40$, $p = .012$. Log 10, square root, and reciprocal transformations failed to correct the problem of heterogeneity of variance, hence the reciprocal transformed variable was used in analyses because it provided the best solution to the skewness of the variable. Due to the results of the Leven's test any analyses involving this variable should be interpreted with caution.

Demographic analyses. Chi-square and one-way analyses of variance (ANOVA) were conducted to ensure that demographic characteristics were equivalent across all instruction conditions. Results indicated no significant differences across conditions based on age, $F(2, 205) = .20$, $p = .82$; gender, $\chi^2(2) = 2.75$, $p = .25$; strength of religious beliefs, $F(2, 205) = 1.02$, $p = .36$; political orientation, $F(2, 205) = .30$, $p = .74$; jury service, $\chi^2(2) = 2.28$, $p = .32$; or witnessing a crime, $\chi^2(2) = .611$, $p = .74$. There were significantly more participants in the weak instruction condition ($n = 12$) who reported being victim of a crime, than in the control (n = 3) or strong (n = 4) conditions $\chi^2(2) = 11.13$, $p = .004$,.

Relationships between demographic characteristics and dependent variables were analyzed. Non-significant relationships were found between age and all DVs: $F_{IBJM\text{-}SR}(1, 206) = .15$, $p = .70$; $F_{\text{IBJM-CRadmissions}}(1, 206) = .15$, $p = .70$; $F_{\text{IBJM-CRguilty-knowledge}}(1, 206) = .03$, $p = .86$; and $F_{\text{CKQ-IBJM}}(11, 196) = .71$, $p = .73$. Non-significant relationships were found between gender and all DVs: $\chi^2_{\text{IBJM-SR}}(1) = 2.24$, $p = .13$; $\chi^2_{\text{IBJM-CRadmissions}}(1) = .41$, $p = .52$; $\chi^2_{\text{IBJM-CRguilty-knowledge}}(1) = .25$, $p = .86$, and $F_{\text{CKQ-IBJM}}(1, 206) = .01$, $p = .92$. Non-significant relationships were found between strength of religious beliefs and all DVs: $F_{\text{IBJM-SR}}(1, 206) = 1.1$, $p = .30$; $F_{\text{IBJM-CRadmissions}}(1, 206) = .14$, $p = .71$; $F_{\text{IBJM-CRguilty-knowledge}}(1, 206) = .04$, $p = .84$; and $F_{\text{CKQ-IBJM}}(6, 201) = .68$, $p = .67$. Non-significant relationships were found between political orientation and

all DVs: $F_{IBJM\text{-}SR}(1, 206) = 1.30$, $p = .25$; $F_{IBJM\text{-}CRadmissions}(1, 206) = .09$, $p = .76$; $F_{IBJM\text{-}CRguilty\text{-}knowledge}(1, 206) = .25$, $p = .61$; and $F_{CKQ\text{-}IBJM}(6, 201) = .65$, $p = .69$. Non-significant relationships were found between jury service and all DVs: $\chi^2_{IBJM\text{-}SR}(1) = .15$, $p = .70$; $\chi^2_{IBJM\text{-}CRadmissions}(1) = .15$, $p = .70$; $\chi^2_{IBJM\text{-}CRguilty\text{-}knowledge}(1) = .18$, $p = .67$ and $F_{CKQ\text{-}IBJM}(1, 206) = 2.67$, $p = .10$. Non-significant relationships were found between reports of being a victim of a crime and all DVs: $\chi^2_{IBJM\text{-}SR}(1) = .62$, $p = .43$; $\chi^2_{IBJM\text{-}CRadmissions}(1) = .42$, $p = .52$; $\chi^2_{IBJM\text{-}CRguilty\text{-}knowledge}(1) = .23$, $p = .63$ and $F_{CKQ\text{-}IBJM}(1, 206) = .07$, $p = .79$. Non-significant relationships were found between reports of witnessing a crime and all DVs: $\chi^2_{IBJM\text{-}SR}(1) = 1.34$, $p = .25$; $\chi^2_{IBJM\text{-}CRadmissions}(1) = 1.02$, $p = .31$; $\chi^2_{IBJM\text{-}CRguilty\text{-}knowledge}(1) = 1.57$, $p = .21$ and $F_{CKQ\text{-}IBJM}(1, 206) = 1.87$, $p = .17$.

Potential covariates. Correlation analyses of the continuous depended variable (CKQ-IBJM Guilty Knowledge) and the potential covariates (NFC and MTUAS Subscales) were conducted to determine whether the covariates needed to be accounted for in the main analyses.

Knowledge of case facts not provided in the transcript (CKQ-IBJM Guilty Knowledge) and thus found only online significantly correlated with four of the MTUAS subscales. Three weak positive relationships were found between the CKQ-IBJM and the MTUAS Phone Use subscale, $r(206) = .17$, $p = .02$; the MTUAS Internet Searching subscale, $r(206) = .14$, $p = .04$; and the MTUAS Social Media Use subscale, $r(206) = .18$, $p < .01$. One weak negative relationship was found between the CKQ-IBJM and the MTUAS Smartphone Use subscale, $r(206) = -.18$, $p = .01$. All other correlations ranged from, $r(206) = .02$ to $r(206) = .09$, indicating that there are no relationships among CKQ-IBJM and the NFC or the remaining MTUAS subscales.

Significant relationships of the CKQ-IBJM and the MTUAS subscales underwent further additional analyses to investigate if the subscales should be accounted for in the main analyses.

First, one-way ANOVAs were conducted with the instruction conditions as a factor and each of the potential covariates (MTUAS Phone Use, Internet Searching, Social Media Use, and Smartphone Use) as the outcome variable to determine independence potential covariate and instruction condition groups. Results indicate that all MTUAS subscales are independent of the instruction condition and should be accounted for in the main analysis of the CKQ-IBJM; MTUAS Phone Use, $F(2, 205) = .03$, $p = .97$; MTUAS Internet Searching, , $F(2, 204) = 1.69$, $p = .34$; MTUAS Social Media Use, , $F(2, 198) = .09$, $p = .92$; and MTUAS Smartphone Use, , $F(2, 204) = .87$, $p = .42$.

Main Analyses

The main objectives of the proposed project were addressed with the analyses described below using the statistical program Statistical Package for the Social Sciences (IBM SPSS version 26), Vassar Stats' Fisher's Exact 2x3 calculator (http://vassarstats.net/fisher2x3.html; Lowery, 2019a), and Vassar Stats' 2x2 contingency table calculator (http://vassarstats.net/tab2x2.html; Lowery, 2019b). All hypotheses are directional and therefore one-tailed tests of significance were conducted and reported.

Objective 1: Hypotheses 1a – 1f

Hypotheses 1a and 1b. To test hypotheses 1a and 1b of the first objective, Fisher's exact 2x3 test was used to assess the effect of the independent variable, instruction type (control vs. weak instructions vs. strong instructions) on the dichotomous dependent variable IBJM-SR. Although there were more self-reports of IBJM in the control instructions condition ($n = 4$) than the weak ($n = 1$), and strong ($n = 1$) conditions, results indicate that these differences were not significant, $p = .14$.

Hypotheses 1c and 1d. To test hypotheses 1c and 1d of the first objective, Fisher's exact 2x3 test was used to assess the effect of the independent variable, instruction type (control vs. weak instructions vs. strong instructions) on the dichotomous dependent variable IBJM-CR Admissions. Results indicate significant differences among confederate reports of IBJM in the control instructions condition (n = 5) compared to the weak (n = 1), and strong (n = 0) instruction conditions, $p < .01$ (see Figure 1).

Post hoc analyses were conducted using Fisher's exact 2x2 to identify which conditions significantly differ from each other. Hypothesis 1c predicts fewer instances of IBJM-CR admissions in the strong instruction condition than in the weak or control conditions. Although there were fewer confederate reports of admission of IBJM in the strong instruction condition (n = 0) than in the weak instruction condition (n = 1), results indicate that these differences were not significantly different, $p = .44$. There were, however, significantly fewer confederate reports of admission of IBJM in the strong instruction condition (n = 0) than in the control instruction condition (n = 5), $p = .019$ (see Figure 1). Hypothesis 1d predicts fewer instances of IBJM-CR admissions in the weak instruction condition than in the control condition. Although there were fewer confederate reports of admission of IBJM in the weak instruction condition (n = 1) than in the control instruction condition (n = 5), results indicate that these differences were not significantly different, $p = .12$.

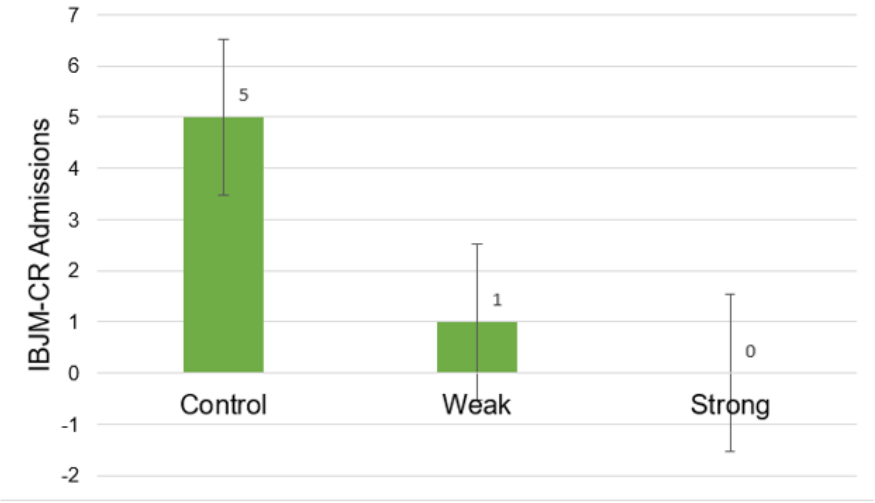

Figure 1. IBJM-CR Admissions by condition.
Error bars represent standard error.

Hypotheses 1e and 1f. To test hypotheses 1e and 1f of the first objective, analysis of variance (ANOVA) and analysis of covariance (ANCOVA) were used to assess the effect of the instruction type (IV) on the continuous DV, CKQ-IBJM, a measure of guilty knowledge (i.e., knowledge of case facts not presented in the trial transcript) with the MTUAS subscale items determined as potential covariates (i.e., MTUAS phone use, internet searching, social media use and smart phone use). There were no significant differences of CKQ-IBJM Guilty Knowledge among conditions, (Control, M = 1.69, SD = .4; Weak, M = 1.72, SD = .39; Strong, M = 1.74, SD = .44), both before adding covariates to the model, $F(2, 205) = .19$, $p = .83$, $\eta_p^2 = .002$., and after, $F(2, 193) = 1.69$, $p = .12$, $\eta_p^2 = .05$.

Fisher's exact 2x3 test was used to assess the effect of the independent variable, instruction type (control vs. weak instructions vs. strong instructions) on the dichotomous dependent variable IBJM-CR Guilty Knowledge (i.e., confederate reports of mock jurors knowledge of case facts left out of the trial transcripts so could only be known by going online). Results indicate that there are significant differences among confederate reports of guilty

knowledge of case facts (IBJM-CR knowledge) in the control instructions condition (n = 1) than the weak (n = 5), and strong (n = 1) instruction conditions, $p < .04$ (see Figure 2).

Post hoc analyses were conducted using Fisher's exact 2x2 to identify which conditions significantly differed from each other. Hypothesis 1e predicts fewer instances of IBJM-CR Guilty Knowledge in the strong instruction condition than in the weak or control conditions. There were fewer confederate reports of guilty knowledge (IBJM-CR knowledge) in the strong instruction condition (n = 1) than in the weak instruction condition (n = 5), results indicate that these differences approached significance, p = .058. There were an equal number of confederate reports of guilty knowledge (IBJM-CR knowledge) in the strong instruction condition (n = 1) and in the control instruction condition (n = 1), results indicate that these differences were not significantly different, p = .71. Hypothesis 1d predicts fewer instances of IBJM-CR guilty knowledge in the weak instruction condition than in the control condition. Although there were more confederate reports of guilty knowledge in the weak instruction condition (n = 5) compared to the control instruction condition (n = 1), results indicate that these differences were not significantly different, p = .09 (see Figure 2).

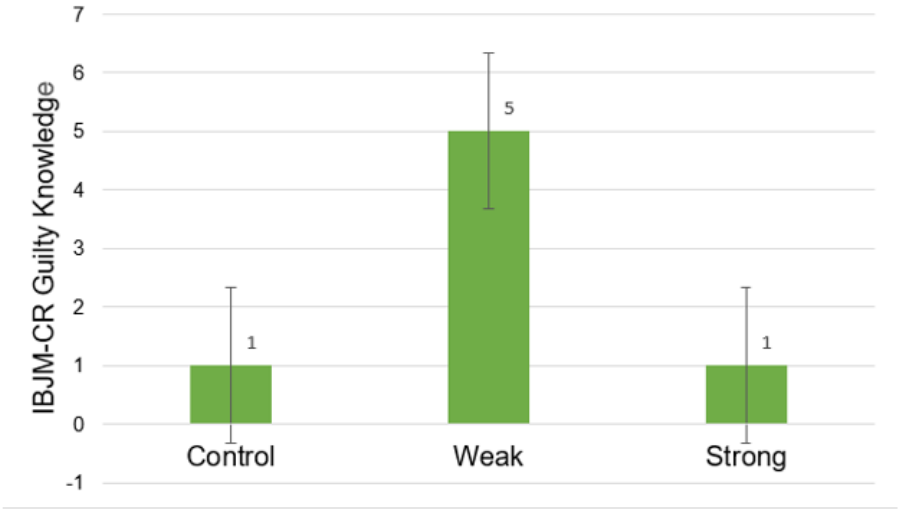

Figure 2. IBJM-CR Guilty knowledge by condition.
Error bars represent standard error.

Objective 2: Hypotheses 2a – 2d. To test the hypotheses of the second objective, correlational analyses were used to assess the relationships among the Juror Internet Research Scale (JIRS), Gudjonsson Compliance Scale (GCS), and each of the dependent variables: self-report of misconduct (IBJM-SR), case knowledge questionnaire identifying guilty knowledge about the case (CKQ-IBJM Guilty Knowledge), and admissions of internet-based juror misconduct during deliberation (IBJM-CR Admissions). The JIRS was negatively skewed and was reverse transformed prior to square root transformation therefore correlation coefficients for the JIRS are reported in the non-transformed direction for easier interpretation.

Hypothesis 2a. To test hypotheses 2a of the first objective, a correlation analysis was conducted to investigate the relationship of the JIRS and self-reports of engaging in internet-based juror misconduct (IBJM-SR). Results indicate that there was not a significant relationship between the JIRS and the IBJM-SR, $r(153) = -.09$, $p = .13$.

Hypothesis 2b. To test hypotheses 2b of the first objective, a correlation analysis was conducted to investigate the relationship of the JIRS and outside knowledge about the case measured by CKQ-IBJM Guilty Knowledge measure. Results indicate that there was not a significant relationship between the JIRS and the CKQ-IBJM Guilty Knowledge, $r(153) = .06$, $p = .22$.

Hypothesis 2c. To test hypotheses 2c of the first objective, correlation analysis was conducted to investigate the relationship of the JIRS and confederate reports of admissions of engaging in internet-based juror misconduct (IBJM-CR Admissions). Results indicate that there is a significant weak negative relationship between the JIRS and IBJM-CR admissions, $r(153) = -.18$, $p = .01$.

Hypothesis 2d. To test hypotheses 2d of the first objective, a correlation analysis was conducted to investigate the relationship of the JIRS and GCS. Results indicate that there was a significantly weak negative relationship between the JIRS and the GCS, $r(153) = -.17$, $p = .02$.

Exploratory Analyses

Exploratory analyses were conducted on variables for which no hypotheses were made. Exploratory analyses described below were conducted using the statistical program Statistical Package for the Social Sciences (IBM SPSS version 26), Vassar Stats' Fisher's Exact 2x3 calculator (http://vassarstats.net/fisher2x3.html; Lowery, 2019a), and Vassar Stats' 2x2 contingency table calculator (http://vassarstats.net/tab2x2.html; Lowery, 2019b). All Fisher's exact tests are directional and therefore one-tailed tests of significance were conducted and reported.

CKQ-Memory and NFC. Correlation analysis was used to investigate the relationship of the CKQ-Memory and the Need for Cognition (NFC) questionnaires. The CKQ-Memory is measure of mock jurors' memory of case facts and thus their understanding of the trial transcripts, ($M = 9.37$, SD = .80, range: 6.56 - 10.00). The NFC is a measure of individuals' need for cognition, i.e. how likely they are to pay close attention to and understand the trial transcript and judicial instructions, ($M = 62.87$, SD = 9.26, range: 40.00 – 87.00). Results indicate that there is a significant weak positive relationship between memory for case facts and need for cognition, $r(206) = .16$, $p = .03$.

IBJM: combined confederate and self-reports. Fisher's exact 2x3 test was used to assess the effect of the independent variable, instruction type (control vs. weak instructions vs. strong instructions) on the dichotomous composite variable IBJM. The IBJM is the combined measure of IBJM-SR, IBJM-CR Admissions, and IBJM-CR Knowledge. Results indicate near

significant differences among reports of IBJM in the control instructions condition (n = 7) compared to the weak (n = 6), and strong (n = 2) instruction conditions, p = .056 (see Figure 3).

Post hoc analyses were conducted using Fisher's exact 2x2 to identify if any conditions significantly differ from each other. There were fewer reports of IBJM in the strong instruction condition (n = 2) than in the weak instruction condition (n = 6), results indicate that these differences were approaching significance but not significantly different, p = .07. There were, however, significantly fewer reports of IBJM in the strong instruction condition (n = 2) than in the control instruction condition (n = 7), p = .05 (see Figure 3). Although there were fewer reports of IBJM in the weak instruction condition (n = 6) than in the control instruction condition (n = 7), results indicate that these differences were not significantly different, p = .12.

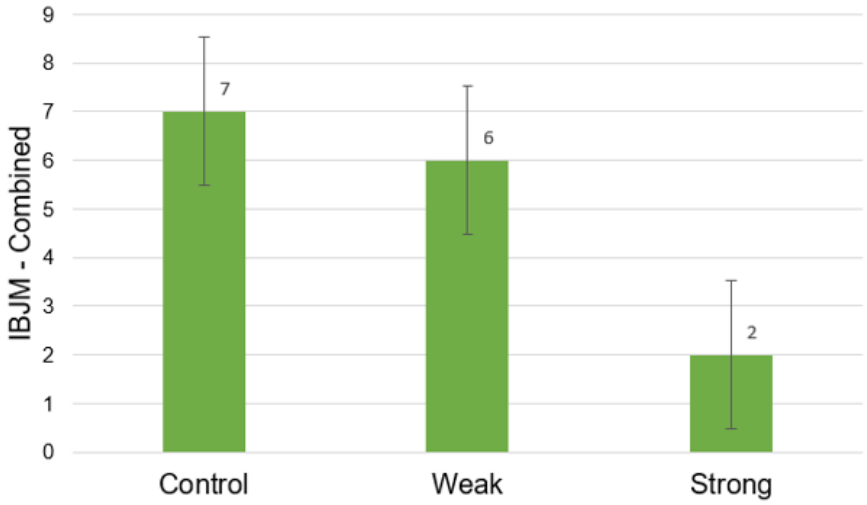

Figure 3. IBJM by condition.
Error bars represent standard error.

Traditional juror misconduct: Communicating with others. Fisher's exact 2x3 test was used to assess the effect of the independent variable, instruction type (control vs. weak instructions vs. strong instructions) on the dichotomous variable measuring traditional juror misconduct (i.e., communication with others about the case; TJM). Results indicate no

significant differences among TJM in the control instructions condition (n = 4) compared to the weak (n = 1), and strong (n = 4) instruction conditions, p = .48.

Juror Misconduct: Total instances of IBJM and TJM. A chi-square test was used to assess the effect of the independent variable, instruction type (control vs. weak instructions vs. strong instructions) on the dichotomous composite variable measuring overall instances of juror misconduct, both internet-based and traditional (JM). Results indicate no significant differences among confederate reports of IBJM in the control instructions condition (n = 10) compared to the weak (n = 7), and strong (n = 6) instruction conditions, $\chi^2(2) = 1.99$, p = .37.

Exploratory GCS Correlations. Correlational analyses were used to explore the relationships among the Gudjonsson Compliance Scale (GCS), and each of the dependent variables: self-report of misconduct (IBJM-SR), case knowledge questionnaire identifying guilty knowledge about the case (CKQ-IBJM Guilty Knowledge), admissions of internet-based juror misconduct during deliberation (IBJM-CR Admissions) and the exploratory variables, internet-based juror misconduct (IBJM), traditional juror misconduct (TJM), and total juror misconduct (JM). Results indicate that there is a significant weak negative relationship between the GCS and the CKQ-IBJM Guilty Knowledge, $r(206) = -.16$, $p < .05$. Additionally, results revealed significant weak positive relationships between the GCS and IBJM, $r(206) = .16$, $p < .05$, and JM, $r(206) = .16$, $p < .05$. All other relationships were not significant, all ps > .05.

CHAPTER V

DISCUSSION

The primary purpose of this dissertation was to explore the efficacy of judicial instructions prohibiting internet-based juror misconduct (IBJM). Specifically, I tested if instances of IBJM can be reduced by enhancing judicial instructions with changes shown empirically to increase the likelihood of compliance as well as additions recommended by legal scholars. The secondary purpose was to investigate whether the Juror Internet Research Scale (JIRS; Knutson et al., 2016) predicts those who are more likely to disregard prohibitive jury instructions that admonish IBJM.

This study was conducted to fill a gap in judicial instruction research literature to address a growing problem faced by the U.S. court system, internet-based juror misconduct (IBJM; i.e., jurors going online during a case to communicate and/or conduct research about the case). This behavior exposes jurors to potentially biasing people and information. The information gained though IBJM may not be accurate and could negatively impact the outcome of trials (Morrison, 2011; St. Eve et al., 2012, 2014; Zimmerman, 2013). This problem is exacerbated by advances in computer and mobile technology making it easier and faster for jurors to engage in IBJM. Courts often attempt to prevent potential juror bias by issuing jury instructions prohibiting IBJM (Posner, 2016; St. Eve et al., 2012, 2014; Zimmerman, 2013). However, the efficacy of limiting instructions is questionable (Devine et al., 2001; Lieberman & Arndt, 2000; Posner, 2016; St. Eve et al., 2012, 2014; Zimmerman, 2013). Field research shows that jurors tend to adhere to judicial restrictions (St. Eve et al., 2012, 2014). Contrary, laboratory research shows that jurors

tend to disregard prohibitive judicial instructions (Devine et al., 2001; Lieberman & Arndt, 2000: Steblay, Hosch, & Culhane, 2006). However, to date laboratory research has not yet examined if jurors will comply with judicial instructions that prohibit IBJM (vs. inadmissible evidence). To fill this gap in the instruction literature, the current study was conducted to help clarify the extent of the problem of IBJM and how to potentially reduce the behavior.

The current experiment examined two ways of reducing IBJM, empirically enhanced instructions and the JIRS, in a two-stage mock jury trial. The mock trial utilized a real murder case and gave mock jurors a realistic temptation and opportunity to engage in IBJM. Mock jurors' IBJM was measured with confederate reports of admissions (IBJM-CR admission) and demonstrations of knowledge intentionally left out of the trial transcript; case knowledge that could exclusively be known only if a juror went online (IBJM-CR guilty knowledge). Mock jurors were also asked for self-reports of IBJM (IBJM-SR) and completed a case knowledge questionnaire (CKQ-IBJM). The CKQ-IBJM designed to measure individuals' knowledge of case facts intentionally left out of the trial transcript and found only online. These measures of IBJM were then used to investigate the first objective of this dissertation, namely, to empirically test the efficacy of prohibitive instructions intended to reduce IBJM. To investigate the second objective (i.e., testing if the JIRS can identify individuals who will engage in IBJM despite prohibitive judicial instructions) the JIRS was administered to mock jurors in a prescreen survey prior to the mock trial.

Main Findings

Objective 1: Hypotheses 1a – 1f. Objective one to empirically test the efficacy of prohibitive instructions intended to reduce online communication and research (IBJM) was

investigated with a series of hypotheses, 1a – 1f, about each of the types of reports of IBJM (IBJM-SR, IBJM-CR admissions, IBJM-CR guilty knowledge, and CKQ-IBJM).

Do the current CACM model instructions (weak) instructions work? Hypotheses 1b, 1d, and 1f. Hypotheses 1b, 1d, and 1f predicted fewer self-reports of IBJM (IBJM-SR) among jurors who received the weak instructions than those who received the control instructions. The results of the current experiment do not provide empirical support for this prediction. Hypothesis 1b, that there would be fewer self-reports (IBJM-SR) in the weak condition than in the control condition was not supported. As predicted, there were fewer self-reports of IBJM among those who received the weak instructions than those who received the control instructions, however that difference was not significant. Hypothesis 1d, that there would be fewer confederate reports of mock juror admissions of IBJM (IBJM-CR admissions) in the weak condition than in the control condition, also was not supported. Again, the pattern of responding is the same as seen for self-reports, there were fewer confederate reports of IBJM admissions among those who received the weak instructions than those who received the control instructions, but as before the effect was not significant.

Hypothesis 1f, that there would be fewer confederate reports of mock juror demonstrations of guilty knowledge (IBJM-CR guilty knowledge) in the weak condition than in the control condition, was also not supported. Contrary to the prediction, there were *more* confederate reports of demonstrated guilty knowledge (IBJM-CR guilty knowledge) among those who received the weak instructions than those who received the control instructions and that difference approached significance. This pattern was also seen in the CKQ-IBJM, the mean level of guilty knowledge among those who received the weak instructions was higher than those who received the control instructions, though not statically significant.

While this pattern was not predicted, it is also not a unique outcome. Past research has found that under certain circumstances jurors respond in the opposite manner than instructed, called a "backfire effect" (Cox & Tanford, 1989; Kramer et al., 1990; Lieberman & Arndt, 2000; Pickel, 1995). For example, in a civil case, Cox and Tanford (1989) found that mock jurors instructed to disregard limited-use evidence against the defendant were more punitive in their verdict decisions, award settlements, and negligence and character trait ratings than those not given an admonishment. In a criminal case, Kramer and colleagues (1990), found that mock jurors evaluated the defendant more negatively after exposure to factual pretrial publicity (PTP) but only when instructed to ignore it. Interestingly, this effect was not found when the PTP was emotional in nature and as such, did not translate to corresponding verdict decisions. In yet another criminal mock trial, Pickel (1995) found a backfire effect when mock jurors were instructed to disregard the prior conviction evidence, even when given legal reasoning for the admonishment. More specifically, mock jurors instructed to disregard the defendant's prior conviction when determining guilt did not comply resulting in more guilty verdicts than those who were not administered the admonishment.

Although the backfire effect has been found in the instruction literature, I did not predict its influence in this study largely because the effect has not been consistently found in past research (Devine, et al., 2001; Fein et al., 1997; Kassin & Sommers, 1997; Kramer, et al., 1990; Lieberman & Arndt, 2000). For example, though Pickle (1995) found a backfire effect when mock jurors were instructed to disregard prior conviction evidence, it did not happen when the instruction was to disregard hearsay evidence. Mock jurors in Pickel's (1995) study were given an instruction to disregard inadmissible evidence when making their verdict decisions including legal reasons for the admonishment. When the inadmissible evidence was a prior conviction and

likely perceived as reliable, mock jurors appeared to make a choice to disregard the prohibitive instruction. In contrast, when the inadmissible evidence was hearsay and not very reliable, mock jurors complied with the instruction to disregard it. Pickel (1995) supports the conclusion that the backfire effect does not always happen and the reliability of the information prohibited may influence its manifestation. Because of the inconsistent manifestation of the backfire effect it was unclear if the admonishment of IBJM in the weak condition would produce a backfire effect.

Taken together, the results of the current study seem to demonstrate that the judicial instructions currently recommended in federal courts (i.e., CACM model instructions; weak condition) are not better at preventing IBJM than judicial instructions that have no admonishment against IBJM (control condition). Examination of the differences among conditions of self-reports (IBJM-SR) and confederate reports of admissions (IBJM-CR admissions) show a clear pattern of responding in the predicted direction, which on the surface appear to support the belief that the current CACM model instructions used in the weak condition reduce IBJM. However, this difference was not statistically significant and when considering the demonstration of guilty knowledge during deliberations as reported by confederates along with the information from the CKQ-IBJM, a new pattern emerged. Both measures reveal more guilty knowledge when jurors received the weak instructions than when they received the control instructions. These conflicting results could be a demonstration of social desirability. Mock jurors might have been hesitant to admit committing IBJM during deliberations or on the self-report measure because they were instructed against it but were unable to hide their guilty knowledge during deliberations and on the CKQ. This possibility is discussed in more detail in the limitations section of this study.

Analysis of the combined measure of IBJM (IBJM-SR, IBJM-CR admissions, and IBJM-CR guilty knowledge) provided some clarification about the overall pattern of responding. Combined, there was only one fewer instance of IBJM when mock jurors received the weak instructions versus the control instructions, which was not significant. Considering this pattern of responding and the lack of empirical significance, the results of this study support the conclusion that the current CACM model instructions are not more effective at preventing or reducing IBJM than instructions with no admonishment of IBJM.

The fact that CACM instructions used in the weak condition were not more effective at reducing IBJM is not surprising when viewed through the lens of extant laboratory research. Laboratory research consistently shows that mock jurors often fail to comply with judicial instructions limiting juror use of information (Devine et al., 2001; Lieberman & Arndt, 2000; Steblay et al., 2006; Tanford, 1990), therefore, it is not unusual that mock jurors complied with the CACM model instructions (weak condition) at the same rate they did when given the instructions with no IBJM admonishment (control condition).

However, only 6% of mock jurors in both conditions reported to have engaged in IBJM, which was lower than would have been expected based on past findings. The results of the current research found that mock jurors complied with both instructions at higher rates than the extant instruction literature suggests is typical (Devine et al., 2001; Lieberman & Arndt, 2000; Steblay et al., 2006; Tanford, 1990). A meta-analysis of judicial instructions found that conviction rates (i.e., non-compliance) were about 45% among mock jurors who were exposed to inadmissible evidence (IE) and biased toward the prosecution (Steblay et al., 2006).

In addition, the current results found higher non-compliance rates (more instances of IBJM) than field research conducted by St. Eve and colleagues (2012, 2014). St. Eve and

colleagues found nearly the same rate of potential non-compliance in real jurors who received the CACM model instructions (8%). However, the jurors surveyed stated that though they were tempted to engage in social media communication, they did not go online, and 2% did not give a response, thus indicating that only 1% of respondents engaged in IBJM. This is a lower rate of non-compliance than found in surveys of legal professionals, 6% (Dunn, 2011) and 10% (Hoffmeister, 2012).

Rates of non-compliance as measured with instances of IBJM in the current experiment were lower than in laboratory research but seem to match those found in surveys of legal professionals field (e.g., Dunn, 2011 and Hoffmeister, 2012). This finding supports the conclusion that the low rates of non-compliance found by St. Eve et al. (2012, 2014) is likely not an accurate assessment of IBJM and points to the possibility that jurors in their studies were responding in a socially desirable way or the presence of a response bias such that only those who did not go online responded to the surveys.

It is important to note that the extant body of instruction literature (laboratory experiments) primarily focuses on admonishment of inadmissible evidence such as pretrial publicity and statements made in court (Devine et al., 2001; Lieberman & Arndt, 2000; Steblay et al., 2006; Tanford, 1990) and has not investigated the focus of the current experiment, admonishment IBJM. Therefore, the results of the current experiment might provide initial evidence that mock jurors are more likely to comply with instructions admonishing juror misconduct than those that prohibit the use of inadmissible evidence potentially advancing and informing theories of why limiting instructions are ineffective.

These findings, if reliably replicated, would help to clarify why and when jurors disregard prohibitive judicial instructions. The current study found that the CACM instructions

prohibiting IBJM performed nearly the same as instructions with no such admonishment. This effect seems to be driven by a nearly significant backfire effect. In the current data were *more* confederate reports of guilty knowledge demonstrated by the mock jurors who received the CACM model instructions (weak) that admonish IBJM than those who received the control instructions that did not mention IBJM. Several theories about the ineffectiveness of prohibitive instructions and the backfire effect might explain these results.

Lieberman and Arndt (2000) theorize that the backfire effect occurs because the instructions bring the prohibited information to the front of the mock jurors' mind making it more salient, memorable and influential. This assertion is logical and probably correct considering that salient information captures individuals' attention which is the first step in the memory process, perception and encoding of information (Coon, Mitterer, & Martini, 2019). However, if it was simple salience driving this backfire effect it should also have affected more participants in the weak condition who got the same instruction. Though, salience does seem to be a first step in more complex mental processes of other theories. Ironic process theory (IPT; Wegner, 1994), flexible correction model (Wegener & Petty, 1997), and reactance theory (RT; Brehm, 1966) could provide other explanations of this backfire effect. These three theories account for the backfire effect by predicting that individuals will engage in behavior more when it is prohibited thus making it salient to the individual. Yet all three differ in their explanations of the cause of the backfire effect.

Ironic process theory posits that when individuals are required to suppress a thought or behavior two mental processes are engaged; 1) a conscious operating process promotes the intended change by searching for thoughts or behaviors that are congruent with the desired mental state; and 2) an unconscious monitoring process tests whether the operating process is

successful in controlling thoughts or behaviors (Wegner, 1994). These processes work in tandem with the operating process requiring more cognitive effort. When cognitive capacity is taxed for any reason the monitoring process is more pronounced making the individual *more* sensitive to the suppressed thoughts or behaviors. Thus, the suppressed thought or behavior is considered or expressed more.

Applied to the current study, it could have been the case that mock jurors instructed to not go online were not able to suppress the prohibited behavior and engaged in IBJM more than mock jurors who did not receive the admonishment. Ironic process theory suggests that the instruction prohibiting IBJM would have made the behavior more salient and gave mock jurors a mental goal to suppress it, thus requiring more cognitive resources. Because suppressing IBJM takes more cognitive effort, individual differences in cognitive control or increase demands on mock jurors' cognitive resources then allow the suppressed thoughts and behaviors to manifest. Further, ironic process theory predicts that mock jurors who did not receive an admonishment of IBJM did not go online because they did not activate any potential suppressed behaviors that could manifest.

However, if ironic processes are the cause of the backfire effect in this study, then it should have manifested in the strong condition as well. Mock jurors in the strong condition also received an admonishment of IBJM, which in theory should have triggered ironic processes resulting in more instances of IBJM, (i.e., a backfire effect). This result was not found supporting the conclusion that ironic processes probably did not account for this effect in the current study. In fact, there were fewer confederate reports of guilty knowledge among mock jurors who received the strong instructions than the weak. In addition, there were the same number of confederate reports of guilty knowledge among mock jurors who received the strong instructions

and the control instructions. However, since we did not examine individual differences in working memory capacity, future research should assess such a process driven juror decision.

Another possible reason for the backfire effect found in this study could be due to mock jurors overcorrecting for potential biases implied in the CACM model instructions (weak). Wegener, Kerr, Fleming, and Petty (2000) suggest that the flexible correction model (FCM; Wegener & Petty, 1997) can explain the phenomena of the ineffectiveness of limiting instructions and the backfire effect. The flexible correction model (FCM) of bias correction theorizes that individuals hold certain beliefs about the biasing effect of environmental factors on their perceptions (i.e., naïve theories). In turn, individuals use these naïve theories to correct against a bias if they have the motivation and ability. Sometimes, individuals' incorrectly perceive or believe the biasing effects are stronger and overcorrect against them (Wegener & Petty, 1997; Wegener, et al., 2000). If Wegener and colleagues (2000) are correct and FCM accounts for juror non-compliance and the backfire effect, the current experiment should support this theory.

For the FMC to explain the results of the current experiment, first individuals need to be made aware of a potential bias which might have happened in the current experiment when mock jurors received the weak instructions. Those given the weak instructions were prohibited from engaging in IBJM. However, there was no reason given for the admonishment. Instead it was implied that going online would be undesirable or biasing. Additionally, mock jurors who received the control instruction did not receive an admonishment of IBJM. According to FMC, it is possible that the admonishment of IBJM made going online salient to the mock jurors in the weak condition, potentially activating their naïve theories. Furthermore, FCM predicts that some mock jurors may have held naïve theories contrary to the instruction. Thus believing that

engaging in IBJM would be helpful instead harmful and subsequently going online. Whereas, for mock jurors who did not receive the prohibitive instruction, IBJM was not mentioned and therefore not made salient. FCM suggests that the naïve theories of these mock jurors were not activated thus there was nothing for them to correct against and they did not engage in IBJM.

In other words, FCM predicts that mock jurors will violate a judicial admonishment prohibiting IBJM if the behavior is made salient thus triggering naïve theories. Though they also need to be motivated by those theories (i.e., believe it will help and is not biasing) and able to make the effort to engage in IBJM. The FCM seems to account for the nearly significant backfire effect observed in the current study. It can also explain why, though in the same instruction condition, some mock jurors engaged in IBJM and others did not. Individual differences in naïve theories could have resulted in varying levels of motivation to correct against the bias implied in the instruction. The FCM provides a possible, yet unlikely, explanation for the presence of the backfire effect found in the weak condition. If the FCM is correct and the mere suggestion that IBJM is biasing triggered a backfire effect, the same response pattern would be expected in the strong condition where it was explicitly stated. Yet, there was no backfire effect found in the strong condition thus minimizing support for the FCM.

Reactance theory (Brehm, 1966) also predicts the backfire effect and states that individuals become psychologically aroused when their behavioral freedom is threatened. As a result, individuals are motivated to regain their freedom by engaging in the prohibited behavior more than if it was permitted. In relation to the current experiment, reactance theory suggests that in the weak condition, some mock jurors may have felt their freedom to engage in a common behavior was threatened when told not to go online. Then, according to reactance theory, those mock jurors reacted thus engaging in IBJM to regain their freedom. This is a reasonable assertion

considering that 77% of Americans go online each day and 26% report that they go online "almost constantly" (Perrin & Jiang, 2018). Reactance theory also explains why the backfire effect did not occur in the strong condition. Mock jurors in the strong condition were adamantly admonished against IBJM but were also given reasons for the admonishment and consequences of non-compliance. This explanation for the admonishment may have moderated the threat to mock jurors' behavioral freedom. Said another way, perhaps that by telling mock jurors the reasons and consequences, they realized that the intent of the admonishment was not to restrict their freedom. Subsequently, assuaging mock jurors' fears thus curbing the need to react and regain their behavioral freedom. Reactance theory is the most parsimonious and seems to be the most logical explanation of the backfire effect found in the current experiment.

Are empirically enhanced (strong) instructions better? Hypotheses 1a, 1c, and 1e.

Hypothesis 1a, 1c, and 1e predicted that issuing empirically enhanced instructions (strong condition) to jurors during the mock trial would result in fewer instances of IBJM compared to the CACM model instructions currently recommended in federal courts (weak condition) and instructions with no admonishment of IBJM (control condition). This study found mixed support for these predictions.

The first part of hypothesis 1a, that there would be fewer self-reports (IBJM-SR) of IBJM in the strong than in the weak condition was not supported. There was an equal number of self-reports of IBJM in the strong and weak conditions. The second part of hypothesis 1a appears valid because there were fewer self-reports (IBJM-SR) in the strong condition than in the control condition. However, this difference was not statistically significant.

The first part of hypothesis 1c, that there would be fewer confederate reports of mock juror admissions of IBJM during deliberation (IBJM-CR admissions) in the strong condition than

in the weak was also not supported. Although there were no confederate reports of IBJM in the strong condition, there was only one in weak condition and that difference was not significant. The second part of hypothesis 1c was supported, there were no confederate reports of IBJM admission (IBJM-CR admissions) in the strong condition which significantly differed from the control condition.

The first part of hypothesis 1e, that there would be fewer confederate reports of mock juror demonstrations of guilty knowledge during deliberation (IBJM-CR guilty knowledge) in the strong condition than in the weak was very nearly supported. There was only one confederate report of demonstrated guilty knowledge (IBJM-CR guilty knowledge) in the strong condition and five in weak condition and that difference was almost significant. The second part of hypothesis 1c was not supported. There were equal confederate reports of demonstrated guilty knowledge (IBJM-CR guilty knowledge) in the strong condition and the control condition. The first part of hypothesis 1e was also tested with mock jurors' guilty knowledge measured by the CKQ-IBJM questionnaire. It was predicted that mock jurors in the strong condition would score lower than those in the weak and control conditions, but no significant differences were found to support this hypothesis.

Considered collectively, the results of the current study provide initial support that empirically enhanced judicial instructions (strong) are more effective at reducing IBJM than the CACM model instructions (weak) currently used in federal courts and instructions with no admonishment of IBJM (control). Examination of differences among the strong and weak conditions of self-reports (IBJM-SR) and confederate reports of admissions (IBJM-CR admissions) show a clear pattern of responding which was not predicted; such that they are nearly equal and not significantly different. This finding could support the conclusion that the

enhanced instructions and CACM model instructions are equally effective at reducing IBJM. However, the picture changes when adding the confederate reports of guilty knowledge.

Confederate reports revealed *more* demonstrations of guilty knowledge when jurors received the weak instructions than when they received the strong instructions and that difference is nearly significant. These results could be a demonstration of social desirability such that mock jurors might be hesitant to admit committing IBJM in deliberation or on the self-report measure but were unable to hide their guilty knowledge in deliberation. Though, if this effect was purely driven by social desirability of not wanting others to know that one violated the judge's instructions then this pattern should also have been seen in the strong instruction condition but was not. This provides some initial evidence that the empirically enhanced instructions (strong) are more effective at reducing IBJM than the CACM model instructions (weak) because that is the only difference between these conditions.

I postulated that making changes to the instructions currently recommended for use in Federal courts might improve juror compliance. This prediction was based on the existing instruction literature that reveals that jurors selectively comply with judicial instructions. Past research reveals that mock jurors comply with limiting instructions when given reasons for the admonishment. For example, the information may be biased, false, misleading (Kassin & Sommers, 1997), and there might be ulterior motives behind its publication such as a desire to bias public opinion (Fein et al., 1997). Additionally, instructions were amended based on the recommendation of legal scholars (e.g., Aaronson & Patterson, 2013; Hoffmeister, 2012; Simpler, 2012). They speculate that jurors informed of the potential consequences of violating judicial instructions would be more inclined to comply. Last, the instructions were made less complex and easier to understand to capitalize on research that indicates jurors are more likely to

comply with instructions they comprehend (Baguley et al., 2017). It is likely that the above changes made to the instructions are the reasons for fewer confederate reports of guilty knowledge in the strong condition.

When examining the differences among the strong and control conditions of self-reports (IBJM-SR) and confederate reports of admissions (IBJM-CR admissions) a pattern of responding was revealed in the predicted direction, such that there were fewer self-reports and confederate reports of IBJM admissions. However, contrary to the predicted pattern, there were equal instances of confederate reports of demonstrated knowledge (IBJM-CR guilty knowledge). It is unclear why there were no more confederate reports of guilty knowledge in the control condition. Mock jurors in the control condition did not receive any admonishment of IBJM and therefore should have been more likely to go online than those instructed not to. This result is not likely due to ironic process or reactant theory because it is not driven by more instances of this type of IBJM in the strong condition but by fewer in the control. In other words, in the strong condition there was only one instance of self-reported IBJM (IBJM-SR), zero confederate reports of admissions (IBJM-CR admissions), and likewise only one confederate report of guilty knowledge (IBJM-CR guilty knowledge). Conversely, in the control condition there were four self-reports of IBJM (IBJM-SR), five confederate reports of admissions (IBJM-CR admissions), and only one confederate report of guilty knowledge (IBJM-CR guilty knowledge).

Analyses of the combined measure of IBJM (IBJM-SR, IBJM-CR admissions, and IBJM-CR guilty knowledge) revealed that overall, there were fewer instances of IBJM when jurors received the strong instructions than weak instructions and that difference was almost significant. Furthermore, there were significantly fewer instances of IBJM when jurors received the strong instructions than the control instructions. When considering all reports of admissions and guilty

knowledge, the pattern of responding and the empirical significance of these patterns, the evidence supports the supposition that empirically enhanced instructions are more effective at preventing or reducing IBJM than current CACM model instructions and instructions with no admonishment of IBJM.

The current study sought to not only investigate if judicial instructions currently recommended in federal courts work to reduce IBJM (hypotheses 1b, 1d, and 1f) but also to determine if instructions could be enhanced by making changes that are empirically supported to improve likelihood of juror compliance (hypotheses 1a, 1c, and 1e). Said another way, a main goal of this research was to make empirically supported changes to the current CACM model instruction to improve their efficacy. The extant body of instruction literature converges on the finding that jurors do not comply with judicial instructions except under certain conditions (Devine et al., 2001; Lieberman & Arndt, 2000; Steblay et al., 2006; Tanford, 1990).

The current experiment tested and found initial support for making empirically supported changes to the current CACM model instruction recommended in Federal courts. Primary alterations include making instructions easier for jurors to understand and giving more examples of prohibited activities, technologies, devices and websites (Baguley et al., 2017; Posner, 2016). Enhanced instructions also gave jurors reasons for the admonishment. Mock jurors were informed that information obtained online might be unreliable, false, incomplete or biased (e.g., Kassin & Sommers, 1997). Additionally they were informed that there might be ulterior motives behind information published online such as a desire to bias public opinion (Fein et al., 1997).

The current experiment also supports legal scholars' recommendation of informing jurors of potential consequences of IBJM (Aaronson & Patterson, 2013; Hoffmeister, 2012; Simpler, 2012). The results of the current study provide initial evidence that such changes appear to be at

least somewhat effective. The empirically enhanced (strong) instructions were more effective at reducing IBJM than both the current CACM model instructions (weak) and the instructions with no IBJM admonishment lend support to and extend the current body of instruction literature.

The finding of fewer instances of IBJM when mock jurors were administered the enhanced instructions, compared to the CACM model instructions and control instructions, best supports reactance theory (Brehm, 1966). Recall that reactance theory predicts that mock jurors will respond in a manner opposite of an instruction if they feel their behavioral freedom is threatened (Brehm, 1966). It is likely that giving mock jurors reasons for the admonishment and consequences for violations reduced the perceived threat to behavioral freedom thus reducing the attractiveness of engaging in IBJM. Ironic process theory (Wegner, 1994) and the flexible correction model (Wegener & Petty, 1997) also predict an increase in prohibited behavior also but these theories do not explain why the enhanced instructions reduced this tendency. The enhanced instructions issued a stronger admonishment which both ironic process and FCM theories predict would increase IBJM instead of reducing it. The issuance of an explanation for the admonishment and consequences of non-compliance might likely make the instruction and IBJM more salient in mock jurors' thoughts and in the case of ironic processes, harder to suppress. In the FCM, if mock jurors hold naïve theories that IBJM is helpful instead of harmful, explaining the reasons for the instruction and consequences of non-compliance might help reframe naïve theories, it is likely that there would be *more* IBJM in the strong condition than the weak because of the stronger admonishment.

Objective 2: Hypotheses 2a – 2d. Objective two to investigate whether the Juror Internet Research Scale (Knutson et al., 2016) predicts those who will not comply with prohibitive instructions that admonish online communication and research (IBJM) was tested with a series of

hypotheses, 2a – 2d, that examined the relationship of the JIRS scores with self-reports of IBJM (IBJM-SR), mock jurors' guilty knowledge measured by the Case Knowledge Questionnaire (CKQ-IBJM) and confederate reports of mock jurors' admissions of IBJM (IBJM-CR admissions), and mock juror compliance measured by the GCS. If the JIRS is capable of identifying non-compliant jurors, then it should positively correlate with measures of IBJM and negatively correlate with jurors who are high in compliance with authority. The current study found no evidence to support that individuals' scores on the JIRS will predict who will engage in IBJM. No relationship was found between the JIRS and self-reports of IBJM (hypothesis 2a) or with scores on the CKQ-IBJM (hypothesis 2b).

A weak significant relationship was found between the JIRS and confederate reports of IBJM admissions (hypothesis 2c) however it is in the opposite direction than predicted. Contrary to the stated purpose of the JIRS, *lower* scores were found to be weakly associated with engaging in IBJM. As predicted, the JIRS was negatively related to individual levels of compliance such those who scored higher on the JIRS were lower in compliance and scored lower on the GCS (hypothesis 2d). This is a curious finding because the JIRS was found to be related to compliance and *positively* related to reports of IBJM and therefore was not found to be a predictor of non-compliant mock jurors in the current experiment.

Overall, the current study did not find evidence that the JIRS can identify jurors more likely to conduct internet research. In fact, the only significant association was with *not* engaging in IBJM, suggesting the JIRS achieves the opposite of what it was designed. Instead it may predict those who are more likely to *comply* with judicial instructions. This interpretation should be considered with *extreme* caution because this is the first investigation of the JIRS. Further, the JIRS was negatively related to the GCS, a measure of compliance with authority, as predicted.

This finding indicates that higher scores on the JIRS are related to non-compliance and thus supports its theoretical purpose. The negative relationship of the JIRS with reported admissions of IBJM is also in direct contrast with negative correlations found by Knutson et al., (2016) when developing the JIRS. They found that the JIRS negatively correlated with obedience to authority and self-control.

To follow up this curious finding, correlation analyses were conducted on the GCS and IBJM-CR admissions. Results indicated a significant positive relationship, such that higher scores on the GCS (more compliance) were associated with reports of engaging in IBJM (non-compliance). This finding is incongruent with extant research on the GCS which has been shown to reliably predict obedience and compliant behavior (vs. non-compliance) (Gudjonsson, 1991; Gudjonsson & MacKeith, 1990; Richardson & Kelly, 2004). Though not likely, these results might demonstrate that high levels of compliant behavior and obedience are not necessarily needed for individuals to comply with judicial instructions of this nature. Such a result would be incompatible with obedience theory and research (Milgram, 1963; 1965) which demonstrates that individuals typically comply with the requests of authority.

It is possible that the data missing from the JIRS and GCS might be part of the reason for the contrary results of the JIRS. Due to a technical issue, 48 participants did not complete the JIRS and GCS during the prescreen, and another six completed all measures of the prescreen except the JIRS. Though, the overall missing values analysis (MVA) indicated that data missing from the experiment is missing completely at random (MCAR), follow-up Little's MCAR analyses were conducted on the JIRS and the GCS individually. These analyses revealed that the missing data on the JIRS is not missing completely at random, though it is on the GCS. Perhaps part of the reason for the curious results of the JIRS is due to six individuals who took the

prescreen but did complete the JIRS. Reactance theory of juror violations of limiting instructions might provide a plausible explanation for the why six mock jurors did not complete the JIRS. The JIRS asked participants their opinions about engaging in various activities constituting IBJM. These items may have triggered a feeling of threat to behavioral freedom about being able to use the internet during a trial and in turn prompted these six participants to refuse to answer the questions. Because the data missing from these participants may have provided an inaccurate assessment of the predictive ability of the JIRS future research should test the JIRS again, administering it both before and after a mock trial.

Finally, the findings regarding the JIRS are not likely due to socially desirable responding or influence of the mock trial because participants filled out the JIRS and GCS questionnaires in a prescreen survey at least 1 week prior to participation in the current experiment. However, there is a possibility that the six individuals who did not complete the JIRS did not want to take a chance giving socially undesirable answers so declined to respond. Nonetheless, it is unclear why the JIRS did not perform as designed and was actually related to reports of *not* engaging in IBJM, but this result clearly demonstrates that more research is needed on the JIRS.

Implications, Limitations & Future Directions

The first to investigate IBJM instructions. The findings of the current study extend the current body of instruction research by being the first to experimentally investigate mock juror compliance with instructions prohibiting IBJM. The existing instruction research typically examines juror compliance with instructions prohibiting the use of inadmissible information (Devine et al., 2001; Steblay et al., 2006; Tanford, 1990) but none have investigated instructions admonishing IBJM. The results of the current study indicate that mock jurors comply with judicial instructions prohibiting IBJM misconduct at lower rates than found in the instruction

literature. This could mean that mock jurors evaluate prohibitive instructions differently depending on what behavior is being admonished; and mock jurors use that evaluation to decide whether or not to comply. This not only provides further support of the instruction literature that posits that jurors selectively comply with prohibitive instructions, but it also expands upon the conditions for which these exceptions are made.

Limitation: First investigation of IBJM. A primary limitation of the current experiment lies in the fact that no known previous research has attempted to identify and measure IBJM. The trial stimuli, materials and methodology used in the current experiment drew upon existing methodologies. However, the current experiment did not utilize guilty verdicts as a measure of juror misconduct because the use of confederates during deliberations to find instances of IBJM and validate self-reports, was expected to bias verdicts. As the first investigation of IBJM and how to reduce it, this experiment sought to first determine how to identify and measure IBJM. As a result, I had to expand and alter the stimuli, materials, and measurement instruments. The current study indicates that self-reports can be used to measure IBJM but need to be validated along additional measures. Future research should replicate current findings with additional materials and means of measuring IBJM.

Rates of IBJM. The rates of non-compliance among mock jurors in the current study were higher than in St. Eve et al.'s, (2012, 2014) field research, but within the same range as found by other field research (e.g., Dunn, 2011; Hoffmeister, 2012). The similar rate of non-compliance in the current study supports the field research by replicating baseline rates of non-compliance. The similar non-compliance rates also indicate that the current experiment was successful at obtaining a fairly accurate measure of IBJM through confederate- and self-reports. It is important to note that mock jurors could have succumbed to socially desirable responding

and failed to self-report true rates of IBJM, as seen in St. Eve et al., (2012, 2014). Therefore, IBJM could be higher than mock jurors actually self-reported, and non-compliance rates might resemble those found in the instruction literature more closely. Future research should investigate IBJM with more objective measures such as guilty verdicts and/or polygraph examination to validate rates of IBJM as discussed below.

Limitation: Self-report measures and socially desirable responding. The self-report type of measurement in the current study is a limitation because of the potential of juror providing socially desirable responses, (i.e., not admitting IBJM). Socially desirable responding occurs when participants respond to experimental stimuli and questionnaires in a way that portray themselves in an overly positive light, accepting desirable statements and attributions and reject undesirable ones which can bias research results (Edwards, 1957; Paulhus, 2002). It was anticipated that it would be socially undesirable to admit to violating judicial instructions. In an effort to account for socially desirable responding the current study relied on the CKQ guilty knowledge questionnaire and confederate reports of guilty knowledge to find and confirm IBJM admissions elicited during deliberations or on the self-report questionnaire.

In an attempt to reduce socially desirable responding this study relied on the principles of social influence and conformity theories (Asch, 1956; Cialdini & Griskevicius, 2010) by planting one confederate in each jury group of 1-6 participants. During deliberations, the confederates admitted to violating the judge's instructions, thus making it seem more socially acceptable to participants to admit wrong doing as well. The elicited confessions of IBJM were then verified by self-reports on a questionnaire, thus advancing these theories. However, the confederate reports of guilty knowledge found additional instances of IBJM which mock jurors did not admit on the questionnaire. These results point to the conclusion that efforts to eliminate socially

desirable responding were not entirely successful. Furthermore, the CKQ failed to find these socially desirable responses as designed.

One possible reason that socially desirable responding was not eliminated is that perhaps mock jurors did not feel truly anonymous. According to the literature maintaining participant anonymity helps to lower social desirability and social anxiety (Joinson, 1999). Although, I tried to maintain juror anonymity through unique identifiers, it is not known if these efforts were successful in ensuring jurors felt anonymous.

Verdict decisions. To address these limitations future research should investigate IBJM with more objective measures such as mock juror verdicts. Research on limiting instructions typically uses verdicts to determine if mock jurors comply with judicial instructions prohibiting the use of information deemed inadmissible (Devine et al., 2001; Fein et al., 1997; Kassin & Sommers, 1997; Kramer et al., 1990; Lieberman & Arndt, 2000; Steblay et al., 2006;). Pretrial publicity and other information deemed inadmissible by the judge is shown to bias mock jurors and subsequently influence their verdict decisions (Devine et al., 201; Lieberman & Arndt, 2000; Steblay et al, 2006). Furthermore, if the information mock jurors receive is negative or prejudiced against the defendant, verdict decisions are biased toward the prosecution, resulting in more guilty verdicts and punitive sentences (Kramer et al., 1990; Steblay et al., 2006; Ruva et al., 2007). Because exposure to negative pretrial publicity tends to bias mock jurors toward guilty verdicts it is reasonable to conclude that jurors could also be prejudiced in the same direction by information obtained while engaging in IBJM.

In accordance with cognitive theory that individuals do not or cannot accurately report their cognitive processes (Nesbitt & Wilson, 1977), Fein and et al. (1997) found that on self-reports, mock jurors claimed that the inadmissible evidence had little influence on them. Yet,

mock juror verdict decisions seemed to be biased against the defendant. This might account for the low number of instances of IBJM in the current experiment. Perhaps mock jurors simply did not accurately report their thought processes and experiences. While it is difficult to misinterpret whether one sought out information or communicated online about the case, mock jurors in the current study may have underestimated the influence of such actions and thus not reported them. Mock jurors in the current study may not have reported going online because they mistakenly thought they were not biased by the obtained information. It is likely that using guilty verdicts as a measure of IBJM may produce a more accurate account of the phenomenon.

Psychophysical detection of deception. Another way to measure whether mock jurors are truthfully self-reporting IBJM would be to use psychophysical detection of deception (PDD) more commonly known as polygraphy or lie detection. PDD involves the recording of autonomic nervous system indices such as respiratory rate, electrodermal conductivity, as well as cardiovascular and vasomotor activity while the asking the subject a series of yes/no questions about the individual's credibility (Honts, 1994; National Research Council, 2003). The goal is to detect deception through analysis of changes or abnormalities in these indices after individuals respond to questions. Changes in these physiological responses are not typically within the control of the individual, therefore increases in heart rate, respiration and skin conductivity are indicative of heightened emotional arousal and deception (National Research Council, 2003). Though some research indicates this is not always the case. PDD measures such as the polygraph are not always accurate in detecting deception because the indices can be influenced by factors other than lying (Grubin, Kamenskov, Dwyer, & Stephenson, 2019; Honts, 1994; National Research Council, 2003; Nelson, 2015). Problems with polygraph accuracy tend to occur when the examiner is inexperienced or incompetent (Grubin, et al., 2019; Honts, 1994; National

Research Council, 2003; Nelson, 2015). The respiratory rate has been shown to be under the most volitional control of the three primary indices; heart rate, skin conductivity and respiratory rate. Therefore, rate of respiration the easiest of the indices to manipulate for individuals motivated to try to beat the polygraph test (Nelson, 2015). To combat such attempts of manipulating polygraphs, skilled examiners have adapted testing techniques making results more reliable (Nelson, 2015).

PDD is commonly used in the criminal justice system by police departments to support investigations, in pre-employment screening of law enforcement and national security officers, and occasionally as evidence in court (Honts, 1994; National Research Council, 2003). Additionally PDD examination is used to screen private sector and government employees in security-sensitive positions (National Research Council, 2003). The National Research Council (2003) reviewed 57 studies on PDD accuracy in detecting deception and its use as a security screening measure. The council concluded that PDD examination can identify deception in laboratory studies at higher than chance rates even though its accuracy is below acceptable levels needed to identify security threats among government workers (National Research Council, 2003). Honts (1994) echoes this conclusion that PDD examination is not as accurate in applied settings as it is in the laboratory. In addition, individuals are more likely to reveal unknown or undisclosed information during a polygraph examination (Grubin, et al., 2019). Because PDD examination can detect deception relatively well (i.e., above chance) in laboratory settings and individuals disclose previously unknown information during testing, it could be a good measure of IBJM. PDD examination could be an effective method for future researchers to identify mock jurors who violate judicial instructions prohibiting IBJM. Combined with guilty verdict and self-

reports, PDD examination might offer a more accurate picture of the level of mock juror engagement in IBJM.

Empirically enhanced instructions. More importantly, the current study extends the current body of instruction research by finding initial support for recommending empirically enhanced judicial instructions instead of the CACM model instructions currently recommended for use in federal courts. The current experiment found that empirically enhanced instructions were more effective at reducing IBJM than CACM model instructions and instructions with no admonishment of IBJM. Furthermore, CACM model instructions were not found to be any more effective than instructions with no admonishment of IBJM. These results provide some initial evidence that the efficacy of judicial instructions were improved.

The enhanced instructions used in the current experiment reduced instances of IBJM to less than 1% which could have a much-needed positive impact in the courtroom if this effect is found to be reliable. A reduction of IBJM to 1% has the potential to save taxpayers tens of thousands of dollars in the cost of retrying cases and help reduce the number of cases needing a jury trial in an already clogged court system. According to the most recent Bureau of Justice Statistics study on legal expenses, in 2015, taxpayers spent approximately $61.2 billion on court costs to prosecute and provide public defense of various types of cases (Bronson, 2018). The current study found support for IBJM rates reported field research ranging from 6% (Dunn, 2011) to 10% (Hoffmeister, 2012). Using the more conservative percentage, if IBJM occurs in 6% of court cases annually, and those cases had to be retried, that would represent 6% of the annual court costs or $3.67 billion annually. A reduction of IBJM to 1% would reduce that amount to $612 million annually. Though not all instances of IBJM result in retrials. According to a Reuters Legal survey, nationwide about 31% of 90 verdicts challenged due to IBJM were

vacated and new trials conducted (Grow, 2010). On the more conservative side, if only 31% of the cases in which IBJM occurs (6%) are retried that would conservatively estimate court cost to retry cases to be around $1.14 billion annually. Moreover, if the enhanced instructions prove to reliably reduce IBJM to 1%, this could result in a reduction in the cost of retrying cases of IBJM to $189.7 million, saving U.S. taxpayers $950.3 million annually.

To put this into perspective, the Georgia v. Harris case used in the current study was a murder trial which according to Hunt, Anderson, and Saunders (2017), costs $22,000 to $44,000 in 2010 dollars to prosecute. Adjusted for inflation that would be $25,800 to $51,700 in 2019 dollars (Inflation Rate between 2010-2019, 2019). If a retrial would have been needed in the Harris case it could have cost tax payers another $51,700 or more considering that the initial trial was 23 days long. Luckily for residents in Cobb County, Georgia, this was not the case. Tax payers in Nelson County, North Dakota were not so fortunate.

On March 1, 2019 the conviction of a man from Lisbon, ND was dismissed, and a new trial granted (Henson, 2019). The man, Jordan Borland, was convicted of vehicular homicide for killing a passenger in a drunk driving accident in 2017. Despite being given judicial instructions that prohibited jurors from seeking information from any source outside the courtroom, including a specific admonishment forbidding internet research, a juror searched online for the legal definition of the term, “Reasonable Doubt” and shared the definition with other jurors during deliberations. This seemingly innocent action contaminated the jury. As a result the judge vacated the conviction and called for a new trial that started on July 8, 2019 (Williams, 2019). Using Hunt and colleagues’ (2017) cost estimate adjusted for inflation, this will likely cost ND taxpayers at least another $25,000.

Even though these initial results are exciting, they should be interpreted with caution. This is the first time IBJM has been measured and tested in an experiment. These results need to be replicated for further validation and confidence in the efficacy and reliability of enhanced instructions in reducing IBJM.

Lack of support for the JIRS. The last main finding of the current experiment was the lack of support for the JIRS as a tool for predicting non-compliant jurors. In fact, the results of the current experiment found initial evidence that it may do the opposite, identify those who are compliant. These results should be interpreted with *extreme* caution for a few reasons. First, this is the first known attempt to validate the JIRS in a true experiment. Second, there was a technical problem with the prescreen resulting in 48 mock jurors participating in the study without taking the JIRS or the GCS. Furthermore, six participants did not answer any items on the JIRS, even though they completed all other prescreen measures. A follow-up missing data analysis indicated these missing data could be a part of the problem. Because of these limitations it is highly recommended that future research replicate the current experiment and findings before a true determination of the JIRS' predictive ability can be made.

General limitations. ***Small sample size.*** Another limitation is the small sample size. Though the current experiment determined sample size with an a priori power analysis based on a small to medium sized effect, the number of instances of IBJM were fewer than anticipated thus limiting the generalizability of the results. Perhaps the small sample size prevented detection of differences between the CACM model instructions (weak condition) and instruction with no admonishment of IBJM. Additionally, the small sample size may have also contributed to *not* finding support of the JIRS as a predictor of non-compliance with instructions. It is likely that there would be more instances of IBJM in a larger sample which might be needed to find the true

effect of the JIRS. Future research should recruit a larger sample of participants to better assess the efficacy of the instructions and the predictive ability of the JIRS.

College-aged convenience sample. A final limitation is the college-aged convenience sample used in this experiment. Mock jurors in this experiment were recruited from undergraduate psychology majors at the University of North Dakota. It is reasonable to conclude that this sample and the population it was drawn from, are likely not representative of jurors pulled from the community which potentially could restrict generalizability of the current results. Yet, research comparing student and community mock juror samples demonstrate that they do not differ in their comprehension of or the effect of judicial instructions (Bornstein, 1999). Nevertheless, it is possible that college-aged psychology students could differ in their propensity to conduct IBJM, especially considering that age group tends to spend more time online than their older, community counterparts (Perrin & Jiang, 2018).

Furthermore, the use of a university student sample is likely to increase the chances of participant crosstalk in which participants who have been through the experiment discuss it with other potential participants (Edlund, Sagarin, Skowronski, Johnson, & Kutter, 2009). However, in accordance with recommendations of Aronson, Ellsworth, Carlsmith, and Gonzales (1990) and Cialdini, (2001) participants in this study were warned of the detrimental effect of sharing details of the experiment and asked to verbally commit to *not* discussing information about the study with other people. Research shows that precautions reduce participant crosstalk (Edlund et al., 1990) thus the likelihood of this phenomenon effecting the results of this study were minimal.

For these reasons, it is recommended that future research reproduce this experiment with a sample of jury-eligible community members to improve generalizability to other populations.

Conclusion

This dissertation successfully investigated two ways of reducing IBJM, judicial instruction prohibiting IBJM and identifying non-compliant juror with the JIRS, thus filling gaps in the instruction literature and addressing questions posed in the legal literature. This study extends instruction literature being the first to test the efficacy of instructions specifically admonishing IBJM. This study is the first to show that judicial instructions that prohibit IBJM currently used in federal courts (CACM model instructions) performed no better than instruction with no admonishment of IBJM. Furthermore, this experiment demonstrated that judicial instructions prohibiting IBJM were improved upon, finding that mock jurors engaged in IBJM less often when they received empirically enhanced instructions than those who got the CACM model instructions.

The results of the current study provide initial support for the use of enhanced instructions instead of the CACM model instructions currently used. Another interesting finding of this study is that mock jurors complied with IBJM prohibitive instructions at higher rates than found in the instruction research that prohibit the use of inadmissible information. Moreover, the rates of IBJM found in this experiment were in the range of non-compliance found in field research, excluding St. Eve et al. (2012; 2014) suggesting that real and mock jurors are likely to comply with judicial instructions prohibiting IBJM at a higher rate than instructions prohibiting the use of inadmissible information. Additionally, this research was the first to empirically test the predictive ability of the JIRS but was unable to find support for its use in identifying jurors who are will conduct online research.

Last, this research informs current theories of limiting instruction ineffectiveness, largely supporting reactance theory. Ironic process theory, flexible correction model, and reactance

theory all predict that mock jurors would violate prohibitive judicial instructions and engage in IBJM. However, reactance theory is the only one that seems able to account for the backfire effect found and fact that IBJM was lower in the strong condition. Reactance theory states that individuals feel threatened when their behavioral freedom is limited (e.g., prohibiting online activities). In turn this threat motivates them to engage in the prohibited behavior more than they would if not given the admonishment. It is possible that explaining the reason for the admonishment and the consequences of non-compliance reduced the threat to mock jurors' autonomy thus reducing the urge to engage in IBJM.

Future research should replicate this study and these findings to establish more confidence in their validity. Replication and expansion to other populations, locations, and other types of cases will help to increase confidence in the ability of enhanced instructions to reduce internet-based juror misconduct and support their use in the courtroom.

References

Aaronson, D. E., & Patterson, S. M. (2013). Modernizing jury instructions in the age of social media. *Crim. Just., 27*, 26.

Aronson, E., Ellsworth, P. C., Carlsmith, J. M., & Gonzales, M. H. (1990). *Methods of research in social psychology*. New York: McGraw-Hill.

Artigliere, R., Barton, J., & Hahn, B. (2010). Reining in juror misconduct: Practical suggestions for judges and lawyers. *FLA. BJ*, *84*, 9-9.

Asch, S. E. (1955). Opinions and social pressure. *Scientific American*, *193*(5), 31-35.

Asch, S. E. (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. *Psychological monographs: General and applied*, *70*(9), 1.

Baguley, C. M., McKimmie, B. M., & Masser, B. M. (2017). Deconstructing the simplification of jury instructions: How simplifying the features of complexity affects jurors' application of instructions. *Law and human behavior*, *41*(3), 284.

Bartels, L., & Lee, J. (2013). Jurors using social media in our courts: Challenges and responses. *Journal of Judicial Administration, 23*, 35-57.

Bonner, S. E., & Sprinkle, G. B. (2002). The effects of monetary incentives on effort and task performance: Theories, evidence, and a framework for research. *Accounting, Organizations and Society*, *27*(4-5), 303-345. doi:10.1016/s0361-3682(01)00052-6

Bornstein, B. H. (1999). The ecological validity of jury simulations: Is the jury still out? *Law and human Behavior*, *23*(1), 75-91.

Bornstein, B. H., & Greene, E. (2017). *The jury under fire: Myth, controversy, and reform*. New York: Oxford University Press.

Brehm, J. W. (1966). *A theory of psychological reactance*. Oxford, England: Academic Press.

Bronson, J. (2018). Justice expenditure and employment extracts, 2015 — preliminary. *Washington, DC: Bureau of Justice Statistics, US Department of Justice, NCJ, 248628*.

Burger, J. M. (2009). Replicating Milgram: Would people still obey today? *American Psychologist*, *64*(1), 1.

Cacioppo, J. T., Petty, R. E., Feinstein, J. A., & Jarvis, W. B. G. (1996). Dispositional differences in cognitive motivation: The life and times of individuals varying in need for cognition. *Psychological bulletin*, *119*(2), 197.

Cacioppo, J. T., Petty, R. E., & Feng Kao, C. (1984). The efficient assessment of need for cognition. *Journal of personality assessment*, *48*(3), 306-307.

Cialdini, R. (2001). *Influence: Science and practice.* Boston: Allyn & Bacon.

Campbell, D. J. (1984). The effects of goal-contingent payment on the performance of a complex task. *Personnel Psychology*, *37*(1), 23-40. doi:10.1111/j.1744-6570.1984.tb02245.x

Chambers v. Georgia, 321 Ga. App. 512 (Court of Appeals of Georgia March 26, 2013) (Westlaw, Thormodsgard Law Library, Dist. file).

Cialdini, R. B., & Griskevicius, V. (2010). Social Influence (R. F. Baumeister & E. J. Finkel, Eds.). In *Advanced social psychology: The state of the science* (pp. 385-417). New York, NY: Oxford University Press.

Clark v. United States, 289 U.S. 1 (March 13, 1933) (Westlaw, Thormodsgard Law Library, Dist. file).

Courselle, D. E. (2005). Struggling with Deliberative Secrecy, Jury Independence, and Jury Reform. *SCL Rev.*, *57*, 203.

Coon, D., Mitterer, J.O., & Martini, T.S. (2019) *Introduction to psychology: Gateways to mind and behavior* (*15th Ed*.). Wadsworth Cengage Learning.

Cox, M., & Tanford, S. (1989). Effects of evidence and instructions in civil trials: An experimental investigation of rules of admissibility. *Social Behaviour, 4*(1), 31-55.

Dambrun, M., & Vatiné, E. (2010). Reopening the study of extreme social behaviors: Obedience to authority within an immersive video environment. *European Journal of Social Psychology*, *40*(5), 760-773.

Davis, J. H., Hulbert, L., Au, W. T., Chen, X., & Zarnoth, P. (1997). Effects of group size and procedural influence on consensual judgments of quantity: The examples of damage awards and mock civil juries. *Journal of Personality and Social Psychology, 73*(4), 703-718. doi:10.1037//0022-3514.73.4.703

Diamond, S. S. (1993). What jurors think: Expectations and reactions of citizens who serve as jurors. In R. E. Litan (Ed.), *Verdict: Assessing the civil jury system* (pp. 282-305). Washington, D.C.: The Brookings Institution.

Diamond, S. S., & Casper, J. D. (1992). Blindfolding the jury to verdict consequences: Damages, experts, and the civil jury. *Law and Society Review*, 513-563.

Dimas-Martinez v. Arkansas, 2011 Ark. 515 (December 8, 2011) (Westlaw, Thormodsgard Law Library, Dist. file).

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.

Dunn, M. (2011). *Jurors' use of social media during trials and deliberations: A report to the judicial conference committee on court administration and case management* (Rep.).

Federal Judicial Center. Retrieved from http://www.fjc.gov/public/pdf.nsf/lookup/dunnjuror.pdf/$file/dunnjuror.pdf

Edlund, J. E., Sagarin, B. J., Skowronski, J. J., Johnson, S. J., & Kutter, J. (2009). Whatever happens in the laboratory stays in the laboratory: The prevalence and prevention of participant crosstalk. *Personality and Social Psychology Bulletin*, *35*(5), 635-642.

Edwards, A. L. (1957). *The social desirability variable in personality assessment and research*. Ft. Worth TX: Dryden Press.

Ebbinghaus, H. (1885; translation 1964). *Memory: A contribution of experimental psychology.* Mineola, NY: Dover Publications.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.

Federal Judicial Center. (n.d.). Demography of article III judges, 1789-2017. Retrieved May 11, 2019, from https://www.fjc.gov/history/exhibits/graphs-and-maps/gender

Fein, S., McCloskey, A. L., & Tomlinson, T. M. (1997). Can the jury disregard that information? The use of suspicion to reduce the prejudicial effects of pretrial publicity and inadmissible testimony. *Personality and Social Psychology Bulletin, 23*(11), 1215-1226. doi:10.1177/01461672972311008

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.

Flesch, R. (1979). *How to write in plain English: A book for lawyers and consumers.* New York, NY: Harper.

Foley, L. A., & Pigott, M. A. (1997). The influence of forepersons and nonforepersons on mock jury decisions. *American Journal of Forensic Psychology*.

Freeman, M. (2016, May 26). Former juror in West Delray murder case jailed over misconduct. Retrieved from https://www.sun-sentinel.com/local/palm-beach/fl-juror-criminal-contempt-hearing-20160526-story.html

Goodwin, I. B. (1978). The effects of persuasive communication by an aggressive and biased juror in a simulated jury task.

Grant, J. S., & Davis, L. L. (1997). Selection and use of content experts for instrument development. *Research in nursing & health*, *20*(3), 269-274.

Greene, E. (1990). Media effects on jurors. *Law and Human Behavior*, *14*(5), 439-450. doi:10.1007/bf01044221

Grow, B. (2010, December 08). As jurors go online, U.S. trials go off track. Retrieved from http://www.reuters.com/article/us-internet-jurors-idUSTRE6B74Z820101208

Grubin, D., Kamenskov, M., Dwyer, R. G., & Stephenson, T. (2019). Post-conviction polygraph testing of sex offenders. *International Review of Psychiatry*, *31*(2), 141-148.

Gudjonsson, G. H. (1989). Compliance in an interrogative situation: A new scale. *Personality and Individual Differences*, *10*(5), 535-540.

Gudjonsson, G. H. (1991). Suggestibility and compliance among alleged false confessors and resisters in criminal trials. *Medicine, Science and the Law*, *31*(2), 147-151.

Gudjonsson, G. H., & MacKeith, J. A. (1990). A proven case of false confession: Psychological aspects of the coerced-compliant type. *Medicine, Science and the Law*, *30*(4), 329-335.

Harkins, S. G., & Williams, K. D. (2017). Introduction and overview. In S. G. Harkins, K. D. Williams, & J. M. Burger (Eds.), *The Oxford handbook of social influence*. New York, NY: Oxford University Press.

Haynes, S. N., Richard, D., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological assessment*, *7*(3), 238.

Henson, M. (2019, March 01). North Dakota judge tosses homicide conviction over juror misconduct. *Grand Forks Herald*. Retrieved July 12, 2019, from https://www.grandforksherald.com/news/crime-and-courts/979974-North-Dakota-judge-tosses-homicide-conviction-over-juror-misconduct

Herndon, P., Myers, B., Mitchell, K., Kehn, A., & Henry, S. (2014). False memories for highly aversive early childhood events: Effects of guided imagery and group influence. *Psychology of Consciousness: Theory, Research, and Practice*, *1*(1), 20-31. doi:10.1037/cns0000011

Hoffmeister, T. (2012). Google, Gadgets, and Guilt: Juror Misconduct in the Digital Age. *U. Colo. L. Rev.*, *83*, 409.

Hoffmeister, T. (2015). Preventing juror misconduct in a digital world. *Chi.-Kent L. Rev.*, *90*, 981.

Horowitz, I. A., & Bordens, K. S. (2002). The effects of jury size, evidence complexity, and note taking on jury process and performance in a civil trial. *Journal of Applied Psychology*, *87*(1), 121-130.

Http://www.readabilityformulas.com/free-readability-formula-tests.php. (n.d.). Retrieved March 18, 2018, from http://www.readabilityformulas.com/free-readability-formula-tests.php

Hunt, P., Anderson, J., & Saunders, J. (2017). The price of justice: new national and state-level estimates of the judicial and legal costs of crime to taxpayers. *American journal of criminal justice*, *42*(2), 231-254.

Inflation Rate between 2010-2019: Inflation Calculator. (2019). Retrieved July 11, 2019, from http://www.in2013dollars.com/us/inflation/2010?amount

Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. *Psychological bulletin, 114*(1), 3.

Joinson, A. (1999). Social desirability, anonymity, and Internet-based questionnaires. *Behavior Research Methods, Instruments, & Computers*, *31*(3), 433-438.

Jury deliberation. (2008). In L. J. Palmer, *Encyclopedia of capital punishment in the United States* (2nd ed.). Jefferson, NC: McFarland. Retrieved from https://ezproxy.library.und.edu/login?url=http://search.credoreference.com/content/entry/mcfcpus/jury_deliberation/0?institutionId=5753

Kaplan, R. M., & Atkins, C. J. (1982). Psychological Issues Raised in the California Supreme Court Case People vs Collins. *Psychological Reports*, *50*(1), 259-266. doi:10.2466/pr0.1982.50.1.259

Kassin, S. M., & Kiechel, K. L. (1996). The Social Psychology of False Confessions: Compliance, Internalization, and Confabulation. *Psychological Science*, *7*(3), 125-128. doi:10.1111/j.1467-9280.1996.tb00344.x

Kassin, S. M., & Sommers, S. R. (1997). Inadmissible testimony, instructions to disregard, and the jury: substantive versus procedural considerations. *Personality and Social Psychology Bulletin*, *23*(10), 1046-1054. doi:10.1177/01461672972310005

King, N. J. (1996). Juror Delinquency in Criminal Trials in America, 1796-1996. *Michigan Law Review, 94*(8), 2673-2751. doi:10.2307/1289836

Knutson, A., Greene, E., & Durham, R. (2016). Identifying the jurors who won't stay offline: Development of the juror internet research scale. *American Psychology & Law Society News, (Summer)*, 5-7. Retrieved June, 2016.

Kramer, G. P., Kerr, N. L., & Carroll, J. S. (1990). Pretrial publicity, judicial remedies, and jury bias. *Law and Human Behavior, 14*(5), 409-438. doi:10.1007/bf01044220

Lieberman, J. D., & Arndt, J. (2000). Understanding the limits of limiting instructions: Social psychological explanations for the failures of instructions to disregard pretrial publicity and other inadmissible evidence. *Psychology, Public Policy, and Law, 6*(3), 677.

Lieberman, J. D., & Sales, B. D. (1997). What social science teaches us about the jury instruction process. *Psychology, Public Policy, and Law, 3*(4), 589-644. doi:10.1037/1076-8971.3.4.589

Lindsay, D. S. (1994). Memory source monitoring and eyewitness testimony. In D. F. Ross, J. D. Read, & M. P. Toglia (Eds.), *Adult eyewitness testimony: Current trends and developments* (pp. 27-55). Cambridge: Cambridge University Press.

Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American statistical Association*, *83*(404), 1198-1202.

Losh, S. C., Wasserman, A. W., & Wasserman, M. A. (2000). Reluctant jurors: What summons responses reveal about jury duty attitudes. *Judicature, 83*, 304.

Lowry, R. (2019a). Fisher Exact Probability Test: 2x3. Retrieved June 18, 2019, from http://vassarstats.net/fisher2x3.html.

Lowery, R. (2019b). For a 2x2 Contingency Table. Retrieved June 18, 2019, from http://vassarstats.net/tab2x2.html.

MacCoun, R. J. (1989). Experimental research on jury decision-making. *Science*, 1046-1050.

MacCoun, R. J., & Kerr, N. L. (1988). Asymmetric influence in mock jury deliberation: Jurors' bias for leniency. *Journal of personality and social psychology*, *54*(1), 21.

Mander, J. (2015, January 26). Daily time spent on social networks rises to 1.72 hours [Web log post]. Retrieved from https://www.globalwebindex.net/blog/daily-time-spent-on-social-networks-rises-to-1-72-hours

Mander, J. (2016). *GWI social summary* (Vol. Q3, Rep. No. Q3 2016). Global Web Index. http://insight.globalwebindex.net/hubfs/GWI-Social-Q3-2016-Summary.pdf?utm_campaign=Insight+Reports&utm_source=hs_automation&utm_medium=email&utm_content=33273144&_hsenc=p2ANqtz-_4Q1z0O9RKkByopn7vYifPhPnZLC0spVyuW7ZGDJq2cTR4v3UFleZ5u_Fu6jAjby1xybFCx2ajQA4AYIUexuhZIHMsKEFL-2_xdSGP-AHNPGTSgvY&_hsmi=33273144

Milgram, S. (1963). Behavioral Study of obedience. *The Journal of abnormal and social psychology*, *67*(4), 371.

Milgram, S. (1965). Some conditions of obedience and disobedience to authority. *Human relations*, *18*(1), 57-76.

Morrison, C. M. (2011). Jury 2.0. *Georgia State University College of Law, Legal Studies Research Paper*, (2010-15), 1579.

Mowen, J. C., Middlemist, R. D., & Luther, D. (1981). Joint effects of assigned goal level and incentive structure on task performance: A laboratory study. *Journal of Applied Psychology*, *66*(5), 598-603. doi:10.1037/0021-9010.66.5.598

Murre, J. M., & Dros, J. (2015). Replication and analysis of Ebbinghaus' forgetting curve. *PloS one*, *10*(7), e0120644.

National Research Council 2003. *The Polygraph and Lie Detection*. Washington, DC: The National Academies Press. https://doi.org/10.17226/10420

Nelson, R. (2015). Scientific basis for polygraph testing. *Polygraph*, *41*(1), 21-61.

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological review*, *84*(3), 231.

Patterson v. Colorado, 205 U.S. 454, 462 (April 15, 1907) (Westlaw, Thormodsgard Law Library, Dist. file).

Perrin, A., & Jiang, J. (2018, March 14). About a quarter of U.S. adults say they are 'almost constantly' online. *Pew Research Center.* Retrieved March 23, 2018, from http://www.pewresearch.org/fact-tank/2018/03/14/about-a-quarter-of-americans-report-going-online-almost-constantly/

Pickel, K. L. (1995). Inducing jurors to disregard inadmissible evidence: A legal explanation does not help. *Law and Human Behavior*, *19*(4), 407-424.

Posner, R. A. (2016). What is obviously wrong with the federal judiciary, yet eminently curable: Part I. *Green Bag 2d*, 19, 187-205.

Public Disclosures of Jury Deliberations. (1983). *Harvard Law Review, 96*(4), 886-906. doi:10.2307/1340907

Richardson, G., & Kelly, T. P. (2004). A study in the relationship between interrogative suggestibility, compliance and social desirability in institutionalized adolescents. *Personality and Individual Differences*, *36*(2), 485-494.

Rosen, L. D., Whaling, K., Carrier, L. M., Cheever, N. A., & Rokkum, J. (2013). The media and technology usage and attitudes scale: An empirical investigation. *Computers in human behavior*, *29*(6), 2501-2511.

Russano, M. B., Meissner, C. A., Narchet, F. M., & Kassin, S. M. (2005). Investigating true and false confessions within a novel experimental paradigm. *Psychological science*, *16*(6), 481-486.

Ruva, C., McEvoy, C., & Bryant, J. B. (2007). Effects of pre-trial publicity and jury deliberation on juror bias and source memory errors. *Applied Cognitive Psychology*, *21*(1), 45-67.

Saks, M. J., & Marti, M. W. (1997). A Meta-Analysis of the effects of jury size. *Law and Human Behavior*, *21*(5), 451-467. doi:10.1023/a:1024819605652

Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. *American psychologist*, *54*(3), 182.

Sheppard v. Maxwell, 384 U.S. 333, 351 (June6, 1966) (Westlaw, Thormodsgard Law Library, Dist. file).

Simpler, M. F., III (2012). The Unjust Web We Weave: The Evolution of Social Media and its Psychological Impact on Juror Impartiality and Fair Trials. *Law & Psychol. Rev.*, *36*, 275.

Snortum, J. R., Klein, J. S., & Sherman, W. A. (1976). The impact of an aggressive juror in six- and twelve-member juries. *Correctional Psychologist*, *3*(3), 255-262.

Steblay, N., Hosch, H. M., Culhane, S. E., & McWethy, A. (2006). The impact on juror verdicts of judicial instruction to disregard inadmissible evidence: A meta-analysis. *Law and Human Behavior*, *30*(4), 469-492.

St. Eve, A. J., Burns, C. P., & Zuckerman, M. A. (2014). More from the jury box: The latest on juries and social media. *Duke Law & Technology Review*, *12*, 64.

St. Eve, A. J., & Zuckerman, M. A. (2012). Ensuring an impartial jury in the age of social media. *Duke Law & Technology Review, 11*.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Nedham Heights, MA: Allyn & Bacon.

Tanford, J. A. (1990). The law and psychology of jury instructions. *Neb. L. Rev., 69*, 71.

Tanford, S., & Cox, M. (1988). The effects of impeachment evidence and limiting instructions on individual and group decision making. *Law and Human Behavior*, *12*(4), 477.

Tanford, S., & Penrod, S. (1984). Social influence model: A formal integration of research on majority and minority influence processes. *Psychological Bulletin*, *95*(2), 189.

Tennessee v. Smith, 418 S.W.3d 38 (September 10, 2013) (Westlaw, Thormodsgard Law Library, Dist. file).

US v. Juror Number One, 866 F. Supp. 2d 442 (United States District Court, Eastern District of Pennsylvania, December 21, 2011) (Westlaw, Thormodsgard Law Library, Dist. file).

US v. Lawson, 677 F.3d 629 (US Court of Appeals, Fourth Circuit, April 20, 2012) (Westlaw, Thormodsgard Law Library, Dist. file).

Vermont v. Abdi, 191 Vt. 162 (January 26, 2012) (Westlaw, Thormodsgard Law Library, Dist. file).

Wegner, D. M. (1994). Ironic processes of mental control. *Psychological review*, *101*(1), 34.

Williams, T. (2019, July 08). Retrial begins for man facing blame in deadly Nelson County crash. *Grand Forks Herald.* Retrieved July 12, 2019, from https://www.grandforksherald.com/news/crime-and-courts/3826850-Retrial-begins-for-man-facing-blame-in-deadly-Nelson-County-crash

Zimmerman, J. P. (2012). A practical guide to the development of jury charges regarding social media. *Am. J. Trial Advoc., 36*, 641.

Appendix A

Proposed Model Jury Instructions
The Use of Electronic Technology to Conduct Research on or Communicate about a Case
Prepared by the Judicial Conference Committee on Court Administration and Case Management
June 2012

[Note: These instructions should be provided to jurors before trial, at the close of a case, at the end of each day before jurors return home, and other times, as appropriate.]

Before Trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. In other words, you should not consult dictionaries or reference materials, search the internet, websites, blogs, or use any other electronic tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

Until you retire to deliberate, you may not discuss this case with anyone, even your fellow jurors. After you retire to deliberate, you may begin discussing the case with your fellow jurors, but you cannot discuss the case with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use cell phones, Blackberries, the internet and other tools of technology. You also must not talk to anyone at any time about this case or use these tools to communicate electronically with anyone about the case. This includes your family and friends. You may not communicate with anyone about the case on your cell phone, through e-mail, Blackberry, iPhone, text messaging, or on Twitter, through any blog or website, including Facebook, Google+, My Space, LinkedIn, or YouTube. You may not use any similar technology of social media, even if I have not specifically mentioned it here. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

At the Close of the Case:

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any electronic device or media, such as the telephone, a cell phone, smart phone, iPhone, Blackberry or computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website such as Facebook, MySpace, LinkedIn, YouTube or Twitter, to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict. In other words, you cannot talk to anyone on the phone, correspond with anyone, or electronically communicate with anyone about this case. You can only discuss the case in the

jury room with your fellow jurors during deliberations. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

You may not use these electronic means to investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom. Information on the internet or available through social media might be wrong, incomplete, or inaccurate. You are only permitted to discuss the case with your fellow jurors during deliberations because they have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Otherwise, your decision may be based on information known only by you and not your fellow jurors or the parties in the case. This would unfairly and adversely impact the judicial process.

Appendix B

IN THE SUPERIOR COURT OR COBB COUNTY
STATE OF GEORGIA

Indictment No. 14-3124

Plaintiffs:

THE STATE OF GEORGIA

vs.

Defendant:

JUSTIN ROSS HARRIS

GENERAL BILL OF INDICTMENT

The Grand Jurors in the name and behalf of the citizens of Georgia, charge and accuse JUSTIN ROSS HARRIS with the offense of MALICE MURDER, O.C.G.A. § 16-5-1, for that the said accused person, in the County of Cobb and State of Georgia, on or about the 18th day of June, 2014 did unlawfully, and with malice aforethought, cause the death of Cooper Harris, a human being, by placing said Cooper Harris into a child car sear and leaving him alone in a hot motor vehicle, contrary to the laws of said State, the good order, peace, and dignity thereof.

Dated: _____

_____ _____
MARY STALEY, Superior Court Judge Grand Jury Foreperson

_____ _____
D. VICTOR REYNOLDS, District Attorney Attorney for the Defendant

CASE SUMMARY

DAY 1: OPENING STATEMENT BY JUDGE STALEY

I will take a few moments now to give you some initial instructions about this case and about your duties as jurors. At the end of the trial, I will give you further instructions. Unless I specifically tell you otherwise, all such instructions are equally binding on you and must be followed.

This is a criminal case, brought against Justin Ross Harris by the State of Georgia. The defendant is charged with malice murder. It will be your duty to decide from the

evidence whether the defendant is guilty or not guilty of the crime charged. You are the sole judges of the facts, but you must follow my instructions, whether you agree with them or not. You have taken an oath to do so. Please remember that this defendant, not anyone else, is on trial here and only on trial for the crime charged.

ELEMENTS OF THE OFFENSE GIVEN BY JUDGE STALEY

I will now give you a summary of the elements of the crime charged, which the prosecution must prove beyond a reasonable doubt to make its case:

- *One*, the defendant did act with malice aforethought;
- *Two*, the defendant did act intentionally;
- *Three*, when the defendant acted, he was aware of facts that would lead a reasonable person to realize that his act, by its nature, would directly and probably result in the death of his child;
- *Four*, the defendant did not act in error or commit the act by accident.

The prosecution has the burden of proof in this case. The defendant should not be convicted unless there is evidence which proves beyond a reasonable doubt that the defendant intentionally committed the crime charged with, malicious aforethought. If there is any evidence that the defendant was not acting intentionally and out of malice, he should not be convicted.

LEGAL DEFINITIONS PROVIDED BY JUDGE STALEY

Reasonable Doubt

Reasonable doubt is based upon reason and common sense, and not on speculation. Reasonable doubt may arise from careful and impartial consideration of all the evidence, or from a lack of evidence. Proof beyond a reasonable doubt is proof of such a convincing character that a reasonable person, after careful consideration, would not hesitate to rely and act upon that proof in life's most important decisions. Proof beyond a reasonable doubt is proof that leaves you firmly convinced of the defendant's guilt. Proof beyond a reasonable doubt does not mean proof beyond all doubt.

Evidence

Evidence includes the statements of witnesses, documents and other things received as exhibits, and any facts that have been stipulated. Certain things are not evidence. I will list those things for you now:

1. Statements, arguments, questions, and comments by lawyers representing the parties in the case are not evidence.
2. Objections are not evidence. Lawyers have a right to object when they believe something is improper. You should not be influenced by the objection. If I sustain an objection to a question, you must ignore the question and must not try to guess what the answer might have been.
3. Testimony that I strike from the record, or tell you to disregard, is not evidence and must not be considered.

4. Anything you see or hear about this case outside the courtroom is not evidence, unless I specifically tell you otherwise during the trial.

Finally, some of you may have heard the terms "*direct evidence*" and "*circumstantial evidence*" You are instructed that you should not be concerned with those terms. The law makes no distinction between them, and you should give all evidence the weight and value you believe it is entitled to receive.

Murder

Murder is defined as occurring when a person unlawfully and with malice aforethought, either express or implied, causes the death of another human being.

Malice

Express *malice* is that deliberate intention to take the life of another human being which is manifested by external circumstances capable of proof. *Malice* shall be implied where no considerable provocation appears and where all the circumstances of the killing show an abandoned and malignant heart.

Intent

Intent is an essential element of any crime and must be proved by the prosecution beyond a reasonable doubt. The prosecution must prove beyond a reasonable doubt that the defendant acted intentionally.

Use of Accidental Death as Justification

No person can be found guilty of any crime committed by misfortune or *accident* in which there is no criminal scheme, undertaking, intention, or criminal negligence. An accident is an event that takes place without one's foresight or expectation, that takes place or begins without design.

Credibility of Witnesses

In deciding what testimony of any witness to believe, consider the witness' intelligence, the opportunity the witness had to have seen or heard the things testified about, the witness' memory, any motives that witness may have for testifying a certain way, the general reasonableness of the testimony, and the extent to which the testimony is consistent with other evidence that you believe.

Note on Transcripts

At the end of the trial, you must make your decision based on what you recall of the evidence. You will not have a written transcript to consult.

One of the 3 pre-trial instructions (control, weak, or strong) will be inserted here according to random assignment.

PROSECUTION OPENING STATEMENT

"*Escape*", words of that defendant, Justin Ross Harris. Words that reveal the motive of this man, for killing his child in the most horrific, imaginable way. This child sat in a car baking to death on June the 18, 2014. The evidence will show that this defendant, that day, messaged over 30 people. Women he met online and exchanged comments with about being unhappy in his marriage. "*I love my son all, but we both need escapes*". This is what he was doing that day while his son died in the car, slowly, painfully.

With this indictment, the question is, did he intend to kill this child or not? The evidence is going to show that he is undoubtedly guilty. You will see, the deception, the double life, how he behaved, and how he lied.

That morning about 9:00 a.m., the defendant arrived at Chick-fil-A with Cooper, at breakfast, and at 9:20 a.m., they walked out of Chick-fil-A together. At 9:25 a.m., the defendant pulls into the parking lot at Home Depot Treehouse. At 9:26 a.m. after he parked that car, it takes him 30 seconds to get out and close the door. At 4:16 p.m., he drives away from work to go to a movie with his friends. About 4:22 p.m. the defendant pulls into the Akers Mill shopping center. Right after he gets out of the car he is saying, '*What have I done? What have I done?*' He then takes Cooper out, messes around with CPR for a second and then walks away. Everybody else tries to save his child.

You're going to hear him yell at the police initially, while they're handcuffing him, and then you're going to hear the behavior, the demeanor, and manipulation start from there. In the back of the patrol car, he was calm, cool, and collected. What does he complain about? Is he screaming, "*Can I see my son? What's going on?"* No. He complains that it's hot in the back of the car. Occasionally, he yells out and says something and puts his head in the cushion. What's important to pay attention when you see this video is his behavior, demeanor, manipulation as they drive away to go to the Police Department. The defendant is in the back of the patrol car chatting officer Piper up like they were in a bar. Not the behavior of someone who unknowingly, negligently left their child in a car to die, gut-wrenching pain, the worst pain imaginable.

At the police station, once he's in that interview room, you're going to see him trying to work himself up, and up, and up. The defendant initially is asked who usually takes this child to daycare. Is it out of the ordinary for him? No, he says initially, "*I usually take him.*" But then you're going to hear him back off and say, "*Well it's kind of a coin toss, we never know who's going to do it.*" Because the defendant worked a stone's throw away from that daycare, he would take the child around 80% of the time, that was his routine. The defendant went to Chick-fil-A all the time but at least two or three days a month he would take Cooper with him. He would go sit down and have breakfast with Cooper and then take him to daycare.

The investigators went and looked at forensic evidence pulled from telephones and computers to see what he was doing that day. The defendant posted numerous times random things on an app called Whisper, "*I hate being married with kids, the novelty has worn off*" just a couple weeks prior to Cooper's death. This was his obsession, taking risk after risk after risk. Meeting up with prostitutes, all the while his wife is texting him.

Other testimony you're gonna hear that the car was taken back to Home Depot parking lot couple weeks later for experts in the field to determine how hot it gets inside of the car. On this day, the defendant left Cooper in the car, it got up to 92 degrees outside.

Coincidence? It happened to be the hottest day of the year. You will see there's a web search on his phone, that he had gone to weather predictor.com "*Why is it hazy on a hot day?*", the day before the murder.

This case is about how the defendant wanted his friends and family see him. He was very worried about perception versus the real Justin Ross Harris. This is about the life he was forced to lead versus the life he wanted to lead. Friends and family, all say he seemed to love his wife and be a good father. Then you're going to hear from people who saw the other side. Trying to use his role of the church guitarist in his messaging with gals. One of these gals asked him, "*Does your conscience ever kick in?"* two weeks before this murder. You know what his answer was? "*Nope."* The only issue in this case is, was there malice? He's guilty, and when you hear the evidence in this case there will be no question that he's guilty.

During this trial remain focused. Focus on the defendant and what he did. This case about who is guilty. It's the defendant versus the evidence. The defendant's own words show that he's guilty by incriminating and conflicting statements, texts, and emails. What he said before getting caught and his attempts to manipulate the situation show that he's guilty. In this case, it is the State's burden of proof to prove the defendant guilty, beyond a reasonable doubt. Now the key word there is reasonable. From any reasonable view the facts you're going to see how the defendant murdered his child. The defendant is clearly guilty of malice murder. "*I love my son and all but we both need escapes*." Death, deception, and a double life. At the end of the case ladies and gentlemen, we are going to ask you to do a couple of simple things, use your common sense with all the evidence in this case and hold this man responsible for trying to escape from one life into another by killing a child in the most unimaginable, horrible way. Thank you.

DAY 2: DEFENSE OPENING STATEMENT

The first thing that I want to tell you is that the State is right about one very important matter and that is that Ross Harris is responsible for his child's death. From the moment he caught a glimpse of Cooper in the back, he knew what he had done. He had forgotten him. He whipped his car over into a parking lot and pulled his son out. He desperately attempted CPR but was too overwhelmed. He acknowledged that this was his fault, that he is responsible. But, responsible isn't the same thing as criminal.

The evidence is going to show you that Ross loved that little boy more than anything. Cooper's death was an accident and that's exactly what Ross told the police when they interviewed him. But because he said, "*Listen this was an accident*", they said, "*Well he's setting up his defense.*" What he did wasn't willful, meaning he wasn't doing some sort of reckless act that would inevitably lead him to believe that his son would be injured. It was an accident.

You are going to hear bad things about Ross Harris regarding his sexually immoral behavior. Ross used social media apps to exchange very gross, graphic, and filthy sexual talk with people. And he was unfaithful to his wife. But Ross's sex life, no matter how perverse, and nasty, and wrong that we think it is, doesn't have a thing in the world to do with the fact that he forgot that little boy. The fact that he had a lot of filthy, sexual behaviors isn't motive to murder the person he loved most.

Mr. Boring kept saying yesterday that Ross was living a double life, but you'll find out that Ross's closest friends knew that he was dealing with sexual sins in his life. He reached out and asked for help. Over the years, Ross's wife had seen things on his phone. They've been in marriage counseling. Just because you don't go around telling everybody about your sins and about your private, sexual business doesn't mean you're living a double life.

What you're going to see is that Ross, at the scene, when he pulled Cooper out, was hysterical. The State's witnesses will come in and suggest that he didn't act right. He didn't cry enough. How do we know how anybody is going to act under those circumstances? None of these police officers who stand up and say, "*He was acting funny*" or "*He was acting suspicious*"; knew Ross. None of them knew his eccentricities, his personality, his coping mechanism for trauma or tragedy.

You are going to hear Ross's routine was that he was responsible most mornings for taking Cooper to daycare. Most mornings he would drop Cooper off at daycare on his way into work prior to going to Chick-fil-A. He would get his breakfast, usually through the drive-thru. On days that Ross did not take Cooper to daycare, he would still go to Chick-fil-A and go through the same intersection to work. That was his typical morning routine.

Occasionally, that pattern would be changed, and they would have their daddy-son time together at Chick-fil-A. When they would have their little daddy-son breakfast together, Ross did not follow that pattern of driving from the Chick-fil-A straight through the intersection to work. On those days, Ross was supposed to come out of the parking lot and make a U-turn when he gets to this intersection. It wasn't every week and it wasn't even every month. It had been about two months since the last time Ross and Cooper went to breakfast.

Memory is amazing and a miraculous thing, but it's not perfect and sometimes, it fails us. There are scientists who study memory failure and why and how parents can forget. Short-term memory is when we're concentrating on something at that moment and that includes intentional or prospective memory. It is what we're intending to do or a plan for future action. Long-term memory deals with the routine behavior that doesn't require the planning and concentration because that's what we do over and over and over

Leaving Chick-fil-A and driving straight through that intersection is Ross's pattern. On June the 18th, he intended to depart from that habit and that pattern. He had every reason in the world to take him to daycare. This is a very high traffic and very serious intersection. Navigating this intersection is something that he does every day but normally he goes straight through. It's his habit, his pattern.

Ross never forgot that he had a son. He just lost awareness that he was in the car. He'd gotten distracted somewhere along the way. His habit memory kicked in and he goes straight through that intersection to work. Why didn't he remember Cooper during the day? Because there was nothing to specifically challenge his memory that he had forgotten Cooper.

There's one person in this world who has got every reason in the world to hate that guy. He took everything from her and cheated on her. His wife is going to sit right here and tell you that he was unfaithful. However, she's going tell you that Ross loved that little boy more than anything in the world. She's going to tell you they got it wrong. Thank you.

DAY 3: PROSECUTION WITNESSES TESTIFY

Officer Piper: Cobb County police officer on the scene who questioned Harris at the scene and transported him to the police department for interrogation. EXAMINATION: Testifies that Harris's demeanor did not appear consistent with someone who had just lost a child; he did not appear upset or distraught and tried chatting her up as if he was flirting with her. CROSS-EXAMINATION: Officer Piper testifies that she does not know anything about Harris, his occupation, personality, or how he deals with trauma when she wrote her initial incident report.

J. Hawkins: Bystander who performed CPR on Cooper in the parking lot. EXAMINATION: Testifies that he saw Harris pull Cooper out of the car, lay him on the asphalt and tried to perform CPR. Harris did not appear to be doing it right, so he began to perform CPR on Cooper instead. NO CROSS-EXAMINATION

B. Shumpert: Crime scene technician for Cobb County police who examined the scene and the Harris's home. EXAMINATION: Testifies, "*It was a young child, toddler age, lying on its back on the pavement, knees slightly bent, hands to its sides. He had some scratches on his face.*" He testifies about the smell of the body, "*I'd describe the smell as a hot, musty, urine-soaked diaper. His shorts and shirt were noticeably wet.*" CROSS-EXAMINATION: Testifies that he did not see any evidence of child neglect when he investigated the Harris's vehicle and home. Shumpert testifies that he smelled a dirty diaper smell when he was close to Cooper's body, but it was "*unremarkable*" so he did not note it in his report.

A. Womack: A witness who called 911. EXAMINATION: Testifies that she pulled up to the parking lot, saw the scene, and called 911 after another person told her what happened. She saw Harris pacing back and forth and screaming while Cooper (who appeared dead) was on the ground with someone performing CPR on him. CROSS-EXAMINATION: She testifies that she saw Harris acting frantic; screaming, pacing, running his hand through his hair and he was on the phone.

DAY 4: PROSECUTION WITNESSES continued

Officer Gallimore: Cobb County patrol officer, first on the scene. EXAMINATION: Testifies that when he arrived on the scene he saw Cooper on the ground, "*I immediately saw the kid was not breathing. I could see his tongue sticking through his teeth. His eyes were wide open, and you could see a gray shadow toward the bottom of his eyes. From my experience, that's a sign a child was deceased for quite a while.*" He also testifies that he thought Harris was acting hysterical and wasn't being genuine. CROSS-EXAMINATION: Gallimore testifies why he did not report that he thought Harris hysterical behavior was not genuine, "*That's why I used the word 'acting' in describing how hysterical Harris was.*"

P. Barwick: Paramedic on the scene. EXAMINATION: Testifies that no one was doing CPR on Cooper when he arrived at the scene and "*His eyes were glazed over. Rigor mortis and lividity had both set in.*" Barwick also states that Harris was "*Very dry. Showed no emotion.*

Was not crying." CROSS-EXAMINATION: Testifies that Harris asked him if Cooper was dead and he replied, "*Yes, sir, he's deceased.*" which was not included in his report.

Captain Ferrell: Captain with the Cobb County police department. EXAMINATION: Testifies that he inspected the vehicle and smelled death and decay. He described the smell, "*It was a combination of odors. You could smell the odor of a diaper from a child, and child's sweat. And I smelled that unusual odor that I can only associate with something that's dead. There's an odor associated with death that's unique.*" CROSS-EXAMINATION: Testifies that he did not mention or report the smell to anyone at the scene, and only mentioned to Det. Stoddard later that night. He also testifies that, "*I failed to file a report on my observations from the scene, including the odor, until many months later, perhaps a year.*"

DAY 5: PROSECUTION WITNESSES continued

Detective Grimstead: Crime-scene investigator for Cobb Country. EXAMINATION: Testifies that he was assigned to process Harris's Hyundai Tucson, at the crime-scene processing shed. He testifies, "*When I opened the car door, I smelled a heavy odor of like a sweat, urine type smell in the vehicle. It's an odor that I normally associate with death. It's very hard to describe the odor. Like a sickly sweaty smell.*" CROSS-EXAMINATION: Testifies that he used very precise measurements on the car seat. He admitted that measurements as to where Cooper had his head, were not used when they replaced that car seat in July, the position of the carrying handle was different and the adjustment straps may have been different.

D. Doerr: Escort. EXAMINATION: Testifies that she engaged in sexual acts with Harris for money three times and he was relaxed but strictly business. NO CROSS-EXAMINATION

W. Milling: Harris's college friend and co-worker at Home Depot. EXAMINATION: Milling testifies that it was Harris's idea to go to the movie and that all the men's wives were going except Harris's wife. CROSS-EXAMINATION: Testifies that he always had to talk to Harris on the left side because Harris is deaf in his right ear.

A. Hall: Harris's college friend and co-worker at Home Depot. EXAMINATION: Testifies that Harris interviewed at Chick-fil-A for a different job and was upset that he didn't get it. CROSS-EXAMINATION: Testifies he was the one who sent the "*living child-free*" Reddit thread to the group in a Google chat and that about 20 seconds later Harris responded, "*Grossness.*"

DAY 6: PROSECUTION WITNESSES continued

B. Frist: Chief medical examiner with Cobb County medical examiner's office at the time of Cooper's death (now retired). EXAMINATION: Testifies that Cooper died of hyperthermia – excessive heat, "*A hyperthermia death would have taken time, the person is going to go through various phases when they are getting heated. He probably would have struggled as he was becoming more and more uncomfortable which is probably what caused the abrasions on Cooper's cheek, arm, neck, and knee.*" CROSS-EXAMINATION: Testifies that there were no gasses or decomposition smells emanating from Cooper, per se, but, "*I believe that*

especially as it got to around 4 o'clock in the afternoon when the temperature in the car would have been hot, there would have the stale odor of someone who's been breathing, sweating, urinating.

D. Brani: An expert in thermodynamics and heat transfer science who works for a lab in Marietta. EXAMINATION: Testifies that he conducted testing on Harris's car in July 2014 to see how hot it got in the car the day Cooper died. The highest temperature on the day Cooper died was 92 degrees. On the day Harris's SUV was tested the outside temperature reached 91 degrees and inside the SUV the temperature peaked at 125 degrees. It was just over 120 degrees at 4:15 p.m., around the time Harris would have gotten back in the car to leave work. CROSS-EXAMINATION: Testifies that he did not take humidity or body heat into account.

R.B. Smith: An expert in surveillance footage investigation who works for Cobb County police in the high-tech crime squad. EXAMINATION: Testifies that he extracted data (messages, texts, searches) from Harris's cell phones and iPad. He found messages exchanged including one that said, "*I love my son and all but we both need escapes.*" He found a Whisper post on Harris's phone, that read, '"*I hate being married with kids. The novelty has worn off and I have nothing to show for it.*" Smith also testifies that Harris went to weatherpredictor.com on June 17, 2014, at 9:12 a.m., the day before Cooper died. CROSS-EXAMINATION: Testifies that Harris did not try to hide the Whisper app, or the messages exchanged. Smith testifies that he did not think Harris created the Whisper message about hating being married with kids but Harris had made a lot of searches including "*Why is it hazy on a hot day?*" and "*child passport cost*".

E. Smith: A woman whom Harris sexted. EXAMINATION: Testifies that she met Harris through Whisper in January 2014 and then continued their conversations on Kik. They talked or exchanged sexual texts almost every day for a couple months and spoke on the phone once or twice before meeting in person in a parking lot and having sex. They were exchanging sexual texts the day Cooper died. CROSS-EXAMINATION: Testifies that Harris told her all about his son, Cooper, and talked to her about sexual problems he had with his wife but never talked about leaving her.

J. Meadows: A woman whom Harris sexted. EXAMINATION: Testifies that she met Harris in person in August 2013 at a store. They kissed but it didn't go any further. She testifies that she fell in love with Harris and he repeatedly sent messages telling her that he loved her. He told her that if his situation was different he would be with her instead of his wife. She testifies that in the weeks prior to Cooper's death she had met someone and cut things off with Harris which he expressed extreme sadness about in his messages to her. CROSS-EXAMINATION: Testifies that Harris sent her a message that said, "*If Cooper wasn't in the picture, I probably would have left by now.*"

DAY 7: PROSECUTION WITNESSES continued

Det. Stoddard: Cobb County police officer, lead detective on the case. EXAMINATION: Det. Stoddard authenticates a video of Harris in the interview room waiting to be interviewed, during the interview and when Harris's wife was in the room with him.

The video: He is visibly upset and begins crying, Harris is breathing heavy and sobbing with his head down. He is repeating "*Oh God! My boy. Oh my God why? Why did I do that?*" He is standing in the interview room alone, leaning against a wall, still crying, breathing very heavily, and is visibly shaken, almost hysterical. He sits back down, then stands up again and begins pacing the room. Det. Stoddard enters the room and begins questioning Harris about education, primary language, and medical conditions.

Harris describes the morning of June 18, 2014: Harris said it was a normal day, his wife left for work about 7:15 and he left the house with Cooper about 8:30 He and Cooper had breakfast at Chick-fil-A, "*We do that about 2 to 3 times a month, have our daddy-son breakfast together.*" Then, Harris says he put his son in his car seat. "*I strapped him in. I tightened him up. I gave him a kiss and he gave me a kiss. That was our routine. I got in my car, and instead of going from here to here, I went straight to work. I didn't even hear him because he falls asleep really easily when driving in a car."*

He said he had plans to go to a movie with his friends after work and that's where he was going. "*I was going to the movie, driving down Akers Mill when I caught a glimpse of him when I looked to my right to change lanes. Then I lost it. I pulled in and I pulled him out. For what felt like an eternity but was really a few seconds I tried CPR. I couldn't compose myself to do it so…then there was a group there and they attempted. I had done what every parent fears doing and that's leave their son in the car on a hot day. And I lost it, started screaming, started yelling. And then you guys arrived."*

Harris says made two calls to the daycare and one to his wife. He says that he did not call 911 because 4 other people did.

Harris says. "*There are occasions in the morning after dropping Cooper off, I'll go to Chick-fil-A because it's on the way and all those times I always go through the drive-thru, and then turn on Cumberland, make that turn, and go straight to work. I don't know if I was thinking it was one of those days and went straight to work. I'd never leave him in the car. One of my biggest fears was leaving my son in a hot car.*"

Det. Stoddard ends the interview and tells Harris that they are going to charge him with cruelty to a child. The video ends.

Det. Stoddard testifies that Harris was then moved to a holding cell where his wife visited him and was videotaped. The video is entered into evidence, authenticated by Det. Stoddard and played for the jury.

The video: Harris is in the interview room. Leanna enters and rushes to Harris. They embrace, and Harris starts crying, "*I didn't mean to. How could I forget him?*" Leanna tells Harris that she knows he didn't mean to, she loves him, and does not hate him. Harris tells Leanna, "*I was dreading how he was going to look but he*

looked peaceful. I wouldn't bring him back even if I could, he's in a better place now," Det. Stoddard enters the room, tells Harris that he will be charged with a felony, he will be taken to jail tonight and booked. The video ends.

DAY 8: PROSECUTION WITNESSES continued

Det. Stoddard continues: EXAMINATION (continued): Testifies and answers questions about the investigation process; collecting and analyzing evidence such as receipts, interviewing witnesses, and searching Harris's vehicle, home, office, electronic devices (phones, computers, tablets). Det. Stoddard identifies Harris's driving routes from Chick-fil-A to Cooper's daycare and to work on an aerial map. He authenticates GoPro videos of him driving the route five times and testifies that it took between 2 minutes, 13 seconds (shortest time) and 2 minutes, 48 seconds (the longest time). Det. Stoddard authenticates and reviews surveillance video of the parking lot of Harris's employer on the day of Cooper's death, June 18, 2014. The video was entered into evidence and played for the jury.

The video: Harris's car enters the lot at 9:24 a.m., finishes parking at 9:25 a.m., and he leaves the car at 9:26 a.m. Then it shows Harris leaving his office around 4:15 p.m., walk to and enter his car at 4:16 and drive away.

Det. Stoddard authenticates Harris's phone call activity on the day of Cooper's death. He testifies that Harris searched, "*what is prison really like?*" and "*how to survive in federal prison*" and provides a copy of the Google search results.

Det. Stoddard testifies about emails Leanna sent to Harris about leaving kids in cars; one on Jan. 30, 2013, with a subject line "*Don't be this dad.*". A second email is a forward of a message headed "*Look again*" from a state agency. A third email sent on May 13, 2014, with a subject line, "*A 2-year-old in Clarkston, Ga., died after being left in her mother's car.*"

Det. Stoddard testifies about messages found on Whisper and Kik between Harris and various women. He complained to one woman about being married and his wife changed. When the woman asked why they don't try counseling Harris told her, "*We have. Plus, I kind of like being bad*". He told another woman, "*my wife should divorce me.*" In another message he told another woman, "*sometimes I want to be unmarried.*" On May 19, 2014 (one month before Cooper's death) he told another, "*Wish I was single.*" On May 23, he told another, "*I settled down. Kinda regret it.*" On May 28, he told another, "*I'm a bit miserable, too . . . No sex (in my relationship). You?*" On March 14, he told another, "*I'm tired of living with my wife sometimes, lol.*" In January 2014, he told another, "*I miss being single. ... I just want to (expletive) a lot of girls, drink a lot and have fun.*" In February he told another, "*You don't need a baby. It's not easy, and expensive. I love my son, but that joker drains my paycheck.*" Also in February, he told another, "*I have sex with strangers to block out a lot of my pain. ... I like it with strangers.*" He told another "*I have a sex addiction I've acted on. I kind of regret that. I know it's not good, but I'm addicted to sex.*" She replied, "*Wow….so why don't you get divorced*"? He says, "*My kid is the glue holding it together*".

Det. Stoddard testifies about Harris's messaging various women on Whisper and Kik the day Cooper died. Harris started messaging a woman at 5:45 am, shortly after he woke up. He sent a few messages and then stops. At 7:22 am messaging resumes and continued all day until Harris leaves work for the movies.

DAY 9: PROSECUTION WITNESSES continued

Det. Stoddard continues: CROSS-EXAMINATION: Confirms that they have not located any witnesses to whom Ross expressed malice or hatred toward his son Cooper. Testifies that on the morning of Cooper's death Harris contacted a woman that he had previously met up with who gave him fellatio in his car, asking if she could come and do that to him again that day.

Det. Stoddard testifies that he thought Harris's behavior at the scene was strange. That Harris should have been crying more and should have had real evidence of crying like tears on his shirt and a stuffy/runny nose. He testifies that they originally detained Harris and put him in the police car because he was causing a disturbance at the scene. He testifies that Harris's behavior in the back of the police car was strange, that he should have been in shock and staring straight ahead instead of turning around to see what was going on behind the car.

Det. Stoddard testifies that at the scene he put his head in Harris's car and did not smell any odor, but he did smell an odor in the vehicle 4-6 hours later at the evidence shed. Det. Stoddard authenticates reports from other first responders on the scene and agrees (with defense counsel) that none of the first responders reported an odor of death or decomposition. Det. Stoddard confirmed that only he, Lieutenant Farrell, and Detective Grimstead reported an odor of death, and that they had a meeting about it later.

J. Persinger: Employed with PM Investigations Inc. & a certified police officer. EXAMINATION: Testifies about programs used to extract data from Harris's phone and two computers. Testifies that there was a search on Harris's laptop for "*how to survive in prison*", but this search had been deleted from the browsing history. He also found a webpage titled "*Divorce/Legal Separation Checklist*" that was accessed following a search for "*name change*"; and on June 17th two searches were conducted for vacation plans for two adults and no children. CROSS-EXAMINATION: Testifies that the applications Harris used to communicate with various women were not deleted and that during his investigation he tried finding several searches on Harris's computer, such as "*living child-free"* but did not find anything. Also testifies that there was evidence on Harris's computer that the Harris were looking for homes.

R. Webb: A real estate agent. EXAMINATION: Testifies that he began helping Ross and Leanna Harris to find a house to buy since February 2014 and their primary concern was being in a good school district. CROSS-EXAMINATION: Testifies that he did not know about Harris's "double-life" and did not know that Harris was looking for a different job.

DAY 10: DEFENSE WITNESSES TESTIFY

Leanna Taylor (formerly Harris): Mother of Cooper Harris and Ross Harris's wife at the time of Cooper's death (now divorced). EXAMINATION: She testifies, "*We were both very involved, diaper changes, baths, meals. Everything was very evenly split.*" She says that Harris was very proud of Cooper and loved to show him off. Taylor describes Harris's personality, "*He always had a large personality. He would talk to everybody. He was very outgoing, very vocal. He never met a stranger. He was very confident, very sure of himself, he liked to be the*

center of attention." Taylor testifies that Harris never got angry and never expressed anger or hatred or malice toward Cooper.

Taylor says Ross took their son to daycare most days, and she picked him up most days. She testifies that most mornings Cooper had his breakfast at the daycare but occasionally Harris would take Cooper to Chick-fil-A for daddy-son breakfast, but not every week.

Taylor testifies that she and Harris had marriage problems. "*We got along, managed our home, and co-parented well. Everything was very normal. It all came back to the sexual. The first thing that came up was in 2008. He told me he had a problem with pornography. At that time, it shocked me, but I didn't think it was a huge issue. Two years after that, around 2010, I found a message on his phone that you would describe it as sexting. Toward the end of 2012 or the beginning of 2013, I discovered him viewing pornography on his phone, and got upset."* She testifies that before his arrest she did not know that Ross had engaged in meeting a woman at a park to have fellatio in a car; had sex in their home with multiple women; that he expressed love for other women; or that he had sex with prostitutes. She says that she eventually did ask Ross if he wanted a divorce and was prepared to give him one if he wanted, but his response was that it was the last thing he wanted.

Taylor testifies about the day of Cooper's death. She was working that day. She and Harris discussed his plans to go to a movie that afternoon and agreed that she would be the one to pick up Cooper from daycare. She received a text from Ross at 3:16 pm asking, "*When are you getting my buddy?*" She says she arrived at Little Aprons day car between 4:30 pm – 5:00 pm. *"They were telling me Cooper wasn't checked in that day. I was calling Ross every two or three minutes and believed that ultimately he would explain everything.*"

Taylor describes what happened when she finally saw Ross. "*It was very difficult to see him like that. That's not a side of Ross that I'd seen. Just very broken. I have never seen him cry out like that before. He had tears streaming down his face and was crying enough that he needed a tissue. I remember his shirt being wet*."

Taylor testifies that Cooper would fall asleep easily in his car seat, and that he was small for his age and weighed less than 30 pounds. Taylor testifies that Harris was deaf in his right ear due to a fireworks accident on New Year's Eve 2005. A bottle rocket went inside his ear and exploded. Harris had surgery to repair the damage but has been deaf in his right ear ever since.

CROSS-EXAMINATION: Testifies that she thinks Harris would have seen Cooper in his car seat when he turned his head to change lanes if Cooper awake; but not if he was sleeping because he slumps down when he slept in his car seat. She confirms that Harris was unsatisfied with his salary at Home Depot and was trying to get a job with Chick-fil-A but did not get it so she (Taylor) had to work more hours at her job. Taylor testifies that money was tight, but they were not overly worried.

DAY 11: DEFENSE WITNESSES continued

J. Abdo: A senior manager in web development and technology who worked with Harris at Home Depot. EXAMINATION: Testifies that he once asked Ross what it was like to have kids, "*I didn't have a lot of friends who had kids already and wanted to know what it was like. He put it in a way I could understand, from a music context. 'As much as you love music, you'll love your kid 100 times more.'*" CROSS-EXAMINATION: Testifies that he wasn't aware of any

of Harris's sexual behaviors: meeting with prostitutes, texting images of genitals back and forth with multiple women, and that it would be completely counter to the person he knew.

A. Brown: A systems engineer who worked on the same team as Harris for three or four years at Home Depot. EXAMINATION: Brown testifies about Harris's work ethic. "*Harris started as an intern and showed great promise but became less motivated as time went on. On June 17 (the day before Cooper's death), I finally told him (Harris) to finish his project by the end of the day but he left work that day without it being done.*" Brown testifies that it is not suspicious that Harris (a web developer) cleared his cache frequently and cleared it shortly before Cooper's death. "*It is not unusual to clear the cache on work computers or phones. The web development crew often 'clear cache' to make sure they could see the changes they made on the web site."* Brown also testifies that Harris was obsessed with Cooper, he brought Cooper into the office from time to time and often showed off photos of him. CROSS-EXAMINATION: Testifies that Harris' work ethic was about forgetfulness not laziness, "*He would forget something we had just talked about 15 minutes before."*

M. Baygents: Harris's brother. EXAMINATION: Testifies that he saw Harris interact with Cooper just weeks before Cooper's death when the families were vacationing on the beach. "*Ross was right there taking care of Cooper the whole time, setting up a big umbrella for him to play out of the sun and stuff like that. I think he loved Cooper more than life itself. Ross was kind to him; he played with him. He was very attentive. That was his little buddy*." Baygents testifies that Harris wanted the two families to go on a cruise. They were looking into Carnival Cruises because it was more family-oriented. Baygents also testifies that Harris and Leanna were starting to look at the future for Cooper's schooling, "*They were looking for houses with big backyards, in good neighborhoods with good schools for Cooper. Everything revolved around Cooper.*" CROSS-EXAMINATION: Testifies that Harris didn't do anything that would lead him to believe he (Harris) saw prostitutes or was sexting women. "*I just don't think that anybody would share that with their brother. I would never have expected that kind of behavior from Ross.*"

A. Baygents: Harris's sister-in-law, (M. Baygents's wife). EXAMINATION: Testifies Harris a good dad. "*Ross was a very loving dad, attentive, played with Cooper a lot. He pushed Cooper in the stroller, carried him around, got ice cream. He always helped out with bedtime, bath time, feeding. Leanna and Ross were both very hands-on parents and seemed to both take on those responsibilities together*." CROSS-EXAMINATION: Testifies that initially, she didn't know about the problems Harris and Leanna were having in their marriage.

H. Coyle: A travel agent. EXAMINATION: Testifies that on June 17, 2014, she received an email from Harris inquiring about family cruises for nine people, four adults and five kids. CROSS-EXAMINATION: Testifies that Harris did not follow up with her between the time he asked her about the trip at church a month before and when he emailed on June 17th.

M. Simmons: Harris's close friend. EXAMINATION: Testifies he and Harris are very close and spend a lot of time together. Simmons testifies that Harris never told him about his marital problems or extramarital sexual activities. CROSS-EXAMINATION: Simmons testifies that he was unaware that Harris had been having sex with women in public, going

to prostitutes, sexting with strangers, "*I wouldn't describe Ross as a big risk taker. Taking risks like that is not in line with the Ross that I know.*"

DAY 12: DEFENSE WITNESSES continued

Dr. Brewer: Professor of psychology at Arizona State University, studies human cognition and memory. Expert witness on memory and attention. EXAMINATION: Dr. Brewer testifies that he has a Ph.D. in psychology and specializes in human cognition. Dr. Brewer testifies about his area of research. "*My research on memory has to do with memory and attention in terms of goal-directed behaviors.*"

Dr. Brewer explains the factors which contribute to or promote prospective memory failure. "*There are three factors that are present in this case that I think hurt, and then there are two factors present in this case that I think can help. First is habit. Most of our lives we are just engaging in routine behavior. I wake up, brush my teeth, take a shower, and put my clothes on. I don't really think much about it. These are routine behaviors that are done over, and over. In cases like this we can see prospective memory failures which are failures to remember to do something in the future. We know that if you have a prospective memory goal to remember to do something in the future and it is counter to your original behavior, people will lapse into their routine behavior, causing them to forget their prospective memory goal. This is because the thing that they are intending to do is not as powerful to them as this routine behavior."*

"So, the evidence in this case is that this route that he takes is his routine behavior. That's his habit. As far as I can tell, based on what I've seen, generally Harris would first take his son to the Little Apron Academy, then he would go to Chick-fil-A, and then he would go to work. So that's a well-worn path. Also, that path is even more well-worn because I had been told that he would often eat at Publix which is along that same path. Instances where Cooper was with Ross are fewer in terms of their relative amount. So, Cooper did go to Chick-fil-A with Ross, but not as much as Ross went to Chick-fil-a on his own, and certainly not as much as when Ross was going to Publix for lunch. So, you have a disproportionate amount of times that Ross drove that route alone than with Cooper. His habit would be to naturally go to work in this case."

"The second factor that is present in memory failure is distraction. Distraction is partly why people fall back into routine behaviors. There are really two types of distraction. There is external distraction and there is internal distraction. External distraction just means that something is happening in your environment. In this case, a big distraction that comes from an external source is making this U-turn. In my experience in making that U-turn and in the GoPro videos that I've seen in making that U-turn, it's a high traffic area. As soon as you make the U-turn, there are trucks pulling out of Home Depot and cars changing lanes so, there is lots of information that could be distracting."

"There's another form of distraction and that comes from inside of your own mind and that's internal distraction. In this case there were some things going on with Ross that could have caused internal distractions. I do know that Ross had sent an email about work the previous night, expressing some dissatisfaction with his own performance at his job. I also note that Cooper had woken him up early. So, I imagine that that was on his mind, thinking that Cooper had not been well or that Cooper had been sick. I certainly can't know what Ross

was thinking. That's the nature of internal distraction, unless somebody reports that they were distracted because they were thinking about this thing."

"*We know that fatigue has negative impacts on attention and memory, which are necessary for prospective memory. So, fatigue is going to have a negative impact on prospective memory. Because of the time of the email that he sent to work and the time that he reported that Cooper woke him, we know that he did not sleep for more than five or six hours. So, he had less sleep than usual."*

Dr. Brewer testifies about false memory. "*The topic here is called output monitoring, which is just a fancy way of saying how you know whether or not you successfully completed your prospective memory intentions. So, monitoring whether you behaved in a certain way. As you might imagine in these cases where children have been left in cars, the parents tend to report the experience of believing that the child was taken to daycare. An example specifically from this case is that when Ross was talking to the police officer at the scene he said something to the effect of 'I thought my son was at daycare,' And it's not an issue that only happened in Ross's case. In other cases where parents have had this tragedy happen to them, they report the exact same subjective experience.*"

DAY 13: DEFENSE WITNESSES continued

Dr. Brewer: CROSS-EXAMINATION: Testifies that in most of the cases where a child has been left and there's been a failure of the memory system, the child is in the back seat, out of view of the driver. He also testifies that in a lot of these cases something stressful or distracting happens during the drive, but he is unclear about what happened during the drive from Chick-fil-A to his work. Dr. Brewer to confirms that he is not here to give this jury an opinion that this incident was a failure of memory systems, per say, and that if it is proven that the defendant intended to kill his child, the memory stuff that he told the jury wouldn't have anything to do with it.

Dr. Brewer testifies that the duration (shorter vs. longer) of the incident sometimes can make memory failure more or less likely depending on the factors. "*Think about it, if you're trying to remember something and I'm allowing you to sit here forever, you have a higher likelihood of remembering it just because you have more time. So, in one way, having more time helps. There are more opportunities for new cues. But in a longer time period, more forgetting can also happen. It's not a very direct answer. There are a lot of factors that are in play when you're thinking about time and memory.*"

S. Moulton: A digital forensics expert works in computers and information technology. EXAMINATION: Testifies that he investigated allegations of web searches and web visits for the police found that Harris did not create the Whisper meme about hating being married with kids and he found no searches that would indicate Harris was seeking a divorce. CROSS-EXAMINATION: Testifies that he did not produce a report of his investigation. Moulton testifies that he found the searches: "*young and wild*" and "*Atlanta casual encounters classified*" on Harris's iPhone from June 17 and June 18 (the day of Cooper's death).

This is the end of Part 1. One of the 3 pre-trial instructions (control, weak, or strong) will be inserted here according to random assignment and participants will be excused for the day.

DAY 14: PROSECUTION CLOSING ARGUMENT

"*I love my son and all, but we both need escapes.*" Those words were uttered 10 minutes before this defendant, with selfish, abandon, and a malignant heart, did exactly that. He drove Cooper to the Home Depot parking lot and left him there to die on that morning of June 18th, 2014. He closed the door on his little life because of his own selfishness, because of what was more import to him: his obsession, his other life and living a live free from his marital and parental responsibilities.

Now throughout this trial, we have seen several videos and photographs of Cooper playing with his dad, on the beach. But we also saw that in this case, in the weeks before they returned from that Memorial Day weekend, a vacation the defendant originally did not want to take Cooper on, he had gone to the Home Depot website to a page with a divorce/separation checklist. Then a couple days after that, he doesn't get the job at Chick-fil-A. The evidence shows the defendant's behavior was escalating. In addition to being unhappy with his job, we know that in that time the number of photos the defendant took or sent out or received regarding his 'other life', far outnumbered anything that had any involvement with his son Cooper. We know that in these weeks leading up to June 18th, 2014, he went to a hotel and had sex for money with a prostitute. That shows you the behavior, and how his priorities were set, and how this was escalating, leading up to June 18th, 2014.

We know that he was leading this double life because he told people numerous times, "*I lead a double life*". And in that double life, two weeks before this child's death, one of these gals he's sexting with, after he's bragging about '*Oh well, I'm also a lead guitarist in a church band*', she asks him, '*Does your conscience ever kick in?*' And what does that defendant say? '*Nope*." He showed exactly who he is. The one that he was most emotionally attached to was slipping through his fingers, Jaynie Meadows. We know this woman that he professed love to, who he told that if it wasn't for Cooper that he would leave Leanna, was gradually cutting him off.

When we're looking at the evidence in this case, we're going to be talking about the facts as they apply. First, as we talked in opening, it's a case about death, deception, and a double life. There is no doubt the defendant lived a double life and was obsessed with his bad side. There is no doubt that the defendant left Cooper in that car and in this case, contrary to what the defense told you in their opening, responsible is guilty.

What does reasonable doubt mean? In this case, your job as a juror is to search for the truth. And as much as we may not want to believe that people are not capable of this type of evil, that's exactly what the facts show. Beyond a reasonable doubt does not mean beyond all doubt or some mathematical certainty. We must have common sense and reason, ladies and gentlemen. The defense's theory: '*Oh, well, maybe it was a memory failure.*' Well, when you look at all the facts, if you use common sense in this case, the defendant is guilty.

We hear about circumstantial evidence and direct evidence, they are equal. Now in this case, we've got evidence of both. We have a ton of direct and circumstantial evidence in

this case. First the direct evidence, which is something that points immediately, to the question and issue. In this case it is the video evidence. There's no doubt the defendant left Chick-fil-A at a certain time. There's no doubt he parked the car the way he did, and he left the child in that car. There's no doubt he went back to the car and sped off that afternoon, with the windows up, within three seconds of the door closing. Direct evidence in the defendant's own statements to the police and his wife. Remember some of those comments he made to his wife? "*I was dreading how he was going to look. I wouldn't bring him back even if I could*," hours after he's pulled his son out of a car.

Now, circumstantial evidence, which is a fact proven by inference. Circumstantial evidence in this case is showing Harris's double life, and what his priority was in the days leading up to and especially on June 18, 2014. The departure from work, the route he took, which we heard from everybody that it was not the right route to take to the movie theater, the smell in that car: all circumstantial evidence. The video evidence, text messages, the lies about his relationships, with Leanna, and about what he was doing that day at Chick-fil-A and after, circumstantial evidence. He wasn't truthful with the police about what he was doing. His demeanor, everybody says that his behavior was inconsistent. He's doing at the scene exactly what was described by Detective Piper as acting like Will Ferrell; yelling a lot, and then he's calm and looking around. It wasn't until after he was detained and told he was going to be arrested for these charges did we see him hit real emotion. All of this is circumstantial evidence.

Accident, you have heard that. It only applies if the person is not responsible at all. You cannot apply '*accident*' if there is a criminal scheme, intention, or criminal negligence whatsoever. Accident in no way applies in this case because even if you believe the defendant, it's criminal negligence. Accident? Throw that out. This isn't an accident because there is, at a minimum, criminal negligence and the evidence shows there's criminal intent.

Let's talk about what malice means. First, the judge is going to tell you the law is that it does not mean ill will or hatred. Ladies and gentlemen, this isn't a case about an adult hating a child. This case is just like it was with his wife, he loved himself and his other obsession more than that little boy. That's all it is. It's not ill will or hatred. Malice, a forethought, causing Cooper's death by leaving him alone in a hot car. Not ill will or hatred.

Now, malice, as it's defined, can be either expressed or implied and we have both of those in this case. Expressed malice is the deliberate intention to take a life which is shown by external circumstances capable of proof. Implied malice, is when no considerable provocation appeared and when all the circumstances of the killing show an abandon and malignant heart. What is the malice in this case? The distance the defendant drove from Chick-fil-A to that parking lot, 0.6 miles. Four minutes. Four minutes is about the time it took the defendant to get from Chick-fil-A to the first time he was seen pulling in that parking lot. The amount of time, 30 to 40 seconds, it took for him to pull out of Chick-fil-A, turn around, take a turn, and make that decision to not take Cooper to daycare, that's malice in this case. And malice is shown in his two lives in this case. And his desire to escape from one of them, to lead the other. Ladies and gentlemen, it all comes back to this, when he left work at the end of the day he knew he had a dead child in the car beside him. The defendant is guilty of malice murder. Thank you.

DEFENSE CLOSING ARGUMENT

The Cobb County police made their decision on the scene and completely precluded the possibility that this was exactly what it was, an accident. It was never, ever a consideration that this was an accident. Detective Stoddard and his boss are wrong. It was an accident and no person can be found guilty of any crime committed by misfortune or accident in which there was no criminal scheme, under-taking, intention, or criminal negligence. An accident, is an event that takes place without one's foresight or expectation. If you find, from the evidence in this case, that Cooper's death was the result of misfortune or accident, and not because of criminal undertaking, then it would be your duty to acquit the defendant.

Mr. Boring told you in opening today that really the only thing to consider here is whether this was malice. He told you that based on Ross's words he's guilty of malice murder. That's not accurate because you heard the interview, and what Ross said to the detectives over, and over again, was "*This was an accident.*" Ross failed to take Cooper to daycare. He forgot him in that car. That has never been an issue. As I told you in the opening and as Ross explained from that very day, he is responsible. Nobody else, and he has acknowledged that fact from day one. The State has not disproven that this was an accident. It is their burden to do so, but they can't because it was an accident.

The State's theory in this case is that Ross intended to kill Cooper. Malice, that's been the State's theory from the beginning. It doesn't matter what he was thinking about, sports, politics, work, sex. Whatever, it doesn't matter. Why? Because you don't anticipate that you're going to forget. When he got out of the car with Cooper at the Treehouse, he'd forgotten him.

The State doesn't address quite a few enormous problems with their theory. There is no evidence of any kind of malice, or bad feelings, or anger. There is no evidence that Ross expressed that toward the son. Every single witness testified that he was a loving, proud father. Even his ex-wife and her best friend did. The State wants to suggest that Ross wanted to escape from Cooper so bad that he would destroy the treasure of his life. I submit to you this, to do what they're suggesting that he did, knowingly and intentionally, there's gotta be some serious hatred. Not just dislike, there's gotta be some real serious ill-will and hatred toward that little boy. What evidence has the State shown to you that Ross Harris hated or had malice for that little boy?

Ross really wanted a family cruise to happen with the two families; Leanna, Cooper, his brother and brother's family. There's no way around the fact that in the hours before Cooper's death, in the weeks before Cooper's death, Ross was planning a cruise that included Cooper. To find Ross guilty of murder you basically have to just ignore it. Why? Because a person planning to do what they say that Ross did, that kind of person is not planning to take their child on the cruise.

The realtor, Roger Web came in here and told you that the Harris's were looking for a house in good school districts. Ross's computer was chock full of emails exchanged with Roger. Some of them we went over in court. So why, why didn't the Cobb County police contact Roger Web? I think it's a fair question. And I also think it's a fair question to ask is whether this investigation is really a search for the truth or just those matters which would be consistent with the State's theory? It's inconsistent. To find Ross guilty you've got to basically just ignore that. Just ignored it, like the police did.

The State's theory in this case is that Ross wanted to live life free of family, free of wife and child, to do whatever he wanted to do. The problem is that Ross was already doing whatever he wanted to do. The State has been very successful at proving that. So, ask yourself this, if the State is right about this cockamamie theory that he intended the killing, what in the world does he gain? What has he accomplished? What is his reward? He's already doing whatever he wants to do. You think he put himself under this kind of scrutiny, destroy his job, his new business and everything, for what?

We talked a lot about Ross's routine. You heard testimony about Ross's routine in the morning. His routine of going to Chick-fil-A. We know from the manager at Chick-fil-A that he'd seen Ross at least 11-12 times inside the store and the drive through but had never seen Cooper before. Why? Because Ross rarely took Cooper to breakfast. Taking Cooper for breakfast was clearly the exception, it wasn't the normal route. Dr. Brewer explained to you that in as little as seconds, we can lose awareness and slip into habit. You heard that when coupled with a distraction, something that requires our focus or concentration like a U-turn, further promotes that loss of awareness. Ross had been through that U-turn many times, but it's different every time you go through it. You must concentrate, and seconds is all it takes to lose that attentional memory and slip into that habit of going straight through that intersection to work. He already forgot, and by the time Ross pulled into work he was already in his daily routine.

Dr. Brewer also explained that we all have false memories, and in this case, Ross had taken Cooper to daycare so many times that he had lots of memories of it. You remember what told Officer Piper, "*I could have sworn I dropped him off.*" The fact that we have memory failure in mere seconds. The fact that Ross would have had false memories. That's all unrebutted.

You heard testimony about a stench of death in Ross's car. The suggestion obviously being that Ross had to know there was a dead child in his car, had to if there's a stench of death. You heard Detective Stoddard testify here in court that he noticed an odor that smelled like decomposition or death. And we know that a whole year after Cooper's death and the initial investigation, Detective Grimstead finally wrote a report noting an odor of death. Their boss Lieutenant Ferrell wrote that he smelled a unique smell of a deceased body and gases coming off the body. Nobody else smelled this odor of decomposition and death they're talking about. Not the CSI detective, the investigator from the medical examiner's office, the firemen, EMS, responding officers, bystanders, they all testified they smelled soiled diaper, urine. Most significantly Dr. Frist, the medical examiner who had examined tissues under a microscope in this case, told us that the smell is the stale odor of breathing, sweating urine, and flatulence, not of the decomposition of a dead body. After the medical examiner testified, Detective Stoddard reported what they wanted to smell. Why? Because it fit their theory.

The center of the State's case in their opening statement, "*I love my son and all but we both need escapes*", what the State suggests Ross is saying is, "*I love my son and all but I'm about to murder him in the next 15 minutes.*" Of course, he doesn't say that, he doesn't suggest that. The State completely ignores the first part of the statement, '*I love my son*' and focuses only on one word, '*escape'*, because it fits their theory. They want you to forget and ignore that Ross says he loves his son and wants you make this leap that one word, '*escape'* means '*murder'* because that's the little bridge that must be built to get from the word '*escape*' to what they are trying to tell you.

The State's told you in opening and closing that their case is about death, deception, and double life, but the truth is this case has always been about demeanor and dirt. Ross didn't act the way they felt he should. Even though there's plenty of video of him weeping aloud when he's alone. He didn't cry while being interviewed by police so that was suspicious. He is inconsolable when allowed to speak with his wife, but I guess Stoddard didn't see real tears, so that was suspicious. Ross reacted very differently than all of us would but no matter what he said or did, it was the wrong thing to say or do. Detective Stoddard doesn't know Ross, officer Piper doesn't know Ross, but Ross's demeanor wasn't what they thought it should be. Is there any evidence that Ross Harris is guilty? No, he just exhibited more and less emotion than the State thinks he should.

I'm going to ask you to very simply go into that room and write two words, not guilty. Because it's the State's burden is to prove beyond a reasonable doubt that Ross is guilty. But more than that, it is also their burden to prove beyond reasonable doubt this was not an accident. They have to disprove it was an accident. And, remember he is presumed to be innocent unless the State proves him guilty beyond a reasonable doubt. The burden of proof rests upon the State to prove every material allegation of the indictment, and every essential element of the crime charged, beyond a reasonable doubt. And the burden never shifts to the defendant to introduce evidence or to prove innocence. Two words, not guilty.

Do you have any doubts? After considering all of the facts and circumstances of this case, if your minds are wavering, unsettled, or unsatisfied then that is a doubt, and you should acquit the defendant. The State failed to prove the defendant's guilt beyond a reasonable doubt, so it is your duty to acquit. The State hasn't disproven that this was an accident, so it is your duty under the law to write two words, not guilty. On behalf of Ross and all us, we trust you.

JUDGE STALEY'S CLOSING STATEMENT AND INSTRUCTIONS TO THE JURY

Members of the jury, the instructions I gave you at the beginning of the trial remain in effect. I now give you some additional instructions. You must continue to follow the instructions I gave you earlier as well as follow the instructions I give you now. The instructions I will now give you will be available to you while you consider your verdict.

It is your duty to find from the evidence what the facts are. You will then apply the law, as I gave it to you, to those facts. You must follow my instructions on the law, even if you thought the law was different or should be different. Do not allow sympathy or prejudice to influence you. The law demands of you a just verdict, unaffected by anything except the evidence, your common sense, and the law as I give it to you.

The indictment in this case charges the defendant with malice murder. The defendant has pleaded not guilty to that charge. The indictment is simply the document that formally charges the defendant with the crime and is not considered evidence.

At the beginning of the trial, I instructed you that you must presume the defendant to be innocent. The presumption of innocence alone is sufficient to find the defendant not guilty and can only be overcome if the prosecution proved during the trial, beyond a reasonable doubt, each element of the crime charged. There is no burden upon the defendant to prove that he is innocent. Instead, the burden of proof remains on the prosecution throughout the trial.

This is the end of Part 2. One of the 3 pre-trial instructions (control, weak, or strong) will be inserted here according to random assignment and participants will be excused for deliberation.

Appendix C

Cover Story:

This study investigates whether the manner in which trial information is presented to mock jurors, (video or written transcript) influences their verdict decisions. Research shows that mock juror verdict decisions tend to differ according to whether the trial information was presented via a trial video or written transcripts (Baguley, McKimmie, & Masser, 2017). Some research shows that mock jurors' verdict decisions tend to be less punitive when trial testimony is presented via video and more punitive when the same information is presented in written format. Some researchers speculate that the difference is due to the influence of visual and audio cues in trial videos such as body language, facial expressions, and tone of voice eliciting various emotional reactions. Other researchers argue that the difference in verdicts could be due to jurors not completely reading or understanding the transcripts when presented in written format. Some legal scholars have embraced this research and advocate for the use of trial transcripts with jurors reading the court proceedings on a teleprompter instead of live viewing in person or over closed-circuit television.

It is possible that mock jurors are taking shortcuts when reading which may lead to a different understanding of the trial information. However, it is also likely that jurors do not intentionally take shortcuts when reading but do so because of differences in motivation. We hypothesize that mock jurors are unintentionally less motivated because there is no incentive for jurors to reach a fair and accurate verdict in mock jury research. Mock juror verdicts in mock trials carry far fewer consequences than those of real jurors in real trials so the difference found in research may not be found in the courtroom. We propose that jurors may be more motivation to render a fair and accurate verdict in a real trial where the decision has a real and lasting impact on the life of another individual, rather than in the artificial environment of a mock trial. Therefore, we hypothesize that increasing the motivation of mock jurors by including incentives for paying attention and thoroughly reading the trial transcripts will result in more accurate verdicts that match those of jurors in a real court case. To test this, we are offering a bonus incentive as motivation to mock jurors for thoroughly reading the transcripts and rendering a correct verdict, one that matches the real verdict.

In the current experiment, you will assume the role of a juror in a two-part jury trial of real-life murder case, Georgia v. Justin Ross Harris. You will read the trial transcripts that consists of the judge's instructions, opening statements, the testimony and questioning of key witnesses, and closing statements. You will also then deliberate in your mock jury group to render a verdict decision. You will be asked to give your individual verdict decision both before and after the deliberation. If you thoroughly read the transcripts you should arrive at the same verdict decision as the real jurors in the real case. If your individual verdict matches the one in the real case, then you will be entered into a drawing to receive a $50 Amazon gift card.

The Justin Ross Harris case is very controversial. It received a lot of media attention and was a trending topic on social media during the trial. Please indicate whether you have prior knowledge of this case or the final verdict reached please by marking "Yes" or "No" below.

Appendix D

Control Jury Instructions

[Note: These instructions should be provided to jurors before trial, at the close of a case, at the end of each day before jurors return home, and other times, as appropriate.]

Pre-trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. In other words, you should not consult dictionaries, reference materials, encyclopedias, legal statutes, state laws, books, periodicals, newspaper articles, or use any other tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

Until you retire to deliberate, you may not discuss this case with anyone, even your fellow jurors. After you retire to deliberate, you may begin discussing the case with your fellow jurors, but you cannot discuss the case with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use telephones, and other manners of communication. You also must not talk to anyone at any time about this case or use any tools to communicate with anyone about the case, in person or otherwise. This includes your family and friends. You may not communicate with anyone about the case on your phone, in messages, in writing, in conversations or in any way, for any reason during this trial. You may not answer questions about the case, ask anyone else about their knowledge, thoughts, questions, or opinions about the case; nor may you discuss your thoughts, questions, or opinions about the case. You may not consult any other people, companies, resources, or tools to communicate or research anything about this case, even if I have not specifically mentioned it here. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

Post-trial:

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any device, reference materials or media, such as phones, written or verbal messages, dictionaries, legal statutes, state laws, books, magazines, newspaper articles, or use any other tools to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict. In other words, you cannot talk to anyone on the phone, correspond with anyone in writing, or communicate with anyone in person or otherwise about this case. You can only discuss the case in the jury room with your fellow jurors during deliberations. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

You may not investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom and not use information obtained from outside individuals or sources. You are only allowed to discuss the case with your fellow jurors during deliberations for the have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Your decision must be based only on information known by you, your fellow jurors and the parties in the case that has been presented during the trial process.

Appendix E

Weak Jury Instructions

[Note: These instructions should be provided to jurors before trial, at the close of a case, at the end of each day before jurors return home, and other times, as appropriate.]

Pre-trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. In other words, you should not consult dictionaries or reference materials, search the internet, websites, blogs, or use any other electronic tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

Until you retire to deliberate, you may not discuss this case with anyone, even your fellow jurors. After you retire to deliberate, you may begin discussing the case with your fellow jurors, but you cannot discuss the case with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use cell phones, smart phones, the internet and other tools of technology. You also must not talk to anyone at any time about this case or use these tools to communicate electronically with anyone about the case. This includes your family and friends. You may not communicate with anyone about the case on your cell phone, through e-mail, smart phone, iPhone, text messaging, or on Twitter, through any blog or website, including Facebook, Reddit, Instagram, LinkedIn, or YouTube. You may not use any similar technology of social media, even if I have not specifically mentioned it here. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

Post-trial

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any electronic device or media, such as the telephone, a cell phone, smart phone, iPhone, tablet, or computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website such as Facebook, Reddit, Instagram, LinkedIn, YouTube or Twitter, to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict. In other words, you cannot talk to anyone on the phone, correspond with anyone, or electronically communicate with anyone about this case. You can only discuss the case in the jury room with your fellow jurors during deliberations. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

You may not use these electronic means to investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom. Information on the internet or available through social media might be wrong, incomplete, or inaccurate. You are only permitted to discuss the case with your fellow jurors during deliberations because they have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Otherwise, your decision may be based on information known only by you and not your fellow jurors or the parties in the case. This would unfairly and adversely impact the judicial process.

Appendix F

Strong Jury Instructions

[Note: These instructions should be provided to jurors before trial, at the close of a case, at the end of each day before jurors return home, and other times, as appropriate.]

Pre-trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. You should not look up terms, laws or other information. In other words, you should not consult dictionaries or reference materials, search the internet, websites, blogs, or use any other electronic tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

You may not discuss this case with anyone, not even your fellow jurors, until you retire to deliberate. In deliberation you may discuss the case with your fellow jurors, but you cannot discuss it with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use cell phones, smart phones, tablets, computers the internet and other tools of technology. You must not talk to anyone at any time about this case or use these tools to communicate electronically with anyone about the case. This includes your family and friends. You may not communicate with anyone about this case on your cell phone, smart phone, iPhone, through e-mail, text messaging, through any blog or website, including Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube. You may not tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case. You may not use any similar technology or social media, even if I have not specifically mentioned it here.

You need to fully comply with these instructions during this trial for many reasons. First, it is important that you decide this case based only on the evidence presented in this courtroom. Otherwise, you could be unfairly influenced or biased by online information. Second, online information has not been vetted by the court, so it might be wrong, incomplete or unreliable which could lead to invalid verdict decisions. Third, online information could be motivated by personal or political agendas that aim to bias public opinion. Fourth, failure to follow these instructions is an act of juror misconduct which can have serious consequences such as leading to a mistrial. A mistrial could make the current trial invalid and a new trial would be required. This is a tremendous expense to the parties, the court, and to you as taxpayers. Last, you could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

Post-trial:

During your deliberations, you must not provide any information to anyone by any means about this case. You may not tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case through any blog or website, including Twitter, Facebook, LinkedIn, YouTube, Reddit, Instagram or Snapchat. In other words, you must not communicate with anyone about this case on your cell phone, smart phone, iPhone, tablet, computer, through e-mail, text messaging, instant messaging or on social media until I accept your verdict. You may not use any similar technology or social media, even if I have not specifically mentioned it here. You can only discuss the case in the jury room with your fellow jurors during deliberations.

You may not use electronic means to investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom. Information on the internet and social media has not been vetted by the court. It might be wrong, incomplete, or unreliable. It could also be motivated by personal or political agendas that aim to influence or bias public opinion. This could lead to inaccurate and invalid verdict decisions. You can only discuss the case with your fellow jurors during deliberations because they have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Otherwise, you could be unfairly biased, and your decision may be based on information known only by you and not your fellow jurors or the parties in the case. This would unfairly and adversely impact the judicial process putting the defendant's rights to due process and a fair trial at risk.

Failure to follow these instructions is an act of juror misconduct which can have serious consequences such as leading to a mistrial. A mistrial could make the current trial invalid and a new trial would be required. This is a tremendous expense to the parties, the court, and to you as taxpayers. Last, you could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

Appendix G

Jury Instructions Pilot Test

Instructions: The following are three sets of jury instructions. Carefully read each set of jury instructions along with the three definitions. Choose the definition that best describes that instruction. If none of the definitions describe that instruction, then choose "none".

1.) Instruction set 1

Pre-trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. In other words, you should not consult dictionaries, reference materials, encyclopedias, legal statutes, state laws, books, periodicals, newspaper articles, or use any other tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

Until you retire to deliberate, you may not discuss this case with anyone, even your fellow jurors. After you retire to deliberate, you may begin discussing the case with your fellow jurors, but you cannot discuss the case with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use telephones, and other manners of communication. You also must not talk to anyone at any time about this case or use any tools to communicate with anyone about the case, in person or otherwise. This includes your family and friends. You may not communicate with anyone about the case on your phone, in messages, in writing, in conversations or in any way, for any reason during this trial. You may not answer questions about the case, ask anyone else about their knowledge, thoughts, questions, or opinions about the case; nor may you discuss your thoughts, questions, or opinions about the case. You may not consult any other people, companies, resources, or tools to communicate or research anything about this case, even if I have not specifically mentioned it here. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

Post-trial:

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any device, reference materials or media, such as phones, written or verbal messages, dictionaries, legal statutes, state laws, books, magazines, newspaper articles, or use any other tools to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict. In other words, you cannot talk to anyone on the phone, correspond with anyone in writing, or communicate with anyone in person or otherwise about this case. You can only discuss the case

in the jury room with your fellow jurors during deliberations. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

You may not investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom and not use information obtained from outside individuals or sources. You are only allowed to discuss the case with your fellow jurors during deliberations for they have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Your decision must be based only on information known by you, your fellow jurors and the parties in the case that has been presented during the trial process.

A.) Instruction Definition A

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions do not give reasons for prohibiting these actions.

B.) Instruction Definition B

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions specifically prohibit the use of electronic tools and devices to engage in internet-based research and communication about the case.

And: The instructions give specific examples of prohibited technology and electronic communication: "*telephone, cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, e-mail, text or instant messaging service, Internet chat room, blog, or website*"

And: The instructions give specific examples of prohibited social media blogs and websites: "*Twitter, Facebook, Reddit, Instagram, LinkedIn, or YouTube*"

And: The Post-trial instruction explain two (2) reasons for the instructions prohibiting internet-based communication and research: 1*) that the information might be wrong, incomplete, or inaccurate*; and 2) *that the information would not be known to other jurors or parties in the case so could unfairly and adversely impact the judicial process*.

C.) Instruction Definition C

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions specifically prohibit the use of electronic tools and devices to engage in internet-based research and communication about the case.

And: The instructions give specific examples of prohibited activities: "*look up terms, laws or other information; tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case"*

And: The instructions give specific examples of prohibited technology and electronic communication: "*telephone, cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, e-mail, text or instant messaging service, Internet chat room, blog, or website*"

And: The instructions give these specific examples of prohibited social media blogs and websites: "*Twitter, Facebook, Reddit, Instagram, Snapchat, LinkedIn, or YouTube*"

And: Both the Pre- & Post-trial instructions explain three (3) reasons for the instructions prohibiting internet-based communication and research: 1) *unfairly influenced or biased by online information*, 2) *online information has not been vetted by the court, so it might be wrong, incomplete or unreliable which could lead to invalid verdict decisions*, 3) *online information could be motivated by personal or political agendas that aim to bias public opinion*.

And: Both the Pre- & Post-trial instructions explain three (3) consequences of violating the instructions, i.e., engaging in internet-based communication and/or research: 1) *It could lead to a mistrial which would require a new trial*; 2) *A mistrial would be expensive*; and 3) *the juror could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared*.

D.) None

2.) Instruction set 2

Pre-trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. In other words, you should not consult dictionaries or reference materials, search the internet, websites, blogs, or use any other electronic tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

Until you retire to deliberate, you may not discuss this case with anyone, even your fellow jurors. After you retire to deliberate, you may begin discussing the case with your fellow jurors, but you cannot discuss the case with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use cell phones, smart phones, the internet and other tools of technology. You also must not talk to anyone at any time about this case or use these tools to communicate electronically with anyone about the case. This includes your family and friends. You may not communicate with anyone about the case on your cell phone, through e-mail, smart phone, iPhone, text messaging, or on Twitter, through any blog or website, including Facebook, Reddit, Instagram, LinkedIn, or YouTube. You may not use any similar technology of social media, even if I have not specifically mentioned it here. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

Post-trial

During your deliberations, you must not communicate with or provide any information to anyone by any means about this case. You may not use any electronic device or media, such as the telephone, a cell phone, smart phone, iPhone, tablet, or computer, the Internet, any Internet service, any text or instant messaging service, any Internet chat room, blog, or website such as Facebook, Reddit, Instagram, LinkedIn, YouTube or Twitter, to communicate to anyone any information about this case or to conduct any research about this case until I accept your verdict. In other words, you cannot talk to anyone on the phone, correspond with anyone, or electronically communicate with anyone about this case. You can only discuss the case in the jury room with your fellow jurors during deliberations. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

You may not use these electronic means to investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom. Information on the internet or available through social media might be wrong, incomplete, or inaccurate. You are only permitted to discuss the case with your fellow jurors during deliberations because they have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Otherwise, your decision may be based on information known only by you and not your fellow jurors or the parties in the case. This would unfairly and adversely impact the judicial process.

A.) <u>Instruction Definition A</u>

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions do not give reasons for prohibiting these actions.

B.) Instruction Definition B

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions specifically prohibit the use of electronic tools and devices to engage in internet-based research and communication about the case.

And: The instructions give specific examples of prohibited technology and electronic communication: "*telephone, cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, e-mail, text or instant messaging service, Internet chat room, blog, or website*"

And: The instructions give specific examples of prohibited social media blogs and websites: "*Twitter, Facebook, Reddit, Instagram, LinkedIn, or YouTube*"

And: The Post-trial instruction explain two (2) reasons for the instructions prohibiting internet-based communication and research: 1*) that the information might be wrong, incomplete, or inaccurate*; and 2) *that the information would not be known to other jurors or parties in the case so could unfairly and adversely impact the judicial process*.

C.) Instruction Definition C

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions specifically prohibit the use of electronic tools and devices to engage in internet-based research and communication about the case.

And: The instructions give specific examples of prohibited activities: "*look up terms, laws or other information; tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case"*

And: The instructions give specific examples of prohibited technology and electronic communication: "*telephone, cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, e-mail, text or instant messaging service, Internet chat room, blog, or website*"

And: The instructions give these specific examples of prohibited social media blogs and websites: "*Twitter, Facebook, Reddit, Instagram, Snapchat, LinkedIn, or YouTube*"

And: Both the Pre- & Post-trial instructions explain three (3) reasons for the instructions prohibiting internet-based communication and research: 1) *unfairly influenced or biased by online information*, 2) *online information has not been vetted by the court, so it might be wrong, incomplete or unreliable which could lead to invalid verdict decisions*, 3) *online information could be motivated by personal or political agendas that aim to bias public opinion*.

And: Both the Pre- & Post-trial instructions explain three (3) consequences of violating the instructions, i.e., engaging in internet-based communication and/or research: 1) *It could lead to a mistrial which would require a new trial*; 2) *A mistrial would be expensive*; and 3) *the juror could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared*.

D.) None

3.) **Instruction set 3**

Pre-trial:

You, as jurors, must decide this case based solely on the evidence presented here within the four walls of this courtroom. This means that during the trial you must not conduct any independent research about this case, the matters in the case, and the individuals or corporations involved in the case. You should not look up terms, laws or other information. In other words, you should not consult dictionaries or reference materials, search the internet, websites, blogs, or use any other electronic tools to obtain information about this case or to help you decide the case. Please do not try to find out information from any source outside the confines of this courtroom.

You may not discuss this case with anyone, not even your fellow jurors, until you retire to deliberate. In deliberation you may discuss the case with your fellow jurors, but you cannot discuss it with anyone else until you have returned a verdict and the case is at an end.

I know that many of you use cell phones, smart phones, tablets, computers the internet and other tools of technology. You must not talk to anyone at any time about this case or use these tools to communicate electronically with anyone about the case. This includes your family and friends. You may not communicate with anyone about this case on your cell phone, smart phone, iPhone, through e-mail, text messaging, through any blog or website, including Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube. You may not tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case. You may not use any similar technology or social media, even if I have not specifically mentioned it here.

You need to fully comply with these instructions during this trial for many reasons. First, it is important that you decide this case based only on the evidence presented in this courtroom. Otherwise, you could be unfairly influenced or biased by online information. Second, online information has not been vetted by the court, so it might be wrong, incomplete or unreliable which could lead to invalid verdict decisions. Third, online information could be motivated by personal or political agendas that aim to bias public opinion. Fourth, failure to follow these instructions is an act of juror misconduct which can have serious consequences such as leading to a mistrial. A mistrial could make the current trial invalid and a new trial would be required. This is a tremendous expense to the parties, the court, and to you as taxpayers. Last, you could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

I hope that for all of you this case is interesting and noteworthy.

Post-trial:

During your deliberations, you must not provide any information to anyone by any means about this case. You may not tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case through any blog or website, including Twitter, Facebook, LinkedIn, YouTube, Reddit, Instagram or Snapchat. In other words, you must not communicate with anyone about this case on your cell phone, smart phone, iPhone, tablet, computer, through e-mail, text messaging, instant messaging or on social media until I accept your verdict. You may not use any similar technology or social media, even if I have not specifically mentioned it here. You can only discuss the case in the jury room with your fellow jurors during deliberations.

You may not use electronic means to investigate or communicate about the case because it is important that you decide this case based solely on the evidence presented in this courtroom. Information on the internet and social media has not been vetted by the court. It might be wrong, incomplete, or unreliable. It could also be motivated by personal or political agendas that aim to influence or bias public opinion. This could lead to inaccurate and invalid verdict decisions. You can only discuss the case with your fellow jurors during deliberations because they have seen and heard the same evidence you have. In our judicial system, it is important that you are not influenced by anything or anyone outside of this courtroom. Otherwise, you could be unfairly biased, and your decision may be based on information known only by you and not your fellow jurors or the parties in the case. This would unfairly and adversely impact the judicial process putting the defendant's rights to due process and a fair trial at risk.

Failure to follow these instructions is an act of juror misconduct which can have serious consequences such as leading to a mistrial. A mistrial could make the current trial invalid and a new trial would be required. This is a tremendous expense to the parties, the court, and to you as taxpayers. Last, you could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared. I expect you will inform me as soon as you become aware of another juror's violation of these instructions.

A.) <u>Instruction Definition A</u>

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions do not give reasons for prohibiting these actions.

B.) Instruction Definition B

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions specifically prohibit the use of electronic tools and devices to engage in internet-based research and communication about the case.

And: The instructions give specific examples of prohibited technology and electronic communication: "*telephone, cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, e-mail, text or instant messaging service, Internet chat room, blog, or website*"

And: The instructions give specific examples of prohibited social media blogs and websites: "*Twitter, Facebook, Reddit, Instagram, LinkedIn, or YouTube*"

And: The Post-trial instruction explain two (2) reasons for the instructions prohibiting internet-based communication and research: 1*) that the information might be wrong, incomplete, or inaccurate*; and 2) *that the information would not be known to other jurors or parties in the case so could unfairly and adversely impact the judicial process*.

C.) Instruction Definition C

The instructions prohibit jurors from conducting independent research, consulting media or reference materials, and communicating with any other people about the case except other jurors during deliberation.

And: The instructions specifically prohibit the use of electronic tools and devices to engage in internet-based research and communication about the case.

And: The instructions give specific examples of prohibited activities: "*look up terms, laws or other information; tweet, post, blog, instant message, conduct opinion polls, or discuss anything about this case"*

And: The instructions give specific examples of prohibited technology and electronic communication: "*telephone, cell phone, smart phone, iPhone, tablet, computer, the Internet, any Internet service, e-mail, text or instant messaging service, Internet chat room, blog, or website*"

And: The instructions give these specific examples of prohibited social media blogs and websites: "*Twitter, Facebook, Reddit, Instagram, Snapchat, LinkedIn, or YouTube*"

And: Both the Pre- & Post-trial instructions explain three (3) reasons for the instructions prohibiting internet-based communication and research: 1) *unfairly influenced or biased by online information*, 2) *online information has not been vetted by the court, so it might be wrong, incomplete or unreliable which could lead to invalid verdict decisions*, 3) *online information could be motivated by personal or political agendas that aim to bias public opinion*.

And: Both the Pre- & Post-trial instructions explain three (3) consequences of violating the instructions, i.e., engaging in internet-based communication and/or research: 1) *It could lead to a mistrial which would require a new trial*; 2) *A mistrial would be expensive*; and 3) *the juror could be held in contempt of court and subject to punishment such as fines, jail time, and paying the costs associated with conducting a new trial should a mistrial be declared.*

D.) None

Appendix H

Juror Internet Research Scale

Instructions: Listed below are a number of opinions. Read each item and decide whether you agree or disagree that this statement reflects your beliefs and to what extent.

1. I would look up the parties in the case online to try to find additional information about them.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

2. Finding additional information about the case online would be more helpful than harmful.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

3. If I don't understand something the attorneys have presented, I would look it up online.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

4. I would try to find relevant and helpful information online that may be withheld during the trial.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

5. If I can't ask questions during the trial, I would look up the information online.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

6. I would use the internet to find out the forbidden information judges don't want me to find.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

7. I would do extra research online because it would help me make the best decision in the case.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

8. It would be wrong to do even a quick internet search for additional information during the trial. (Reverse scored).

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

9. I would do additional research online if I thought it would help me better understand the case, even if the judge asked me not to.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

10. I would be curious to see what I could find online about the parties in the trial.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

Appendix I

Gudjonsson Compliance Scale (GCS)

Instructions: Please read each statement carefully. If you agree with the statement, choose True. If you disagree with the statement, then choose False.

1.) I give in easily to people when I am pressured.
   a. True
   b. False
2.) I find it very difficult to tell people when I disagree with them.
   a. True
   b. False
3.) People in authority make me feel uncomfortable and uneasy.
   a. True
   b. False
4.) I tend to give in to people who insist that they are right.
   a. True
   b. False
5.) I tend to become easily alarmed and frightened when I am in the company of people in authority.
   a. True
   b. False
6.) I try very hard not to offend people in authority.
   a. True
   b. False
7.) I would describe myself as a very obedient person.
   a. True
   b. False
8.) I tend to go along with what people tell me even when I know that they are wrong.
   a. True
   b. False
9.) I believe in avoiding rather than facing demanding and frightening situations.
   a. True
   b. False
10.) I try to please others.
   a. True
   b. False
11.) Disagreeing with people often takes more time than it is worth.
   a. True
   b. False
12.) I generally believe in doing as I am told.
   a. True

b. False

13.) When I am uncertain about things I tend to accept what people tell me
   a. True
   b. False
14.) I generally try to avoid confrontation with people.
   a. True
   b. False
15.) As a child I always did what my parents told me.
   a. True
   b. False
16.) I try hard to do what is expected of me.
   a. True
   b. False
17.) When I was a child I sometimes took the blame for things I had not done
   a. True
   b. False
18.) I am not too concerned about what people think of me.
   a. True
   b. False
19.) I strongly resist being pressured to do things I don't want to do.
   a. True
   b. False
20.) I would never go along with what people tell me in order to please them.
   a. True
   b. False

Appendix J

Case Knowledge Questionnaire

Instructions: Please read each statement and indicate whether it is True or False based on your memory of the case. If you do not know or remember the statement, then please indicate that it is False.

Questions 1 – 10 are target questions. They will be scored as one (1) for True responses and zero (0) for False responses. The scores will be added together to compose an overall score that will range from (0-10). This information has been left out of the trial summary stimulus so more 'True' answers will result in a higher overall score and indicates that it is likely the individual obtained information online (a.k.a. – more true answers/higher score = more likely engaged in internet-based misconduct).

Questions 11-20 are filler/distractor questions and will not be scored. This is information has been left in the trial summary stimulus so all participants should mark those as 'True", depending on how good their memory is. However, since these questions are merely distractor questions they will not be calculated in the overall questionnaire score.

1.) Justin Ross Harris was charged with felony murder.
   a. True
   b. False
2.) Cooper Harris was 22 months old.
   a. True
   b. False
3.) Justin Ross Harris was sexting (texting sexually explicit messages and exchanging nude photos) and trying to meet up with underage girls (under the age of 18).
   a. True
   b. False
4.) On the day of Cooper's death, Justin Ross Harris, went to his car on his lunch (around 12:41pm) and threw a package of lightbulbs in the front seat.
   a. True
   b. False
5.) Cooper Harris's car seat was rear-facing.
   a. True
   b. False
6.) Leanna Taylor (Justin Ross Harris's ex-wife) asked Justin Ross Harris, "*Did you say too much*?" when they were alone were alone in the interview room.
   a. True
   b. False
7.) According to the prosecution, the defendant, Justin Ross Harris conducted internet searches about hot car deaths and what happens when a person or animal is left in a hot car.
   a. True

b. False

8.) The trial venue (location) was changed to another county due to excessive local media coverage in Cobb County which prevented obtaining an unbiased jury.
   a. True
   b. False

9.) Justin Ross Harris's ex-wife, Leanna Taylor (formerly Harris) was originally a suspect.
   a. True
   b. False

10.) When Justin Ross Harris's ex-wife, Leanna Taylor (formerly Harris) went to pick up Cooper from day care and was informed that he was brought in she said, "*Ross must have left Cooper in the car.*"
   a. True
   b. False

11.) Cooper Harris was left in the car on June 18th, 2014 for approximately 7 hours.
   a. True
   b. False

12.) Justin Ross Harris was sexting (texting sexually explicit messages and exchanging nude photos) and meeting up with multiple women and prostitutes for sex.
   a. True
   b. False

13.) Justin Ross Harris was sexting (texting sexually explicit messages and exchanging nude photos) with women on the day Cooper died, June 18, 2014.
   a. True
   b. False

14.) The State (prosecution) claimed that the defendant, Justin Ross Harris, led a double life and he murdered Cooper because he wanted to be free from his marriage and parenting responsibilities to pursue other relationships.
   a. True
   b. False

15.) Cooper Harris died of hyperthermia (excessive heat).
   a. True
   b. False

16.) Justin Ross Harris's family, friends, coworkers and ex-wife testified that Harris was a good, loving father.
   a. True
   b. False

17.) Justin Ross Harris's defense counsel claimed that Cooper's death was an accident, Harris forgot. He had a memory failure, automatic processes kicked in when he was driving, and he went straight to work instead of going to the day care.
   a. True
   b. False

18.) According to the prosecution, the defendant, Justin Ross Harris conducted internet searches about "*What is prison really like*?" and "*How to survive in federal prison,*".

a. True
b. False

19.) On the day of Cooper's death, June 18, 2014, the temperature outside reached over 90 degrees.
a. True
b. False

20.) The State (prosecution) claimed that the defendant, Justin Ross Harris is guilty because he did not act the way they thought he should have acted.
a. True
b. False

Appendix K

Internet-Based Juror Misconduct Questionnaire (IBJMQ)

Instructions: Please provide the following information. This information is important so that we may compare our sample to individuals selected for juries throughout the state. All information collected will be kept anonymous and confidential.

SOCIAL MEDIA

1.) How tempted were you to communicate about the case through any social networks, such as Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube?

Not at all Tempted						Very Tempted
1	2	3	4	5	6	7

2.) Did you communicate about the case through any social networks, such as Facebook, Twitter, Reddit, Instagram, Snapchat, LinkedIn, or YouTube?

a. Yes
b. No

If yes, why? _____

If no, what prevented you from doing so?

- □ I did not want to violate the Judge's instructions.
- □ I did not want to take the time.
- □ I did not want to be biased.
- □ It would not be right or legal.
- □ Other: _____

INTERNET RESEARCH

3.) How tempted were you to conduct research or search for information about the case on the Internet?

Not at all Tempted						Very Tempted
1	2	3	4	5	6	7

4.) Did you conduct research or search for information about the case on the Internet?

a. Yes
b. No

If yes, why? _____

_____

If no, what prevented you from doing so?

- □ I did not want to violate the Judge's instructions.
- □ I did not want to take the time.
- □ I did not want to be biased.
- □ It would not be right or legal.

□ Other: _____

ONLINE LEGAL RESEARCH

5.) How tempted were you to look up legal terms, laws or other information on the Internet?

Not at all Tempted — Very Tempted

1 2 3 4 5 6 7

6.) Did you look up legal terms, laws or other information on the Internet?

a. Yes
b. No

If yes, why? _____

_____

If no, what prevented you from doing so?

□ I did not want to violate the Judge's instructions.
□ I did not want to take the time.
□ I did not want to be biased.
□ It would not be right or legal.
□ Other: _____

DISCUSS CASE WITH OTHERS

7.) How tempted were you to discuss the case with any other person besides your fellow jurors during deliberation?

Not at all Tempted — Very Tempted

1 2 3 4 5 6 7

8.) Did you discuss the case with any other person besides your fellow jurors during deliberation?

a. Yes
b. No

If yes, why? _____

_____

If no, what prevented you from doing so?

□ I did not want to violate the Judge's instructions.
□ I did not want to take the time.
□ I did not want to be biased.
□ It would not be right or legal.
□ Other: _____

Appendix L

Short Form of the Need for Cognition Scale (NFC-sf)

Instructions: For each of the statements below, please indicate to what extent the statement is characteristic of you. If the statement is extremely uncharacteristic of you (not at all like you) please choose "1"; if the statement is extremely characteristic of you (very much like you) please choose the "5". Of course, a statement may be neither extremely uncharacteristic nor extremely characteristic of you; if so, please use the number in the middle of the scale that describes the best fit.

Please keep the following scale in mind as you rate each of the statements below: 1 = extremely uncharacteristic; 2 = somewhat uncharacteristic; 3 = uncertain; 4 = somewhat characteristic; 5 = extremely characteristic.

1. I would prefer complex to simple problems.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

2. I like to have the responsibility of handling a situation that requires a lot of thinking.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*3. Thinking is not my idea of fun.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities?

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*5. I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something."

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

6. I find satisfaction in deliberating hard and for long hours.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*7. I only think as hard as I have to.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*8. I prefer to think about small, daily projects to long-term ones?

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*9. I like tasks that require little thought once I've learned them?

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

10. The idea of relying on thought to make my way to the top appeals to me.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

11. I really enjoy a task that involves coming up with new solutions to problems.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*12. Learning new ways to think doesn't excite me very much?

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

13. I prefer my life to be filled with puzzles that I must solve.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

14. The notion of thinking abstractly is appealing to me.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*16. 1 feel relief rather than satisfaction after completing a task that required a lot of mental effort?

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

*17. It's enough for me that something gets the job done; I don't care how or why it works?

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

18. I usually end up deliberating about issues even when they do not affect me personally.

Extremely Uncharacteristic	Somewhat Uncharacteristic	Uncertain	Somewhat Characteristic	Extremely Characteristic
1	2	3	4	5

Note. From "'The Efficient Assessment of Need for Cognition," by J. T. Cacioppo, R. E. Petty, and C. F. Kao, 1984, Journal of Personality Assessment, 48, pp. 306-307. Copyright 1984 by Lawrence Erlbaum. Adapted by permission.

The number of response options on the scales used across studies has typically ranged from five to nine, and the labels for these response options have varied from agreement—disagreement to extremely uncharacteristic-extremely characteristic. Although these variations across studies may influence the total scores obtained, they have not had dramatic effects on the relationships between interindividual variations in need for cognition and other variables in a given study.
* Reverse scored.

Appendix M

Media and Technology Usage and Attitudes Scale (MTUAS)

Instructions: Please respond to each of the following items to the best of your ability. There are no "right" or "wrong" answers to the questions – we are only interested in your own personal thoughts and opinions, which will be completely anonymous.

Please indicate how often you do each of the following e-mail activities on any device (mobile phone, laptop, desktop, etc.)

	Never	Once a month	Several times a month	Once a week	Several times a week	Once a day	Several times a day	Once an hour	Several times an hour	All the time
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Send, receive and read e-mails (not including spam or junk mail).										
2. Check your personal e-mail.										
3. Check your work or school e-mail.										
4. Send or receive files via e-mail.										

Please indicate how often you do each of the following activities on your mobile phone.

	Never	Once a month	Several times a month	Once a week	Several times a week	Once a day	Several times a day	Once an hour	Several times an hour	All the time
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5. Check for voice calls on a mobile phone.										
6. Make and receive mobile phone calls.										
7. Check for text messages on a mobile phone.										
8. Send and receive text messages on a mobile phone.										
9. Use your mobile phone during class or work time.										
10. Read e-mail on a mobile phone.										
11. Get directions or use GPS on a mobile phone.										

12. Browse the web on a mobile phone.										
13. Listen to music on a mobile phone.										
14. Take pictures using a mobile phone.										
15. Check the news on a mobile phone.										
16. Record video on a mobile phone.										
17. Use apps (for any purpose) on a mobile phone.										
18. Search for information with a mobile phone.										

How often do you do each of the following activities?

	Never	Once a month	Several times a month	Once a week	Several times a week	Once a day	Several times a day	Once an hour	Several times an hour	All the time
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

19. Watch TV shows, movies, etc. on a TV set.										
20. Watch video clips on a TV set.										
21. Watch TV shows, movies, etc. on a computer.										
22. Watch video clips on a computer.										
23. Download media files from other people on a computer.										
24. Share your own media files on a computer.										
25. Search the Internet for news on any device.										
26. Search the Internet for information on any device.										
27. Search the Internet for videos on any device.										
28. Search the Internet for images										

or photos on any device.										
29. Play games on a computer, video game console or smartphone BY YOURSELF.										
30. Play games on a computer, video game console or smartphone WITH OTHER PEOPLE IN THE SAME ROOM.										
31. Play games on a computer, video game console or smartphone WITH OTHER PEOPLE ONLINE.										

If you have a Facebook or other social media account, then continue with item 32 below.
If you do NOT have Facebook or other social media account, then skip to item 106 below.

How often do you do each of the following activities on social networking sites such as Facebook?

	Never	Once a month	Several times a month	Once a week	Several times a week	Once a day	Several times a day	Once an hour	Several times an hour	All the time
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
32. Check your Facebook page or other social networks.										
33. Check your Facebook (social media) page from your smartphone.										
34. Check Facebook (social media) at work or school.										
35. Post status updates. 36. Post photos.										
37. Browse profiles and photos.										
38. Read postings.										
39. Comment on postings, status updates, photos, etc.										
40. Click ‘‘Like’’ to										

a posting, photo, etc.										

Please answer the following questions about your Facebook (social media) and other online friends.

	0	**1–50**	**51–100**	**101–175**	**176–250**	**251–375**	**376–500**	**501–750**	**751 or more**
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
41. How many friends do you have on Facebook or other social media?									
42. How many of your Facebook (social media) friends do you know in person?									
43. How many people have you met online that you have never met in person?									
44. How many people do you regularly interact with online that you have never met in person?									

Please indicate the degree to which you agree or disagree with each statement below using the provided scale:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	(1)	(2)	(3)	(4)	(5)

45. I feel it is important to be able to find any information whenever I want online.					
46. I feel it is important to be able to access the Internet any time I want.					
47. I think it is important to keep up with the latest trends in technology.					
48. Technology will provide solutions to many of our problems.					
49. With technology anything is possible.					
50. I feel that I get more accomplished because of technology.					
51. I get anxious when I don't have my cell phone.					
52. I get anxious when I don't have the Internet available to me.					
53. I am dependent on my technology.					
54. New technology makes people waste too much time.					
55. New technology makes life more complicated.					
56. New technology makes people more isolated.					
57. I prefer to work on several projects in a day, rather than completing one project and then switching to another.					

58. When doing a number of assignments, I like to switch back and forth between them rather than do one at a time.					
59. When I have a task to complete, I like to break it up by switching to other tasks intermittently.					
60.* I like to finish one task completely before focusing on anything else.					